

## MANAGING MODERN TECHNOLOGY TOWARDS A PAPERLESS OFFICE

**BESSIE OBUBA (MCPS)**

Abia State Polytechnic, Abia  
ABIA STATE

### **Abstract**

The challenges of present day realities in offices need to be adequately addressed. This is because the prophecy that we are living in the best dispensation is true. The only way out is to create its consciousness among office workers and office managers. So as to acquaint them with the realities of time. The introduction of Information and Communication Technology (ICT) into the world of work has impact on the ways we conduct our business and office records management. Once living, there us a whole promise of chance which matures into paperless office. This paper seeks to expose the n necessary revolutionary changes that must be brought to today's offices to embrace full office automation which if properly applied will make our offices less dependent on paper work but implicitly containing them on demand.

**Keywords:** Managing, Modern, Technology, Paperless and Office

### **Introduction**

Everything on earth is transient. Change is only permanent thing. The transitory nature of things have led to the classification of office according to age of technology which of course determine the office equipment used. There is the Traditional, the transitional or Word Processing, as well as the Electronic/digital or visual office which forms the focus of this work. Change has transformed office work from paperwork to paperless with a monumental reduction or outright elimination of paper in the office.

Recall that our office when at the traditional state contained such mechanical and manual devices like the typewriter for information processing. Files were used to store document. There were also duplication machines in use. From the traditional office setting, change brought us to the transitional office setting/era. According to Ojukwu (2009), this phase lies between the traditional and the electronic era. This is also regarded as the word pro cessing office. This office uses computer for word processing tasks. The computers were generally the 'Stand Alone or Work Station'. The word processors perform more or less the function of typewriters and generally were not linked to perform more or less the function of typewriters and generally were not linked or communicating with other computers. According to Ojukwu (2009), the use of computers in the transitional office makes it possible for the storage and

retrieval of information to be moved from the end of a linear flow process of the middle information processing.

In fact, storage occurs simultaneously at input stage. Storage and retrieval can be done automatically anytime. Since the computers are not networked, they do not communicate electronically, hence, distribution of mails re done manually and involving paperwork.

From the transitional/word processing office in which most organisational still operate. We now move in interconnectivity of computers which birth to the paperless office that is christened "The Electronic Office' on/around which work revolve

### **Electronic/Paperless Office**

It is a modern office setting where the computers are networked so that sending or receiving of information and performance of other duties may be conducted through interaction of computers and other technology gadgets. In the paperless/electronic office, information storage takes place as input is taking place in the computer, similar to that of the word processing office. The major difference lies in the fact that information is stored electronically in software and not in files inside drawers. Retrieval of information from the system is also eletronically processed. To. r.trieve information, what needs to be done is to command the computer to find such data and display some of the screen or print out hardcopy or manual to be stored in diskette, flash drives or compact disk (CDs) (David, 2010).

In the paperless office, access to information is very fast and more secured. Works can access information from the files in their own computer system, as well as file in the computers located other offices within the interconnectivity. Paperless office is therefore the highest stage of electronic office. It requires the technology of interconnectivity as well as information data processing, storage and retrieval a little above the elementary so we need to be scared.

### **Electronic/Paperless Modes Of Handling Data In An Office**

The following are some of the electronic/paperless modes of handling data in an office.

- **Document Management**

Document management sorftware allows the user to store electronic documents in a data base for subsequent retrieval and sharing, and it can assign viewing and editing privileges to users. It helps manage the creation, distribution maintenance, organisation and storage of documents. It often includes scanning (converting paper documents to electronic format) and high performance storage, Keary (2000) points out that 'the weakest links in electronic document management are indexing, searching and retrieving'. Although the selection of software is important in this regard, the application of appropriate expertise during the indexing phase is critical for finding electronic documents at later stage. Several document management

packages now provide full text indexing and searching (Falk, 1999). The addition of metadata (Data about data) to documents is becoming important to enable the user to verify the general quality of the document, such as reliability and accuracy of the document.

- **Workflow**

Complex business processes typically include several operations, different levels of authority and documents or folders of information (Mulline, 2001). Workflow software provides tools to automate the electronic workflow of documents and business procedures. It ensures that the correct document enters the database, routes each document to the appropriate person and ensures that approval is obtained at the right stage within the business process, monitoring each step of the process. Electronic workflow automates process control because it coordinates activities, role players' data/information and monitoring. Tracking and tracing of dynamic content and feedback are possible at any point in a document's life cycle. When applied correctly, and not just automating inherently inefficient paper procedures, workflow is a catalyst for business process improvement (re-engineering) defining new business rules (FHC 2000)

- **Intranet**

An intranet is a private network that is contained within an enterprise. It may consist of many interlinked local area networks and also use leased lines in the wide area network (WAN). Typically, an intranet includes connecting through one or more gateway computers to the outside internet. It is a local or restricted communication network, especially a private network created using World Wide Web software. An intranet is a computer network that uses internet protocol; technology share information, operational systems, or computing services within an organisation.

It creates a web-enabling digital environment for the entire organisation, providing service such as electronic mail, groupware and search engines via a standard Web browser the intranet enables cross – platform information access, sharing and communication across traditional organisational boundaries (Ives, 2001)

According to Auditors (2001), the enterprise information portal (EIP) is the next natural step in the evolution of the organisational intranet. It acts as a single point access to internal and external information, enabling users to access different information sources throughout the organisation. In larger organisations with distributed offices, an EIP can function as unified corporate desktop that provides a personalised view of organisational information. The ultimate EIP integrates structured information (databases) and unstructured information (Documents, items) into a single personalised environment. An **Enterprise Portal**, also known as an **Enterprise Information Portal (EIP)**, is a framework for integrating information, people and processes across organisational boundaries. Enterprise portal provide a secure unified

access point, often in the form of a web-based user interface, and are designed to aggregate and personalize information through application-specific portals.

- **Extranet**

An extranet is private network that uses internet technology and the public telecommunication system to securely share part of a business's information or operations with suppliers, vendors, partners, customers, or other businesses. It is computer network that allows controlled access from outside of an organisation's intranet (i.e. access from the outside for specific business or educational purposes). Extranets are used for specific use cases including business – to – business (B2B). In a business to business context, an extranet can be viewed as an extension of an organisation's intranet that is extended to users outside the organisation, usually partners, vendors and suppliers, in isolation from all other internet users. It is in context of that isolation that an extranet is different from an intranet or internet. In contrast, business – to – consumer (B2C) models involve known servers of one of more companies, communicating with previously unknown consumer users.

An extranet is similar to a DMZ in that it provides access to needed service for channel partners, without granting access to organization's entire network

An extranet requires security and privacy. These can include firewall server management, the issuance and use of digital certificates or similar means of user authentication encryption of messages, and the use of virtual private networks (VPNs) that tunnel through the public network.

### **Modern Technology/Applications That Launches Us Into Paperless Office**

- **Micrographic system**

This is one of the systems that launch us unto the paperless office. Micrographics are used to store data. It is a process of photography reducing and recording paper documents and computer generated outputs on microfilms. Many micrographic systems also include computer assisted retrieval (CAR) mechanism. Micrographic system therefore replaces the traditional paper record management of using file folders and cabinets to categorised data (David, 2010)

- **Electronic Mail (e-mail)**

This system is a modern electronic invention which is faster, reliable, much paperless and distant means of moving information from one place to another, e-mail system can transmit messages that would have otherwise been sent through an office memo or the postal through service e-mail automatically creates a permanent computer record of each transaction. The recipient can view incoming mail items on the screen or print it out if desired. After receiving messages, the recipient can acknowledge receipt to them, and store them for later action, forward them to others or simply delete them. We need to also know that there is that also the voice mail which is similar to the e-mail except that the messages are vocal ones and which people may

prefer (David, 2010)

- **The Online Record Transmission**

This technology is for the transmission of records and files from one location to another. The use of File Transfer Protocol (FTP) and document originality maintenance and compression packages has made handling of messages/file transfer easier. According to Adobe system (2000), a portable document format (PDF) is a file format created by Adobe system in 1993 for document exchange. PDF is used for representing two dimensional application software, hardware and operating system.

- **The Archiving Technology (e-storage)**

Archiving according to Wikipedia is a collection of historical records (primary source documents) which have accumulated over a period of time by an individual or organisation. The computer file, business records, memos, official correspondences and minutes of meetings are stored. Archives also consist of records which have selected for permanent or long term preservation on grounds of their cultural, historical and/or evidential values (David, 2010).

- **The Data Mining (DM)**

Data Mining process generally starts with collection and cleaning information, then storing it in some type of data warehouse or data mart. Data mining is the process of data extracting patterns. As more data are gathered, doubling at short intervals, data mining is becoming an increasingly import tool to transform these data into information. It is commonly used in a wide range of profiling practice such as marketing and surveillance.

- **Internet**

The internet is sometimes referred to as information superhighway. Just as telephone allows one to talk to someone who has telephone also on the other side, the internet enables the secretary to sit at her computer and access or exchange information or ideas with other computers and computer users anywhere in the world.

In the electronic office, data/information can be distributed electronically form one computer in the office to another computer with greater speed and without paper, unless the recipient wishes to printout in hard copy.

- **Chatting**

This is another paperless way of communication. According to Wikipedia (2009), it is by sending text messages to people in the same chat-room in real-time. Some chat rooms such as Yahoo! Use both text and voice simultaneously. The primary use of a chat enables the sharing of files and webcams to be included in same programs and almost all internet chat or messaging services allow user display or send each other photos of themselves.

- **Online Meeting Scheduling And Conferences**

The traditional ways of scheduling meeting and conferences are totally discouraged by electronic/modern office. With the new technology such as Apple iCal, Lotus Note, Mobile Doodle, Google, Widget, Facebook, Blue Berry e-presence, Secretaries and Office manager alike should be able to schedule board meetings, business lunch and conference calls. Lack of knowledge and technical know-how of modern technology or online meeting, have made efficiency and timeliness elude office setting in the delivery of services and improvement on profit margin of business organisations.

**Benefit of the Paperless Office**

- **Environment Friendly**

The paperless office reduces the amount of paper produced and used thereby saving money for the organisation as well as making tangible contribution towards protecting the environment. Large storage room filled with files can be eliminated, provided legal obligations are adhered to.

- **Process efficiency**

Converting to an electronic system provides the opportunity of analysing and identifying flaws in manual processes in order to implement improved electronic business processes and new business rules (Sharma, 2000)

- **Process management**

Electronic workflow has built-in control mechanism like the triggering of activities, automated notifications and escalation as well as an audit trail to measure processing time and the quality of process output. The automated process allows tracking against predefined rules. The control over document updating and circulation ensures more accurate information, as employee will be using the most up-to-date version available. This culminates in improved efficiency and better quality (Baines, 1997)

- **Resource Efficiency**

Automated workflow sends the work to the employees and efficiency is achieved by assigning tasks according to workload. Electronic templates furthermore eliminate repetitive administrative tasks, improving productivity by allowing the employee to concentrate on the more intellectual tasks at hand, etc. (Uthmann & Speek, 1998).

- **Market Efficiency**

A single customer service representative can access all the different areas of the (Distributed) organisation and has immediate access to the most current electronic information. This allows for quicker response times to customer inquiries. The automated procedure further enables transparent communication with customers (uniform interface), the prediction of delivery times and adherence to deadlines.



Automated acknowledgement letters, for instance, demonstrate a customer focus. Better service delivery improves customer's perceptions of the organisation and provides a competitive advantage.

- **Information Delivery**

Electronic documents can be stored and delivered in various forms and formats, to the user as, when and how required.

- **Unlocking Information**

Information sources previously 'lock 'away and unknown might become available to the end-user in electronic format. Examples are fragile documents or those of which only a single copy exist. Provided the information professional has applied his/her expertise in identifying and organizing (indexing) documents or records, better retrieval results will be obtained.

## **Conclusion**

We therefore should not conceive paperless office as a thing yet to come, for it is already here with us, all we need to do is to acquire the necessary knowledge, properly update and in readiness for even the next level, if we really want to remain relevant esteemed in the labour market and not dead woods in our offices.

It is never an overstatement to say that only few organisations are embracing the shift to paperless office, with the telecommunication industries taking the lead by providing their teaming customers with varieties of packages through the use of GSM phones. The banking industries operating branchless banking due to paperless transactions and indeed few multinational companies engage in electronic filing and collection forms that are relevant to their transactions. It is concluded that the paperless office is more than just effective output strategy.

It is now imperative for organisation to shift to a paperless office to actually entrench timeliness in the delivery of services to their client and customers at their point of need. Whether we call it office Automation (OA), office Technology and Management (OTM) or Technology Development (TD), the basic thing is to entrench a timely, effective method of service delivery to people irrespective of place. In achieving this, certain levels of literacy re needed to be achieved among which are; Technology literacy, Information Literacy and Media Creativity

## **Recommendations**

The office today is very affected by technological development. This poses great challenge to office mangers who want to remain relevant in their business. The acquisition of the technology of the paperless office is goodwill to both the Secretary and the organisation. Apart from boosting production, it is worthy of note that the whole word is going digital and since the impact are more on the positive, irrespective of cost we should strive to update ourselves as well as our equipment to face the

challenges ahead.

For effective and proper administration of the office, a shift to paperless office is very important to ensure greater productivity. A full deployment of the relevant office technology is required coupled with the systemic application of the following recommendations:

- ❖ Secretaries must, as matter of urgency, acquire relevant modern office education and skills that will make us relevant in this era of office automation. This education is the type of education that is concerned with office occupation or the acquisition of skills, aptitude, attitudes and knowledge for carrying out successfully the functions in the office
- ❖ The changes taking place should be adopted by office manager otherwise they would be overtaken by the office revolution and caught in morbidity. Office workers should avail themselves the technicalities and technologies of modern office equipment.
- ❖ Standard office equipment should be installed in all modern office. These include computer, scanners, storage servers etc.
- ❖ Internet facilities and gadgets required for transmission of files and archiving should provided
- ❖ Communication hand – free devices like headphones and microphones should be provided for conferences and meeting
- ❖ Office Managers should adopt documentation standards that would allow files to referenced online
- ❖ A pragmatic approach of change-over should be adopted for conversion of office documents to electronic form desirable archiving.
- ❖ Retraining should be organised for all secretaries for effective handling of installed equipment and change orientation about automation of the office

### **References**

Adobe System Inc. (2000). PDF Reference Sixth Edition Version 1, 2, 3, (30mg)

Audiore, P.J (2001). the emerging enterprise portal market: an overview of key issues and trends impacting enterprise adoption. *Enterprise System*, (1, 32-34



- Baines, A. (1997). End the paper chase. *Work Study*, 46 (1), 25-26
- David Chike (2010) Abens book of Reading Vol. 1
- Falk, H. (1999). Storing and viewing electronic documents. *The Electronic Library*, 17(1). [www;http://www.itweb.co.za](http://www.itweb.co.za)
- FHC. (2000). Workplace portal: the next big thing. *Managing Information*, 8(5), 38-40.
- Keary, M. (2000). Document management: New Technologies for information services. *The Electronic Library*, 18 (2), 137-146
- Mulline, T. (2001). The paper chase: deploying enterprise information management in today's print-oriented world. *Enterprise System*, (2), 18-21.
- Ojukwu, K. (2009). *Office Administration and Management*, Aba: Adecrown Printers.
- Sharma, P. (2000). E-transformation basics: key to the new economy. *Strategy and Leadership*, 28(4), 27-31
- Uthman, C & Speck, M. (1998). Internet technology to run workflows. *Internet Research: electronic Networking Applications and Policy*, 8(5), 414-424