ELECTRONIC PUBLISHING: ISSUES, OPPORTUNITIES AND THREATS

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ABSTRACT

Electronic publishing is one of the stunning developments brought about by the advent of the information age or digital age. Electronic publishing has changed the face of publishing and is sustained by the sophistication and reliability of electronic technologies. The paper therefore probes extensively into the concept of publishing, electronic publishing models and types of electronic publishing, critical issues in electronic publishing, opportunities created by this innovation and finally the challenges or threats to electronic publishing.

Introduction

Right from the creation of the world, man has concerned himself with the search for knowledge and because of this quest; different generations have evolved different means of communicating knowledge. Among the retinue of techniques devised by man, the published materials or the printed matter has been adjudged the most enduring and dependable. Publishing has become an indispensable and inevitable activity in any nation's march towards advancement. This is because scholarly publishing aids dissemination of knowledge and contributes immensely to intellectual fulfillment, societal development and general living.

Civilization is now considered to be undergoing its third era, having gone through two eras already. The first of such era was the Agrarian Era, which was characterized by its dependence on land as its main source of power and capital. Industrial Era was the second, when machines formed the nucleus of resources. This era saw the invention of the printing press, which is a major factor in traditional publishing. The third era is the new wave, called the Information Era or Digital Age, which begun perhaps fifty to seventy years ago and still subsisting. As espoused by Uhegbu (2007), this is made possible by the efficiency, sophistication and reliability of electronic technologies such as computers, satellite operations and the Internet.

The explosive development in information and communication technology (ICT) is turning almost everything on its head. It has invariably challenged and affected the traditional forms of publishing, giving rise to the development of electronic publishing. It is therefore necessary that one must not only think about the existing environment that defines the roles of authors, users and publishers. One needs to start thinking about the possibilities of what can be achieved with new technologies that allows the exchange of knowledge and information in unparallel ways. Understanding these possibilities will enlighten one with the complexities in the transition from traditional publishing to electronic publishing.

This paper will therefore look at the concept of publishing; meaning of electronic publishing,; models or types of electronic publishing; critical issues in electronic publishing, opportunities spawned by the electronic evolution or revolution in publishing and finally the threats and challenges facing electronic publishing.

The Concept of Publishing

There is need to understand fully the meaning of publishing. This stems from the fact that knowledge grows from the known to the unknown. Retz (2004) defines publishing as the business of issuing books, music photographs, maps and other printed materials for sale to the public, which includes negotiating contracts with authors and their literary agents, editing the author's manuscripts, designing the physical item, producing the finished products, marketing the product and making arrangements for its distribution through regular market channels". Publishing is the activity that involves the selection, preparation and marketing of printed matter (Encyclopedia Britannica, 1993). In the words of Okwilagwe (2001), publishing activities involve the manufacturing of newspapers, magazines, books, newsletters, journals, reports and many other printed materials". From these definitions, publishing can be understood to mean the whole intellectual and business procedure of selecting and arranging to make a book or any other printed matter. It is this form of publishing that existed in both the developed and developing world until the invention of electronic publishing.

What is Electronic Publishing?

Like other human activities in the information age, publishing has been affected tremendously by automation, resulting in a shift from traditional publishing to the new wave of electronic publishing. However, there is yet no agreement on what electronic publishing is. Daniels and Kinney (1999) describe electronic publishing as a process whereby computers perform the entire task necessary to produce a publication. They went further to describe the processes which involve a scanner letting an editor transform pictures into digital signals that can be processed by a computer; the editor then arranges the elements of the publication on a display screen and additional technology in the form of a printer that uses lasers to produce extremely sharp, clear-type professional looking hard copy-so called because it exists on paper rather than in electronic or soft form. A closer look at the description above can better be understood as desktop publishing, which is an aspect of electronic publishing. It is perhaps against this background that Adebowale (2000) defines electronic publishing as "publishing activities that have as their end, the distribution of knowledge by electronic means, not the use of electronic technologies to speed up or reduce the cost of print publication". To bring a synergy between the

two definitions or to synchronize the two ideas, Reitz (2004:244) defines electronic publishing as "the publication of (books, periodicals, e-zines etc), bibliographic databases and other information resources in digital format, usually on CD-ROM or online via the internet, for in-house users, subscribers and/or retail customers with or without a print counterpart" e.g. Journal of Electronic Publishing.

Whether viewed from the point of e-publishing or desktop publishing, the truth is that the two employ computer equipment and software to make publishing easier, as individuals can compose and distribute high caliber documents from their offices or homes to the public domain through the Internet. The product of electronic publishing is electronic publication-A work in digital format capable of being read or otherwise perceived, distributed to the public electronically.

Types of Electronic Publishing Models

Though e-publishing started as a trend to provide printed materials in a digital format, today it has grown to become an alternative in itself (George, 2011). Some of the e-publishing models, which exist according to Usha (2010) include:

- **Commercial e-publishing:** Commercial e-publishing involves the activities of commercial publishers. Like their traditional counterparts, they choose to publish books that are likely to be sold – a good mix of quality and subject matter is what they look for. For this reason rejection rates of papers submitted for publishing are very high. In this model, the websites of the commercial e-publishers serve as effective storefronts. They can also sell through other online book stores e.g Amazon.com.

- **Subsidy e-publishing:** They differ from commercial e-publishers in various ways. They accept most manuscripts and publish them on an "as is" basis. These are not edited, formatted or proofread. They have a virtual rate card for add on charges for these services, should the author opt for it. Subsidy e-publishers publish books for a flat fee and pay the authors a royalty that is comparable to what they would receive from the commercial publishers. However, they are more likely to sell through online stores than through their own websites. Likewise, they pass on the added cost of selling through online stores to the author who receives higher royalties for books sold through the publisher's website and lower royalties if they were sold through online book stores.

- **Print-on-demand e-publishing (POD):** This is another interesting model of e-publishing. It is a mixture of electronic and print publishing. The book is held by the publisher in electronic form and is printed out in the hard copy form only on order. This is also done for a flat fee. While many commercial publishers also offer the format, it is a model more often adopted by the subsidy e-publishers.

- **No-fee distributor model:** In this model, the no-fee distributors accept manuscripts and publish them on an "as is" basis, in a sense. They simply provide authors with a bookstore. They do not charge a fee, but take a slice of the royalties. In this model, price setting is usually the author's prerogative. The no-fee distributor does not offer service like editing or formatting. This works well for the authors who prefer the self publishing model, but want to offload the task of setting up their own "store front" or website. It also

does away with the need to register as a retail business as they get paid royalties by the distributors as opposed to revenue on sales.

- **Self publishing model:** This is the most popular model of e-publishing. It is an alternative to the other types of e-publishing. It is not only inexpensive, but also offers authors the total control over the various processes involved in the publishing activities. The author usually does all promotional and marketing work on the web. Unless the author wants to offer the e-book in multiple formats like downloads, CD-ROM or floppy disks. Distribution costs are also very low. Again, offering only a download-able format makes it possible for the author to register only as a publisher and not a retail business, which entails the procurement of a license.

Critical Issues in e-Publishing

At first instance, the proliferation of e-journals, e-books and other e-publications, particularly from the commercial e-publishers may seem like manna from heaven. Librarians and other information professionals can now offer users searchable full text of important journals, as well as enhancements found only in the electronic version, yet there are critical issues publishers, authors and information workers must consider as it affects electronic publishing. In fact, the modern world of information exchange is diverse and convoluted, its possibilities are exhilarating. Some critical issues to be considered include; what skills are required? How it will affect institutions, communities and society in general/ what are the changes required in cost and pricing models/ how sustainable the new models are? A more important thing to consider is to find and to make best use of the available means of managing and sharing the intellectual capital. Brown and Duda (2000) recognize two critical issues, which include:

- **Cost Implications:** This can equally be referred to as economics of e-publishing. The e-publisher might save costs associated with paper, printing and distribution, but if he wants to put out quality content, he continues to incur fairly high cost in terms of the editorial and technical staff. To capture the true value electronic publishing can offer, he has to choose the business model that enables him to cast a wider net and garner more customers to cover total cost such that each customer need pay for a smaller fraction of the total. The total cost may include support function costs like human resources (HR), accounting and legal costs, operational costs including editorial and technical staff for activities like design, typesetting, advertising, promotions and distribution. Therefore, the cost which would have been incurred on paper, printing and mailing etc is now incurred on editorial and technical staff engaged in bringing out quality products.

- **Licensing Agreements:** Is another critical issue to consider in electronic publishing. Some electronic publications have limitations in their licensing agreements, which may make them less ideal. Some licenses state for instance, that libraries may not make copies (either electronic or print) for users who are not part of the library's main user group. This makes interlibrary loan of these materials impossible. Some licensing agreements require a library password which is not easy to come by or which creates limited access to library users. But in most libraries anyone who can enter the library can look at print journals. It is not unreasonable for libraries to expect to provide the same access whether the resource is in print or on the web.

Challenges and Threats to Electronic Publishing

To understand who has to gain or lose by adopting any model of e-publishing, we must understand the roles involved in publication and the social infrastructure that is affected by changing publishing approaches. Some of the challenges include:

- **Preservation of e-publications:** Libraries traditionally collect and preserve scholarly and documentary records of publishing. Electronically published materials require a new approach to document security, since digitally edited records are much more difficult to trace in their changes (unlike print). Further, individual libraries which purchase "copies" of electronically published works will be required to convert those documents to new systems, or maintain old hardware to provide access to them.

- **Archiving e-journals:** Archiving is to place documents in storage, usually to preserve them as a historical informational. Legal or evidential record, permanently or for a finite or indefinite period of time. The issue of archiving has been an active topic in e-publishing, especially on the ARL-E-journal list. The question has been who will be responsible for archiving electronic journals? Do publishers have enough incentive to provide this service or will archiving be left to libraries? What format will be used for storage? It is good to note however, that there are some promising initiatives on archiving of e-publications. For example, OCLC has undertaken an archiving project called Electronic Collections Online. They offer to archive the files of publishers at no cost to the publisher. Libraries can subscribe to these journals through the publisher, as they have done traditionally. Some archiving projects have also been undertaken by Havard \University and Yale University (NISO, 2012). ICMJE (2012) recommends that access to the archive should be immediate and controlled by by a third party, such as a library, instead of the publisher.

- **Intellectual property concern:** The traditional forms of publishing have certain structural concern to ensure aspects similar to protection of intellectual property and quality of information and publication. On the contrary, e-publishing models give greater latitude in bringing in facets of technology like multimedia and quick knowledge dissemination, which to a large extent undermine the recognition and protection of intellectual property.

- **Problem of quality publications:** In the era of traditional publishing, quality publications are almost guaranteed as publications must go through the probing eyes of editors and peer reviewers. Today, as a result of e-publishing, especially using the self publishing model, the reverse is the case. The Internet is inundated on hourly bases with low quality publications. Some of the times the authorities of the authors are questionable. One can easily upload any material to the Internet provided he has the necessary software, computer and Internet facility to do so. With this development, quality publications are not guaranteed.

- **Indexing e-publications:** The issue of indexing e-publications is also critical. Where the electronic journals have print analogs, indexing is generally not a problem. However, for electronic-only journals, no indexing may be available. However, in 1995, Chemical Abstract Service (CAS) announced that few electronic publications meet their criteria for

inclusion in Chemical Abstract. Before any electronic document is added to Chemical Abstract, it must meet the following criteria:

i.   Report information of chemical or chemical engineering interest
ii.   Present information in a form similar to that of a scientific paper (i.e. reporting novel findings with some discussions of the experimental details).
iii.   Identify authorship
iv.   Be publicly available
v.   Have some relative permanence or continued accessibility and
vi.   The original publications, not issued previously in another form or medium.

Opportunities for Electronic Publishing

Electronic publishing holds a lot of opportunities that makes it authors; publishers and information professionals' delight. Hersh and Rindleisch (2000) identify some opportunities to include:

- **Flexibility in the distribution of information:** It has spun the information delivery models on its head to allow for information in formats like e-books, e-journals, newsletters, e-zines and research papers to be distributed faster, better and most importantly in a dynamic and interactive manner.
- **Ubiquitous and fast access to information:** With concepts like digital libraries, there is the advantage of availability and accessibility. The entire content is readily available and accessible to users in various places at the same time, using the Internet as a channel. With this promise, e-publishing stand poise to do something far more dramatic in promoting the vital circulation of knowledge.
- **Wider range of alternatives and readership:** E-publishing holds a wider range of alternatives and choices as information seekers can access information from various digital libraries or databases and online publishers' bookstores, which were not available in the traditional publishing regime. It also gives wider readership to any published research. Scholars who need literature to build on have much information at their disposal. E-publishing has resulted to increase in the rate of digital distance programmes. Even governments and big organizations are keenly adopting such methods for training programmes for their employees.
- **Convenience and Cost saving:** Proponents of e-publishing argue that it is economical as it saves cost to the publisher. Studies show lots of cost savings if an institution or shifts towards electronic version of publication. Institutions that cannot afford the rigours of subscription and associated costs of traditionally published materials have the opportunity of having such publications through the Internet, without incurring any additional cost. Today, universities, libraries and research centres do depend on e-publications through downloads from their respective websites, since they may not have adequate resources to subscribe to all the peer-reviewed publications needed in their programmes.

Conclusion

Publishing has grown from its small ancient, and law or religion-bound origins into a vast industry that disseminates every kind of information imaginable. With the advent of e-

publishing, publishing once a preserve of large companies has become a very real option for anyone with access to computer and Internet. To recognize the direction publishing is heading, we must not only think about the existing environment that defines the roles of authors, users and publishers etc. We must also start thinking about the possibilities of what can be achieved with new technologies that allow the exchange of knowledge and information in unparallel ways (Shiveley, 1996). In consideration of the critical issues about e-publishing, the opportunities and the threats, there is the need to balance the challenges and opportunities presented by electronic publishing for its sustainability.

REFERENCES

Adebowale, S. (2000).Discriminating the electronic publishing philosophy in developing countries. In: Electronic Journal Publishing: A reader. *International Network for the Availability of Scientific Publications* (INASP): 133-138.

Daniels, P. and Kinney, K. (eds.) (1999). *Twenty First Century Encyclopedia of Science, Technology and Nature,* Vols. 1&10, Amsterdam: Time Life.

George, L. & Kuleszi, O. (2011). Electronic publishing in developing countries: the emergence of new models? Available at www.//en.wikipedia.org/wiki/ElectronicPublishing.

Hersh, W.R. and Rindleisch, T.C. (2000). Electronic publishing of scholarly communication in the biomedical sciences. *Journal of the American Medical Informatics Association,* 9(3): 321-325.

ICMJE (2012). Uniform requirements for manuscripts (URM). Accessed 11/09/2012, at http://www.icmje/ publishing7electroni.html.

Okwilagwe, O.A. (2001). *Book Publishing in Nigeria.* Ibadan: Horden Publishers (Nig) Ltd.

Reitz, J. M. (2004). *Dictionary of Library and Information Science.* Westport: Libraries Unlimited.

Shiveley, E. (1996). CAS experience with Internet publications. *ARL-E-journal.* Available at: www.ARL-E-Journal. Accessed on 16th August, 2012.

Uhuegbu, A.N. (2007). *The Information User: Issues and Themes*, 2nd ed. Okigwe: Whytem Publishers.

Usha, G. (2010). Electronic publishing: the models in publishing. Accessed on August 24, 2012, at www.chillibreeze.com/articles_various/epublishing/Electroni-publish.