

## **CHAPTER 1**

### **Introduction**

#### **Background of the study**

In the early 1970s, the Department of Defense in USA and several large universities developed an intricate system of electronic communication for research purposes. It was called the Advanced Research Projects Agency Network (ARPA net),( Ryder & Tom Hughes, 1998). Word quickly spread about this elaborate data network. After seeing the benefits of this system of networked computers, many universities wanted to come online. In the early 1980s, the United States government realized that the huge growth of the network would soon cause ARPA net to expand beyond the US government's ability to administer the network. At this point, the US government turned over the network's administration to the universities and the private sector, and the Internet was born.

The Internet is a global network of networks enabling computers of all kinds to directly and transparently communicate and share services throughout much of the world. Because the Internet is enormously valuable, enabling capability for so many people and organizations, it also constitutes a shared global resource of information, knowledge, and means of collaboration, and cooperation among countless diverse communities.

In a recent survey of Internet services online users indicated that the total number worldwide as of September 1998 was 147 million. In the Middle East alone there was 0.75 million, Africa 0.8 million users while in the

Asia/Pacific it was approximately 22 millions, Europe 33.25 millions and in South America 4.5 millions making Canada & USA the majority of the Internet users that is 87 millions leaving only 8.7million in scattered areas. (Nua Internet Surveys, 1998). Those millions of users access the Internet to use electronic mail (E-mail), trade data files and shareware programs, access libraries and message bases, or order products. In just over a few years, the Internet has emerged from near obscurity to become an information phenomenon. Connecting most of the world, the Internet truly is an international medium, as illustrated in Figure 1.

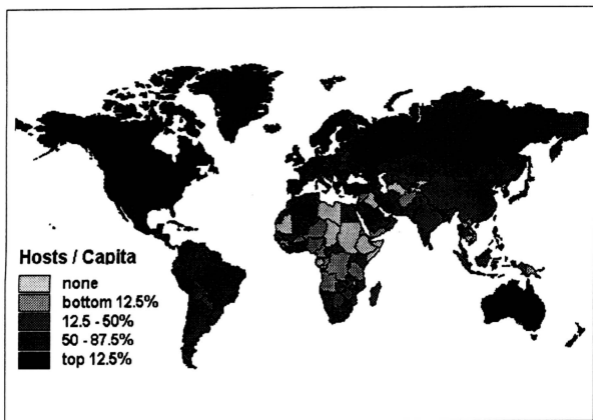


Figure 1: Countries connected to the Internet and the Internet hosts per capita. (Copyright ©1998 Matrix Internet Quality, all rights reserved)

The utility of the Internet uses comes in many forms, such as the World Wide Web (WWW) or (Web), Electronic mail (e-mail), news groups, Internet Relay Chat (IRC) etc. Computers in the Internet performs two distinct operations. They act as a server or as a client. In general, a server serves the client computers requests for information while the client displays the information. Thus, users of the Internet can be classified as Internet contain developers or Internet surfers. Internet contain developer creates the sites and the sources of the Internet deferent forms. The Internet surfers are the users of the information and other Internet services online in any of its forms. In all these forms the information will be transferred and exchanged between the individuals in one or many forms of media like plain text, sound, video, animation and pictures, one media or multimedia. Islamic information is available in the Internet in all the above forms provided by universities, scholars, governments, companies, schools and individuals. Multimedia instructional materials mostly appear in the WWW more than other platforms of the Internet because of the nature of the Hyper Text Markup Language (HTML) programming and the ability of adding all the multimedia materials in the WWW sites. The WWW is the easy way of presenting these materials with a possibility of being interactive making the WWW unique for the use of Islamic information in education. This study monitored the Islamic information sources in the Internet for the period of April to November 1998, the number of the monitored sources is 2834 in 58 countries world-wide.

## **Problem Statement**

With the huge amount of Islamic information in the Internet and not many MIIRM, the study found that the indications and directions of a lot of those information have been mixed and disorganized thus the major problems in this study are:

1. There is a mixture of the MIIRM and other materials in the Islamic sites;
2. The Islamic sources of the MIIRM are unorganized in the Internet;
3. The instructional design approach of these information had not been followed in it's Internet sources; and
4. There is a lack of MIIRM in the Internet comparing with other type of instructional materials.

Therefore the online education researchers and Internet users for Islamic information in the Internet, will find difficulty in following the information and identifying the source and validity of it.

## **Aim of the study**

The main aims of this study was to identify which information resources are available on today's Internet for MIIRM and how can they best be found, accessed and improved . For this purpose, a classification scheme of the most important online resources and background information on the different types of search engines and outlining general search strategies for all Internet users, will be presented in this study.

Therefore, this research will:

1. Identify the MIIRM available in the Internet;
2. Analyze those sources using adopted instructional design approach for the validity, being interactive and with quality display via the computer screen;
3. Survey the limitation and the implications of the MIIRM sources in the Internet;
4. Help the providers, developers and organizers of MIIRM in the Internet to improve their sites as source of information by making the results of this study available for them; and
5. Help the Internet users to maximize their benefits of using MIIRM available in the Internet and minimize the time consumed in their online search or research by making the results and the links of this study available online.

### **Rational of Study**

Even though MIIRM only accounts for a comparatively small part of the overall data on the Internet, there already exists a broad and highly useful variety of online resources which can be employed in almost every Islamic subject. Given this broadness and the considerable degree of differences among the numerous sources themselves, however, it is necessary to present a general classification of their different types, which will, in turn, help both teachers and students to gain a better understanding of the various tasks they can be used for. This study will enable the Internet users to:

1. Access sites through a wide range of MIIRM links;

2. Effectively search and use the MIIRM in the Internet; and
3. Help to improve and update the Internet sources of MIIRM.

### **Research Questions**

The research questions in this study were:

1. What are the MIIRM available in the Internet;
2. What are the significant ways of finding the MIIRM available in the Internet;
3. What are the validity and the accessibility of the MIIRM sources of information in the Internet; and
4. What is the MIIRM evaluation in this study in term of:
  - i) Instructional design evaluation.
  - ii) Evaluation of MIIRM Information.

### **Limitation of the study**

1. The MIIRM are unorganized in the Internet;
2. The existence of MIIRM is unstable;
3. Sample size; and
4. Limited research references on the subject of the study.

Although 2834 Islamic information sources in the Internet have been monitored by this study, only 100 in 25 countries will be used in the sample. This is because most of the sources did not contain any multimedia

instructional materials. Besides the instability in the existence and the validity of many of those sources limits the sample of this study.

There is a lot of research references about the Internet but there is a very limited number of MIIRM research references. This is due to the fact that the subject of the study is new.

### **Significance of the Study**

This study is important by its nature as it will be of benefit to the Muslims and the non Muslims in the era of the information technology.

It is important in identifying the MIIRM sources in the Internet and analyzing the source in term of its instructional design to give directions for further studies in the field of Islamic education and Islamic information available in the Internet.

The Internet and the speed with which it is growing has provided to the Islamic scholar a golden opportunity to spread the message of Islam. It is heartening to note the rapidly growing number of Islamic sites at the world wide web. These sites cover almost everything related to Islam and its concept and message also its history, its art and culture. Inspired by what the author have seen, learnt and gained through this electronic medium the author have tried to make his own humble little contribution to it.

Other importance are:

1. Create a direction in the field of MIIRM to help the educators, researchers, students and individuals to identify the genuine and the relevant sources of

the MIIRM in the Internet; and

2. Analyze and evaluate those sources as a beginning in setting up an MIIRM standard and to give the developers and the authors of those sources a direction for future improvement.

The prime Minister had urged us to be an information rich society because knowledge or information is power and this is vital if one is to remain in power (Zulkifli, A. M. 1991). Dato' Seri Dr. Mahathir bin Mohamad, the Prime Minister of Malaysia stated "to face the 21st century which is full of challenges of the Information Age, the reformation needed is one which emphasizes the values of Muslims and based on true Islamic teachings which are free from confusing beliefs and interpretations which are not based on the Quran and hadiths." ( Institut Kefahaman Islam Malaysia "IKIM", 1998).

This study is also important as long-term usefulness in:

- i) Establishing Islamic network for Instructional materials by developing directions for that network.;
- ii) Helping the future researchers by developing a guide line for Internet Islamic information; and
- iii) Promoting the wise and sustainable use of the Islamic information technology resources.



## **Operational Definition**

For the purpose of this research, the MIIRM on the Internet are defined as follows:

**Browser.** A browser is a client application used to explore information on the Internet. Browser provide an easy-to-use interface for accessing information and files. The word usually refers to a program for accessing the World Wide Web, such as Mosaic, but can also refer to any point-and-click Internet client.

**Display.** To provide (information or graphics) on a computer screen.

**Genuine Islamic information.** These are Islamic information base on Islamic doctrine.

**Home Page (or Homepage).** There are several meanings to the homepage. Originally, it meant file available for access at a World Wide Web site, it was intended chiefly to greet visitors, provide information about the site, and direct them to other sites with more related information. A home page is the hypertext document that is automatically displayed when a user launches a World Wide Web browser. Many WWW sites now refer to themselves as a "home pages".

**Hypertext.** A computer-based text retrieval system that enables the user to provide access to or gain information related to a particular text. Hypertext refers to text that contains "links" to other documents. On the Internet, hypertext generally refers to World Wide Web pages created with HTML. These documents include highlighted words or phrases that can be

selected, enabling another document to be retrieved and displayed.

**Instructional materials.** The materials or the information of imparted knowledge used in the education process.

**Instructional design.** The process of planning and presenting instructional materials in meeting with the dual requirement of understanding both the systematic nature of design process as well as particular theoretical orientation that explain how learners do learn, might learn, can be motivated to learn.

**Interactive.** The feature which relating to a two-way communications system in which response is direct and continual.

**Internet.** The matrix of networks that connects computers around the world. The Internet is a worldwide network of thousands of smaller computer networks and millions of commercial, educational, government, and personal computers. The Internet, the world's largest computer network, is a cooperative effort between every connected institution and is not owned or operated by any single organization.

**IRC (Internet Relay Chat).** It is a worldwide protocol that allows one to converse with others in real time.

**Islam.** The world's major religion, founded in Arabia and based on the teachings of Muhammad, who is called the Prophet. The Arabic word *Islam* literally means "to surrender," but as a religious term in the Koran, it means "to surrender to the will or law of God." One who practices Islam is a Muslim. According to the Koran, Islam is the primordial and universal religion, and

even nature itself is Muslim, because it automatically obeys the laws God has ingrained in it. For human beings, who possess free will, practicing Islam does not involve automatically obeying but rather freely accepting God's commandments. A Muslim is a follower of the revelation (the Koran) brought by Muhammad and thus is a member of the Islamic community. Because the name Muslim is given in the Koran itself to the followers of Muhammad (Koran 22:78), Muslims resent being called Muhammadans, which implies a personal cult of Muhammad, forbidden in Islam. Although exact statistics are not available, the Muslim world population is estimated at more than 1.5 billion. Islam has flourished in diverse climatic, cultural, and ethnic regions. It has begun to grow rapidly in the United States. The major groups comprising the world community of Islam include the Arabs (North Africa and the Middle East); sub-Saharan Africans (from Senegal to Somalia); Turks and Turkic peoples (Turkey, Central Asia); Iranians; Afghans; the Indo-Muslims (Pakistan, India, and Bangladesh); Southeast Asians (Malaysia, Indonesia, and the Philippines); and a small percentage of Chinese (China). In Europe, Islam is the second largest religion after Christianity.

**Islamic countries.** These are the total of 52 members of the Organization of the Islamic Conference (OIC). They are: Afghanistan, Albania, Algeria, Azerbaijan, Bahrain, Bangladesh, Benin, Bosnia-Herzegovina, Burkina Faso, Cameroon, Chad, Comoros Island, Djibouti, Egypt, Gabon, Gambia, Guinea, Guinea-Bissau, Indonesia, Iran, Iraq,

Jordan, Kazakhstan, Kuwait, Kyrgyz Rep., Lebanon, Libya, Malaysia, Maldives, Mali, Mauritania, Morocco, Mozambique, Niger, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Sierra Leone, Somalia, Sudan, Surinam, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, U.A.E, Uganda and Yemen Republic.

**Islamic Doctrine.** The two fundamental sources of Islamic doctrine and practice are the Koran and the Sunna or the exemplary conduct of the Prophet Muhammad. Muslims regard the Koran as the speech of God to Muhammad, mediated by Gabriel, the angel of revelation; they believe that God himself, not Muhammad, is the author and therefore that the Koran is infallible. The document called the Koran is the collection of the passages revealed to Muhammad during his prophetic life, approximately 22 years ( 610 - 632 ). It is divided into 114 chapters of unequal length, the shortest containing only 3 short verses, the longest containing 306 long verses. Both Islamic and non-Islamic scholars agree on the essential integrity of the text of the Koran throughout its history. The second substantive source of Islam, the Sunna, or example of the Prophet, is known through Hadith, the body of traditions based on what the Prophet said or did regarding various issues. Unlike the Koran, which was memorized—either in whole or in part—by many followers of Muhammad during their lifetime and which was compiled in written form quite early, the transmission of Hadith was largely verbal, and the present authoritative collections date from the 9th century. Unlike the

Koran, Hadith is not considered infallible. In the early Islamic period, whether or not the Prophet himself was infallible (apart from the revelations in the Koran) was a point of controversy. Later, however, the consensus of the Islamic community was that both he and the earlier prophets were infallible. Because Hadith was mainly transmitted orally, it was conceded that error could enter into the human transmission. Hadith, therefore, is a source secondary to the Koran, although it is almost equally fundamental for most Muslims. Recent research, not yet accepted by the large body of Muslims, has demonstrated that much of Hadith was not derived from the Prophet but represents the opinions of the early generations of Muslims, opinions that were subsequently attributed to the Prophet. In some cases genuine statements of the Prophet were preserved, but additions to it were later made by Muslims who wanted to advance certain theological or legal opinions.

**Islamic education system.** The Islamic education were founded as system of religious learning, where the Ulama (religious scholars), Kadis (judges), Muftis (interpreters of the law), and other high religious officials were trained. The Islamic education system contributed to the great cultural developments of Islam. In the 9th century the caliph al-Mamun founded an academy in Baghdad for the study of secular subjects and for the translation of Greek philosophical and scientific texts. In the 10th century, at Cairo, the Fatimid caliphs also established an academy for secular learning, Al Azhar, still the most important center for Islamic learning where rulers and wealthy

patrons usually made funds available for individual scholars. Medieval Islamic scholars made important contributions to the fields of philosophy, medicine, astronomy, mathematics, and the natural sciences; between the 9th and 13th centuries the Islamic community was the most productive civilization in the world.

**Multimedia.** In computer science, the presentation of information uses the combination of text, sound, pictures, animation, and video. Common multimedia computer applications include games, learning software, and reference materials such as encyclopedias. Most multimedia applications include predefined associations, known as hyper links, that enable users to switch between media elements and topics. Connectivity provided by hyper links transforms multimedia from static presentations with pictures and sound into an endlessly varying and informative interactive experience. Multimedia applications are computer programs; typically they are stored on compact discs read only memory (CD-ROM's). They may also reside on the WWW, which is the media-rich component of the Internet. Linking information together with hyper links is accomplished by special computer programs or computer languages. The computer language used to create Web pages is called Hyper Text Mark-up Language (HTML). Multimedia applications usually require more computer memory and processing power than the same information represented by text alone.

**Search engine.** Software that finds and retrieves information through the Internet.

**Server.** A computer, or a software package, that provides a specific kind of service to client's software running on other computers. The term can refer to a particular piece of software, such as a WWW server, or to the machine on which the software is running. A single server machine could have several different server software packages running on it, thus providing many different servers to clients on the network.

**Stability.** The status of the Internet information sources, status or quality of being stable, especially by:

- i) Resistance to change the source or address, deterioration, or displacement;
- ii) Constancy of character or purpose; steadfastness; and
- iii) Reliability; dependability.

**USENET.** It is the "bulletin board of the Internet," a collection of huge amount of discussion forums (called newsgroups) covering every imaginable topic of human experience. Unlike electronic mail, posts on Usenet are public, anyone interested in the topic of discussion may browse, read messages, and participate in the ongoing discussion. A message posted on any site on Usenet will quickly be copied to all other sites that choose to carry that particular newsgroup.

**Validity.** Well grounded information source and producing the genuine Islamic information results.

**Wide Area Information Server (WAIS).** It is a distributed information service that offers natural language input, indexed searching for fast retrieval,