NATIONAL OPEN UNIVERSITY OF NIGERIA

JLS 842

Introduction to web Publishing

Module 1

JLS 842 (Introduction to Web Publishing) Module 1

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Module 1General Introduction

Unit 1Meaning and Definitions of Publishing/Web

1.0 Introduction

The term "publishing" in the broadest sense means making something publicly known. Historically, it refers to the issuing of printed materials, such as books, magazines, periodicals, and the like; it now also encompasses issuing such materials in an electronic form. There is, however, great latitude of meaning, because publishing has never emerged, and cannot emerge, as a profession completely separate from printing on the one hand and the retailing of printed matter on the other.

Publishing has become mandatory because knowledge has to be disseminated to people across boundaries and frontiers. Through publishing, knowledge is created and transferred to several people. Through publishing, people are educated, informed, socialized and entertained. In this unit therefore, we are going to examine publishing and Web.

2.0 Objectives

At the end of this unit, you should be able to:

- explain the meaning of publishing
- discuss the meaning of Web
- trace the history of Web
- identify the characteristics of Web.

3.0 Main Content

3.1 The Meaning of Publishing

Publishing is simply referred to as the business or profession of the commercial production and issuance of literature, information, musical scores or sometimes, recordings or art; it is the process of production and dissemination of literature, music or information. The foregoing implies that publishing is the activity of making information available to the general public. In some cases, authors may be their own publishers, meaning, originators and developers of content also provide media to deliver and display the content for the same.

Traditionally, the term refers to the distribution of printed works such as books and newspapers. With the advent of digital information systems and the Internet, the scope of publishing has expanded to include electronic resources, such as the electronic versions of books and periodicals, as well as micropublishing, Web sites, blogs, video game publisher and the like.

Thus, publishing includes the stages of the development, acquisition, copy editing, graphic design, production – printing and its electronic equivalent, marketing and distribution of newspapers, magazines, books, literary works, musical works, software and other works dealing with information, including the electronic media. The foregoing implies that publishing is any means of making information available to the public. The publishing industry encompasses book, magazine, newspaper and digital publishing.

3.2 Understanding Web as a Concept

The World Wide Web, commonly referred to as Web or Web site, is a system of interlinked hypertext documents accessed via the Internet. With a Web browser, one can view Web pages that may contain text, images, videos and other multimedia and navigate between them via hyperlinks. A Web site is a set of related Web pages served from a single Web domain. A Web site is hosted on at least one Web server, accessible via a network, such as the Internet or a private local area network through an Internet address known as a Uniform Resource Locator (URL).

All publicly accessible Web sites collectively constitute the World Wide Web. As noted by Mitchel (n. d.), the World Wide Web consists of all the public Web sites connected to the Internet worldwide, including the client devices, such as computers and cell phones, that access Web content. The WWW is just one of many applications of the Internet and computer networks. WEBOPEDIA (n. d.) states that a Web is a system of Internet servers that support specially formatted documents. The documents are formatted in a markup language called HTML (HyperText Markup Language) that supports links to other documents, as well as graphics, audio and video files.

3.3 History of Web

In 1980, Tim Berners-Lee, an independent contractor at the European Organisation for Nuclear Research (CERN), Switzerland, built *ENQUIRE*, as a personal database of people and software models, but also as a way to play with hypertext; each new page of information in *ENQUIRE* had to be linked to an existing page.

In 1984 Berners-Lee returned to CERN, and considered its problems of information presentation: physicists from around the world needed to share data, and with no common machines and no common presentation software. He wrote a proposal in March 1989 for "a large hypertext database with typed links", but it generated little interest.

His boss, Mike Sendall, encouraged Berners-Lee to begin implementing his system on a newly acquired NeXT workstation. He considered several names, including *Information Mesh*, *The Information Mine* (turned down as it abbreviates to TIM, the WWW's creator's name) or *Mine of Information* (turned down because it abbreviates to MOI which is "Me" in French), but settled on *World Wide Web* (Wikipedia, n. d.).

He found an enthusiastic collaborator in Robert Cailliau, who rewrote the proposal (published on November 12, 1990) and sought resources within CERN. Berners-Lee and Cailliau pitched their ideas to the European Conference on Hypertext Technology in September 1990, but found no vendors who could appreciate their vision of marrying hypertext with the Internet (Wikipedia, n. d.).

By Christmas 1990, Berners-Lee had built all the tools necessary for a working Web: the HyperText Transfer Protocol (HTTP) 0.9, the HyperText Markup Language (HTML), the first Web browser (named World Wide Web, which was also a Web editor), the first HTTP server software (later known as CERN httpd), the first Web server (http://info.cern.ch), and the first Web pages that described the project itself. The browser could access Usenet newsgroups and FTP files as well.

However, it could run only on the NeXT; Nicola Pellow therefore created a simple text browser that could run on almost any computer called the Line Mode Browser. To encourage use within CERN, Bernd Pollermann put the CERN telephone directory on the Web — previously users had to log onto the mainframe in order to look up phone numbers.

According to Tim Berners-Lee, the Web was mainly invented in the Building 31 at CERN (46.2325°N 6.0450°E) but also at home, in the two houses he lived in during that time (one in France, one in Switzerland). In January 1991, the first Web servers outside CERN itself were switched on (Wikipedia, n. d.).

The first Web page may be lost, but Paul Jones of UNC-Chapel Hill in North Carolina revealed in May 2013 that he has a copy of a page sent to him in 1991 by Berners-Lee which is the oldest known Web page. Jones stored the plain-text page, with hyperlinks, on a floppy disk and on his NeXT computer.

On August 6, 1991, Berners-Lee posted a short summary of the World Wide Web project on the alt.hypertext newsgroup. This date also marked the debut of the Web as a publicly available service on the Internet, although new users only access it after August 23. For this reason, this is considered the internaut's day. The World Wide Web (WWW) project aims to allow all links to be made to any information anywhere. The WWW project was started to allow high energy physicists to share data, news, and documentation. We are very interested in spreading the Web to other areas, and having gateway servers for other data (Wikipedia, n. d.).

Paul Kunz from the Stanford Linear Accelerator Center visited CERN in September 1991, and was captivated by the Web. He brought the NeXT software back to SLAC, where librarian Louise Addis adapted it for the VM/CMS operating system on the IBM mainframe as a way to display SLAC's catalog of online documents; this was the first Web server outside of Europe and the first in North America. The www-talk mailing list was started in the same month. An early CERN-related contribution to the Web was the parody band Les HorriblesCernettes, whose promotional image is believed to be among the Web's first five pictures (Wikipedia, n. d.).

3.4 Characteristics of Web

The World Wide Web has inherent properties that characterize its expressive possibilities. The characteristics of World Wide Web as identified byVITODIBARI.COM (n. d.) are:

Unbound in space/time: Information provided on the Internet is available every day, around the clock, and around the world, pending network operation.

Bound in use of Context: Web-based hypertext fosters associations among works through links, giving rise to networks of meaning and association among many information sources that may be scattered across the globe and written by many authors.

Distributed, non-hierarchical: The Web's technical organization as an application using the Internet for a client/server model influences the disintegration of user focus on a single outlet for experiencing content.

The Web is a platform: We have gone from installable software on our PC, to software-services that are accessible online. All data and software is now available online.

The Web is functionality: The Web aids in the transfer of information and services from Web sites.

The Web is simple: It facilitates the access and usage of Web services using user-friendly interfaces.

The Web is light: The models of development, the processes and the models of business become light. The lightness is associated with the ability to share of information and services with ease and made possible through the implementation of intuitive modular elements.

The Web is social: People create the Web, "populate the Web", by socializing and gradually moving members from the physical world to the online world.

The Web is flow: The users are seen as co-developers, while Web 2.0 remains in "perpetual beta", where it remains at the beta development stage for an indefinite period of time.

The Web is flexible: The software is on a more advanced level because it enables access to previously unavailable digital content. This idea is similar to the Long Tail concept, which focuses on the less popular content that could not previously be accessed.

The Web is mixable: The expansion of codes in order to modify Web applications allows individuals who are not necessarily computer professionals to mix different applications in order to create new ones.

The Web is participatory: Web 2.0 has adopted a structure of participation that encourages users to enhance the application while they use it, instead of keeping it rigid and controlled.

The Web is in our hands: Its increased organization and characterization of information emphasizes its user-friendly interaction through deep linking. Thanks to phenomena such as social tagging, information is always more and more easily available (VITODIBARI.COM, n. d.).

Self-Assessment Exercise

1. Publishing has to do with passing messages to a large audience. Discuss.
2. The Web is unbound in space and time; what are the other characteristics of Web?

4.0 Conclusion

Publishing is a means through which messages are carried to a large audience. Books, newspapers, magazines and journals are often published thereby, passing information across to the audience-members. As the popularity of the Internet increases, people become more aware of its colossal potential. The World Wide Web (WWW) is a product of the continuous search for innovative ways of sharing information resources. People have dreamt of a universal information database since late 1940s. In this database, not only would the data be accessible to people around the world, but it would also easily link to other pieces of information, so that only the most important data would be quickly found by a user.

5.0 Summary

In this unit, we examined publishing as a concept, looking at several definitions. Publishing is seen as the communication of information through newspapers, magazines, books, journals, and through digital means. The unit also examined Web as a concept. The unit also appraises the historical genesis of Web and the characteristics of Web. It is therefore imperative for readers to be able to understand the concept of publishing, Web and history of publishing.

6.0 Self-Assessment Exercise

1. Briefly explain the meaning of publishing.
2. What do you understand by the term "Web"?
3. Trace the history of Web.
4. Elaborately discuss the characteristics of Web.

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Unit 2 Internet and the Web

1.0 Introduction

The two terms "Internet" and "World Wide Web" have been used interchangeably ever since the Internet itself became a household "utility" as common as electricity or cable TV. People talk about "surfing the Web" and "searching the Internet" like the two terms are one and the same. The World Wide Web and the Internet are not the same. You might be shocked, but that is the fact. The Internet and the World Wide Web have become integral parts of our lives.

For some, going online is the first thing you do when you wake up and the last thing you do before going to bed. But how they are different and how they work together is the focus of this unit. The World Wide Web is the information, in the form of Web sites that is found on the Internet. This therefore introduces one of the most significant innovations of the past half century – the Internet. In this unit, the Internet is defined, and the history of the Internet is detailed. This unit equally discusses the differences between the Internet and World Wide Web.

2.0 Objectives

At the end of this unit, you should be able to:

- enumerate the meaning of Internet
- explain what the Internet does
- explain how the Internet moves data
- differentiate between the Internet and World Wide Web
- enumerate how World Wide Web shows information from the Internet.

3.0 Main Content

3.1 The Meaning of Internet

The Internet is a global computer network providing a variety of information and communication facilities, consisting of interconnected networks, using standardized communication protocols. The Internet, according to Agba (2002:253) is the most technologically advanced medium of communication.

It is a multimedia information superhighway that facilitates business, sports, politics, entertainment and other endeavours across international boundaries. It is a technological revolution of monumental capabilities. In fact, it is the information revolution that has turned the world into a "global village". It is man's most ambitious attempt to miniaturize the physical planet, earth.

Internet, according to Asemah (2011), is an electronic medium, which today is connecting the whole world with the help of the computers. Internet consists of large amount of data that can be accessed by the various users and because of this; it is also referred to as the 'Information Superhighway' of the world. With the help of the Internet one can easily be in touch with anyone in the whole world by sending electronic mail, by chatting etc., travel bookings can be made very easily, one can order books or buy anything online.

In simple terms, it can be said that Internet provides a very strong connection or network between computers globally; bringing people and their working close to each other (Information Technology, 2013). The Internet is not a personal property of any one i.e. it is not owned by anyone, which allows individuals and the various organizations to get connected to any other server or any other user. Internet has become such an important and defining tool in today's competitive and market oriented environment that it helps a lot in getting business and making money (Information Technology, 2013).

The Internet has become a world-wide tool of information dissemination and communication. It has had profound impact on academic, social and business communication. It has destroyed time, space and geography. One of the features of the Internet that readily advertises its democratic potential is its openness.

Anybody with a computer connected to the information superhighway is a potential creator and disseminator of information, and can obtain information from other sources without any barrier. It allows equal opportunity for all participants to share information. The Internet is a vast library holding vast amount of materials from diverse sources - government, corporate bodies, non-governmental organizations, academic institutions, individual on almost all subjects, issues and interests.

All these materials are accessible theoretically by anybody. It is established more or less as cooperative, non-hierarchical and uncontrollable system of communication. It is designed to facilitate the sharing of information between individuals and among groups. It is an interactive medium. The complex and multifarious nature of the Internet is described by Morris and Ogan (1996:42), cited in Asemah (2011) thus:

> Internet communication takes many forms; from World Wide Web pages operated by major news organizations to Usenet groups discussing folk or music to E-mail messages among colleagues and friends. The Internet's communication forms can be understood as a continuum. Each point in the traditional model of communication process can, in fact, vary from one to a few-many on the Internet. Sources of the messages can range from one person in E-mail communication, to a social group in a Listserv or Usenet group to a group of professional journalists in World Wide Web page. The messages themselves can be traditional journalistic news stories created by a reporter and editor, stories created over a long period of time by many people, or simply conversations, such as in an internet Relay Chat group. The receivers, or audiences, of these messages can also number from one to potentially millions, and may or may not move fluidly from their role as audience-members to producers of messages.

With its multifarious features and uses, the Internet provides a unique forum for anybody to be both a producer and consumer of information. It allows for the 'free' flow of information without any form of barrier currently suffered by the 'old' media. The Internet, sometimes called simply "the Net," is a worldwide system of computer networks - a network of

networks in which users at any one computer can, if they have permission, get information from any other computer and sometimes, talk directly to users at other computers.

It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPANet. The original aim was to create a network that would allow users of a research computer at one university to be able to "talk to" research computers at other universities. A side benefit of ARPANet's design was that, because messages could be routed or rerouted in more than one direction, the network could continue to function even if parts of it were destroyed in the event of a military attack or other disaster (Rouse, 2008).

Today, the Internet is a public, cooperative, and self-sustaining facility accessible to hundreds of millions of people worldwide. Physically, the Internet uses a portion of the total resources of the currently existing public telecommunication networks.

3.2 What Does the Internet Do?

The Internet has one very simple job; to move computerized information known as data, from one place to another. The machines that make up the Internet treats all the information they handle in exactly the same way. In this respect, the Internet works a bit like the postal service. Letters are simply passed from one place to another, no matter who they are from or what messages they contain. The job of the mail service is to move letters from place to place, not to worry about why people are writing letters in the first place; the same applies to the Internet (Woodford, 2013).

Just like the mail service, the Internet's simplicity means it can handle many different kinds of information helping people to do many different jobs. It is not specialized to handle e-mails, Web pages, chat messages, or anything else: all information is handled equally and passed on in exactly the same way. Because the Internet is so simply designed, people can easily use it to run new applications; new things that run on top of the basic computer network.

That is why, when two European inventors developed Skype, a way of making telephone calls over the Net, they just had to write a programme that could turn speech into Internet data and back again. No-one had to rebuild the entire Internet to make Skype possible (Woodford, 2013).

3.3 How the Internet Moves Data

There are two basic ways through which the Internet can move data. The two basic ways as identified by Woodford (2013) are:

Circuit Switching: Much of the Internet runs on the ordinary public telephone network, but there is a big difference between how a telephone call works and how the Internet carries data. If you ring a friend, your telephone opens a direct connection or circuit between your home and theirs. If you had a big map of the worldwide telephone system and it would be a really big map, you could theoretically mark a direct line, running along lots of miles of cable, all the way from your phone to the phone in your friend's house.

For as long as you are on the phone, that circuit stays permanently open between your two phones. If you think about it, circuit switching is a really inefficient way to use a network. All the time you are connected to your friend's house, no-one else can get through to either of you by phone.

Packet Switching: The Internet could, theoretically, work by circuit switching and some parts of it still do. If you have a traditional "dialup" connection to the Net, you are using circuit switching to go online. You will know how maddeningly inefficient this can be. No-one can phone you while you are online; you will be billed for every second you stay on the Net; and your Net connection will work relatively slowly.

Packet switching is much more efficient than circuit switching. You do not need to have a permanent connection between the two places that are communicating, for a start, so you are not blocking an entire chunk of the network each time you send a message. Many people can use the network at the same time and since the packets can flow by many different routes, depending on which ones are quietest or busiest, the whole network is used more evenly, which makes for quicker and more efficient communication all round.

3.4 Differences between WWW and Internet

Many people use the terms Internet and World Wide Web, or just the *Web*, interchangeably, but the two terms are not synonymous. The World Wide Web is a global set of documents, images and other resources, logically interrelated by hyperlinks and referenced with Uniform Resource Identifiers (URIs). URIs symbolically identifies services, servers, and other databases and the documents and resources that they can provide.

Hypertext Transfer Protocol (HTTP) is the main access protocol of the World Wide Web, but it is only one of the hundreds of communication protocols used on the Internet. Web services also use HTTP to allow software systems to communicate in order to share and exchange business logic and data.

The Internet is a global system of interconnected computer networks that use the standard Internet protocol suite (*TCP/IP*) to serve several billion users worldwide. It is a *network of networks* that consists of millions of private, public, academic, business, and government networks, of local to global scope, that are linked by a broad array of electronic, wireless and optical networking technologies. The Internet carries an extensive range of information resources and services, such as the inter-linked hypertext documents of the World Wide Web (www), the infrastructure to support e-mail, and peer-to-peer networks.

Most traditional communications media including telephone, music, film, and television are being reshaped or redefined by the Internet, giving birth to new services such as Voice over Internet Protocol (VoIP) and Internet Protocol Television (IPTV). Newspaper, book and other print publishing are adapting to Web site technology, or are reshaped into blogging and Web feeds. The Internet has enabled and accelerated new forms of human interactions through instant messaging, Internet forums, and social networking. Online shopping has boomed both for major retail outlets and small artisans and traders. Business-to-business and financial services on the Internet affect supply chains across entire industries.

The Internet's precursor as noted by Arrindell and Lyster (2013) began as a U.S. military project in the 1950's. It was called ARPAnet and eventually came online when it connected

four university computers in 1969. Arrindell and Lyster (2013) further noted that by 1984, it linked 1000 computers and was renamed the Internet, for *inter*connected *net*work. And by 2012, the Internet had grown to 8.7 billion connected devices. While the Internet is the hardware made up of computers, servers, switches, and routers that contain data and allow it to travel, it is also the software and communication protocols that allows different computers and networks to communicate. That makes it a "network of networks."

The Internet is named for "interconnection of computer networks". It is a massive hardware combination of millions of personal, business, and governmental computers, all connected like roads and highways. The Internet started in the 1960s under the original name "ARPAnet". ARPAnet was originally an experiment in how the US military could maintain communications in case of a possible nuclear strike. With time, ARPAnet became a civilian experiment, connecting university mainframe computers for academic purposes. As personal computers became more mainstream in the 1980s and 1990s, the Internet grew exponentially as more users plugged their computers into the massive network.

Today, the Internet has grown into a public spider-web of millions of personal, government, and commercial computers, all connected by cables and by wireless signals. No single person owns the Internet. No single government has authority over its operations. Some technical rules and hardware/software standards enforce how people plug into the Internet, but for the most part, the Internet is a free and open broadcast medium of hardware networking.

The World Wide Web or "Web" on the other hand, is a massive collection of digital pages: that is large software subset of the Internet dedicated to broadcasting content in the form of HTML pages. The Web is viewed by using free software called Web browser. Since it came to existence in 1989, the Web is based on hypertext transfer protocol, the language which allows you and me to "jump" (hyperlink) to any other public Web page. There are over 65 billion public Web pages on the Web today (Gil, n.d.). This perhaps explains why Boswell (n.d.) states that the World Wide Web is a part of the Internet "designed to allow easier navigation through the use of graphical user interfaces and hypertext links between different addresses.

The World Wide Web allows users to access the information on the Internet by displaying web pages on a browser. Tim Berners-Lee created the Web in 1989, and in 1991 the first web page went live. There are now almost 650 million Web sites in the world. Thus, the Web is just one type of traffic on the Internet. Email, video chat, gaming, and many other types of data are like different kinds of vehicles that travel and rely on the infrastructure of that superhighway called the Internet.

The foregoing implies that the World Wide Web (WWW) is just one of the features of the internet. WWW involves a graphical-hypertext based multimedia medium. This implies that it allows still and motion pictures and text presentations which can be made to suite various dimensions. The World Wide Web is a location on the Internet. There are lots of information on WWW thus, researchers can get lot of materials on WWW. The researchers use the search tool or the search engine. These messages may be in form of text, graphics, video, journals, etc. Each person has a designated mailbox that stores messages sent by other users (Asemah, 2011).

The most widely used part of the Internet is the World Wide Web, often abbreviated as "WWW" or called "the Web". Its outstanding feature is hypertext, a method of instant

cross-referencing. In most Web sites, certain words or phrases appear in text of a different colour than the rest; often this text is also underlined. When you select one of these words or phrases, you will be transferred to the site or page that is relevant to this word or phrase.

Sometimes there are buttons, images, or portions of images that are "clickable." If you move the pointer over a spot on a Web site and the pointer changes into a hand, this indicates that you can click and be transferred to another site (Rouse, 2008). Using the Web, you have access to millions of pages of information. Web browsing is done with a Web browser, the most popular of which are Microsoft Internet Explorer and Netscape Navigator. The appearance of a particular Web site may vary slightly, depending on the browser you use. Also, later versions of a particular browser are able to render more "bells and whistles" such as animation, virtual reality, sound, and music files, than earlier versions (Rouse, 2008).

3.5 How the World Wide Web shows Information from the Internet

To get to a Web site, you have totype in its Web address or Uniform Resource Locator, better known as a URL, into a Web browser. Entering the URL sends a request to a domain name server, or DNS, to access that Web site's server. Like a translator, the DNS converts the URL into an IP address. Every server and computer connected to the Internet has an IP or Internet protocol, address. You could type an IP address into your browser, but IP addresses can change, and it is much easier to remember an address like yahoo.com.

After the DNS tells your computer that the Web site is correct IP address, your computer can then directly contact the Web site's server. The Web site's server responds to the request and sends the information back to your computer. Your computer's Web browser converts the information into a readable form. That is the Web site you see on your computer screen.

Self–Assessment Exercise

1. What do you understand by the term Internet?
2. Mention at least five importance of the Internet
3. Show how the Internet moves data.

4.0 Conclusion

Global communication is easy now, thanks to an intricately linked worldwide computer network that we call the Internet. In less than 20 years, the Internet has expanded to link up around 210 different nations. Even some of the world's poorest developing nations are now connected. This development has been facilitated by the Internet; the Internet is however different from the WWW.

5.0 Summary

In this unit, we examined the relationship between the Internet and the Web. The Internet is a collection of standalone computers and computer networks in companies, schools and colleges, all loosely linked together, mostly using the telephone network. The Internet and the World Wide Web have a whole-to-part relationship. The Internet is the large container and the Web is a part within the container. To be technically precise, the Net is the restaurant, and the Web is the most popular dish on the menu. The Internet and the Web work together, but they are not the same thing. The Internet provides the underlying structure, and the Web utilizes that structure to offer content, documents, multimedia, etc.

6.0 Self-Assessment Exercise

1. The Internet and World Wide Web are not the same. Do you agree?
2. The World Wide Web is independent on the Internet. Take a position on this assertion.
3. Briefly discuss how the World Wide Web shows information from the Internet.

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Unit 3Understanding Web Publishing

1.0 Introduction

In these days of information society, traditional books, magazines, newspapers and journals are not the only sources of information any more. Electronic publications, which came with new technologies, create basis for fast and high quality information. Convenient storage, search and copying possibilities decide the strength of this new media. Web publishing has become common in scientific publishing, where it has been argued that materials like books, magazines, journals, etc., are in the process of being replaced by electronic publishing. It is also becoming common to distribute books, magazines, and newspapers to consumers through the Internet, a market that is growing by millions each year (Tech Terms.Com, n.d.).

Market research suggests that half of all magazines and newspaper circulation will be via digital delivery by the end of 2015 and that half of all reading in the in most part of the world will be done without paper by 2015. Web or electronic publishing is increasingly popular in works of fiction, as well as with scientific articles. Electronic publishers are able to provide quick gratification for late-night readers, books that customers might not be able to find in standard book retailers and so on and so forth.

While the term "electronic publishing or Web publishing" is primarily used today to refer to the current offerings of online and Web-based publishers, the term has a history of being used to describe the development of new forms of production, distribution and user interaction in regard to computer-based production of text and other interactive media (Tech Terms.Com, n.d.). In this unit, we are going to have an overview of Web publishing.

2.0 Objectives

At the end of this unit, you should be able to:

- enumerate the concept of Web publishing
- trace the history of Web publishing
- identify the advantages and disadvantages of Web publishing
- discuss the Web Design and development process.

3.0 Main Content

3.1 What is Web Publishing?

Web publishing is also called online publishing. It is simply the process of publishing content on the Internet. It includes creating and uploading Web sites, updating Web pages and posting blogs online (Tech Terms.Com, n. d.). The published content may include text, images, videos and other types of media. It may be seen as the process of posting or publishing information on the Internet. It involves creating and uploading Web sites,

restoring Web sites posting and commenting on blogs. All these may include videos, images, scripts, documentaries and other categories of media content.

Web publishing is therefore, seen as the act of creating a Web domain in which information is shared with others that access the site. This can be done by creating a Web page and putting the desired information, ranging from books, newspapers, magazines, journal articles, etc.

Web publication is arranged computer information. In Web publishing, material is produced and stored electronically, rather than in print. Whenever users display, present or "post" any written, auditory or visual media on to the World Wide Web, it can be said they are "publishing" electronic content.

Most traditional newspapers and magazines today publish in an electronic form on the Web where access is typically "free" or available through a free membership. Frequently electronic publishing is referring to production of electronic books. It is however worthy to note that posting updates on social networking Web sites like Facebook and Twitter is generally not considered Web publishing. Instead, Web publishing generally refers to uploading content to unique Web sites. Then electronic publishing could mean:

- production and distribution of new works, which are appearing for the first time in electronic format.
- providing electronic text versions of previously published works (such as classic literature, non-copyrighted material, or works that have entered the public domain), either online or on CD-ROM, or offering an electronic version of a book that is simultaneously being produced in print.

Electronic publications should have several important features:

- Convenient navigation
- Information control
- Search possibilities
- Identification number (ISSN, ISBN, DOI, etc.).

Electronic publications are being registered in ISSN and ISBN agencies, just as in the traditional publications. They have to be registered independently from their "traditionally" published analogue.

3.2 Advantages of Web Publishing

There are several advantages of Web publishing; among them are:

Editing: Editing is a plus involved in online publishing. For the most part, editing should and does occur before the new issue goes online. However, we have all come across several typos in print documents of any kind that were not caught before the publication was sent off to the printer. In online publishing, there is no "final" product. Errors can be corrected in a matter of minutes or seconds even. This implies that even when the publication is already online, there is room for editing.

Traffic: Online publishing through blogs, lenses and article marketing are well known as tools for bringing traffic to your landing pages and/or home pages. This traffic is your viewing audience. The more traffic you get, the greater the opportunity you have to gain new members for your mailing lists, new subscribers for your blogs and lenses. The ultimate goal, of course, is to make more sales. These are just methods that often lead to sales.

It is easy: It is quite easy to learn how to publish electronically and necessary equipment can be obtained without difficulties.

It is much faster: It can take months to publish traditional "paper" book; it is possible to publish electronically in days or even hours.

It is less expensive: Once you have software and knowledge necessary for work, you can publish lots of various materials without almost any additional costs.

It can use multimedia and varying format options: An electronic book or e-journal can have a variety of multimedia elements to add to the experience. Such elements might include music, graphics, animation, audio, or interactivity-clickable features. Downloadable formats for hand readers often include different fonts, a highlighter, post-it notes, a "clickable" table of contents, and bookmarking capabilities.

It will be available internationally: Electronic editions can be accesses from any part of the world and read from any computer connected to the Internet (Tech Terms.Com, n.d).

3.3 Disadvantages of Web Publishing

Web Publishinghas the following disadvantages:

Profits: It remains difficult to make any money off of online publishing. Most publications online right now are free to readers and are merely charging for ad space. However, some are attempting to require subscriptions. Much still seems up in the air in terms of what standard might come out of online publishing. It is a new medium and people using it are still in the stages of trial and error.

Marketing: Although there are no or few distribution costs for online publishing, it does take a bit of marketing to get people to your site. You must register your publication with as many search engines as possible and often, this entails a cost. However, if this is not done, no one will be able to find your site. This process needs to be given regular attention as your description or focus changes and as new search engines are introduced. Also, other sites that have agreed to link to yours need to be regularly contacted to make sure that link will remain on their site.

Audience: Audience is a category that can be considered both a pro and a con for online publishing. While your audience is not limited to only those hit in your distribution efforts, it is also not the dedicated group of readers that most print publications can count on. So, while your publication may be more widely available, that does not mean that people are reading it. It is more difficult to determine your readership in online publications.

First, you cannot know the demographics of your readers as easily as you might with print. Some people have attempted to stick with the subscription method to alleviate some of this

problem, but then readership often goes down because readers can often get the same information elsewhere for free on the Internet.

Consumer reluctance to read online: While the popularity of e-books and e-journals is growing steadily, many consumers are still reluctant to read onscreen or to add the cost of printing a book on one's own paper and with one's own toner. Regardless of age, gender or experience, almost everyone finds it more difficult to read from a screen than from paper (Tech Terms.Com, n.d.).

3.4 The Web Design and Development Process

Web development follows some stages; let us quickly examine the stages:

Information Gathering: The first step in designing a successful Web site is to gather information. Many things need to be taken into consideration when the look and feel of your site is created. This first step is actually the most important one, as it involves a solid understanding of the company it is created for. It involves a good understanding of **yo**u. What your business goals and dreams are and how the Web can be utilised to help you achieve those goals. It is important that your Web designer start off by asking a lot of questions to help him understand your business and your needs in a Web site (Bolby, 2008).

Certain things to consider are:

- What is the purpose of the site?
- What do you hope to accomplish by building this Web site? Two of the more common goals are either to make money or share information.
- Is there a specific group of people that will help you reach your goals? It is helpful to picture the "ideal" person you want to visit your web site. Consider their age, sex or interests; this will later help determine the best design style for your site.
- What kind of information will the target audience be looking for on your site?

Planning: Using the information gathered from phase one, it is time to put together a plan for your Web site. This is the point where a site map is developed. The site map is a list of all main topic areas of the site, as well as sub-topics, if applicable. This serves as a guide as to what content will be on the site, and is essential to developing a consistent, easy to understand navigational system. The end-user of the Web site (customers) must be kept in mind when designing your site.

These are, after all, the people who will be learning about your service or buying your product. A good user interface creates an easy to navigate Web site and is the basis for this (Bolby, 2008). During the planning phase, your Web designer will also help you decide what technologies should be implemented. Elements such as interactive forms, ecommerce, flash, etc. are discussed when planning your Web site.

Design: Drawing from the information gathered up to this point, it is time to determine the look and feel of your site. Target audience is one of the key factors taken into consideration. A site aimed at teenagers, for example, will look much different from the one meant for a financial institution.

As part of the design phase, it is also important to incorporate elements such as the company's logo or colours to help strengthen the identity of your company on the Web site. Your Web designer will create one or more prototype designs for your Web site. This is typically a .jpg image of what the final design will look like. Often times, you will be sent an email with the mock-ups for your Web site, while other designers take it a step further by giving you access to a secure area of their Web site meant for customers to view work in progress (Bolby, 2008).

Either way, your designer should allow you to view your project throughout the design and development stages. The most important reason for this is that it gives you the opportunity to express your likes and dislikes on the site design. In this phase, communication between both you and your designer is crucial to ensure that the final Web site will match your needs and taste. It is important that you work closely with your designer, exchanging ideas, until you arrive at the final design for your Web site. Then development can begin.

Development: The developmental stage is the point where the Web site itself is created. At this time, your Web designer will take all of the individual graphic elements from the prototype and use them to create the actual, functional site. This is typically done by first developing the home page, followed by a "shell" for the interior pages. The shell serves as a template for the content pages of your site, as it contains the main navigational structure for the Web site.

Once the shell has been created, your designer will take your content and distribute it throughout the site, in the appropriate areas. Elements such as interactive contact forms, flash animations or ecommerce shopping carts are implemented and made functional during this phase, as well. This entire time, your designer should continue to make your in-progress Web site available to you for viewing, so that you can suggest any additional changes or corrections you would like to have done.

On the technical front, a successful Web site requires an understanding of front-end Web development. This involves writing valid XHTML / CSS code that complies with current Web standards, maximising functionality, as well as accessibility for as large an audience as possible (Bolby, 2008).

Testing and Delivery: At this point, your Web designer will attend to the final details and test your Web site. They will test things such as the complete functionality of forms or other scripts, as well last testing for last minute compatibility issues (viewing differences between different Web browsers), ensuring that your Web site is optimized to be viewed properly in the most recent browser versions. A good Web designer is one who is well versed in current standards for Web site design and development. The basic technologies currently used are XHTML and CSS (Cascading Style Sheets).

As part of testing, your designer should check to be sure that all of the code written for your Web site validates. Valid code means that your site meets the current Web development standards – this is helpful when checking for issues such as cross-browser compatibility as mentioned above (Bolby, 2008). Once you give your Web designer final approval, it is time to deliver the site. An FTP (File Transfer Protocol) programme is used to upload the Web site files to your server. Most Web designers offer domain name registration and Web hosting services as well.

Once these accounts have been setup, and your Web site uploaded to the server, the site should be put through one last run-through. This is just precautionary, to confirm that all

files have been uploaded correctly, and that the site continues to be fully functional (Bolby, 2008).

Maintenance: The development of your Web site is not necessarily over, though. One way to bring repeat visitors to your site is to offer new contention a regular basis. Most Web designers will be more than happy to continue working together with you, to update the information on your Web site.

Many designers offer maintenance packages at reduced rates, based on how often you anticipate making changes or additions to your Web site (Bolby, 2008). If you prefer to be more hands on, and update your own content, there is something called a CMS (Content Management System) that can be implemented to your Web site. This is something that would be decided upon during the planning stage. With a CMS, your designer will utilise online software to develop a database driven site for you (Bolby, 2008). A Web site driven by a CMS gives you the ability to edit the content areas of the Web site yourself. You are given access to a back-end administrative area, where you can use an online text editor (similar to a mini version of Microsoft Word). You will be able to edit existing content this way or if you are feeling more adventurous, you can even add new pages and content yourself.

The possibilities are endless. It is really up to you as far as how comfortable you feel as far as updating your own Web site. Some people prefer to have all the control so that they can make updates to their own Web site the minute they decide to do so. Others prefer to hand off the Web site entirely, as they have enough tasks on-hand that are more important for them to handle directly. That is where the help of your Web designer comes in, once again, as they can take over the Web site maintenance for you. One less thing for you to do is always a good thing in these busy times (Bolby, 2008).

Other maintenance type items include SEO (Search Engine Optimization) and SES (Search Engine Submission). This is the optimization of your Web site with elements such as title, description and keyword tags which help your Web site achieve higher rankings in the search engines. The previously mentioned code validation is something that plays a vital role in SEO, as well (Bolby, 2008). There are a lot of details involved in optimizing and submitting your Web site to the search engines. This is a very important step, because even though you now have a Web site, you need to make sure that people can find it (Bolby, 2008).

Self-Assessment Exercise

1. Explain the concept "Web publishing".
2. What are the advantages of Web publishing?
3. What are the disadvantages of Web publishing?

4.0 Conclusion

In this unit, we have conceptualized Web publishing. Web publishing is also known as online publishing. In this unit, the advantages and disadvantages of Web publishing were also delved into. As well, we delved into the process of Web publishing. Thus, the reader is equipped with additional knowledge of Web publishing process and its advantages and disadvantages.

5.0 Summary

Web publishing entails the publication of materials on the Internet. It has to do with an individual or an organization publishing books, newspapers, magazines or journals on the Internet. Posting updates on social networking sites is not Web publishing. There are certain advantages and disadvantages of Web publishing; one of the advantages of Web publishing is that the work can be edited at any point in time. However, one of the advantages is that it is difficult to make profit through Web publishing.

6.0 Self-Assessment Exercise

1. Posting updates on social networking sites like Facebook, 2go, Twitter, etc. is not Web publishing. Discuss.
2. Identify and discuss the advantages and disadvantages of Web publishing.
3. Elaborately discuss the Web design and development process.

7.0 References/Further Reading

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