ELECTRONIC NEWSPAPERS ON THE INTERNET:

A study of the production and consumption of
Arab dailies on the World Wide Web.

Thesis submitted for the degree of Doctor of Philosophy
to the Department of Journalism Studies
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By

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Dedication

This thesis is dedicated to fond memories of my mother,
and to my father for his steadfast support in all my endeavours.

Abstract

With the spread of the Internet in the Arab world, many Arab publishers and governments' media bodies have begun to utilise websites in their outreach programmes. This thesis examines the subject of Arab e-newspapers on the Internet. Specifically, it focuses on readers of these publications and explores their use of this new news medium and their overall satisfaction with it. To supplement this analysis, data were also collected from e-newspaper publishers about their practices and about the content of their Internet news services. The methodology included online surveys of readers and publishers, content and format analysis of newspapers' websites, and face-to-face interviews with some Arab journalists. The research was restricted to Internet daily publications published by Arab publishers in Arabic and English, though its results may have wider implications. It was also restricted temporally to a specific time period, meaning that events in this rapidly changing new technology environment may quickly overtake the situation as elucidated in this work. In this respect, the findings do not reflect the impact of the new browsers that were introduced in late 1999, such as Microsoft's multi-language browser (Internet Explorer version 5), which will revolutionise the way people, read Internet content. The most important trend that has been identified is the major move of existing Arab printed newspapers towards online publishing in most Arab countries. Some of them just present part of their printed product (a selection of the daily content), others offer all of their content but, in most cases they appear in the same optical format as in the printed version. Yet, despite the urgency to get on the Internet, the findings reveal that most publishers did not have clear online publishing strategies and most of them were unaware of the seriousness of the Internet to their traditional business. This study revealed that the demographic profile of Arab e-newspapers' readers was similar, in many ways, to readership profiles found for Internet users in the non-Arab World, in terms of age, occupation and level of education. The keys to reader loyalty and satisfaction are found in the ease with which online news can be accessed and explored, and the extent to which it is updated.

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Abbreviations and acronyms used in the study

ACROBAT	The type of program needed for viewing PDF files.
Arab(s)	The term 'Arab' refers to the (Semitic) people living, nowadays, in the vast area extending from the Arab Gulf to the Atlantic Ocean who are linked by a common (Arabic) language and historical ties to the Arabian Peninsula. However, Arabs are not a homogeneous group; they consist of people from different nationalities, religions, customs, cultural interests and socio-economic backgrounds. They constitute most of the population of the Arab World (see Arab World). Arab communities are also found elsewhere in the world. Estimates of the total Arab population range from 220 to 250 million. The great majority of Arabs are Muslims.
ARAB WORLD ARAB COUNTRIES ARAB LEAGUE	Includes members of the Arab League which is a pan-Arab regional organization set up on 22 March 1945 in response to Arab aspiration for unity and independence. Its seven founder members are Egypt, Iraq, Lebanon, Saudi Arabia, Syria, Jordan and Yemen, the only independent Arab states at that time. Over the years the League's membership expanded and now includes 22

	members, including; Algeria, Bahrain, Comoros, Djibouti, Kuwait, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Somalia, Sudan, Tunisia, and United Arab Emirates.
BANNER	The graphic that appears at the top of a Web Page
BROWSER	A Client program (software) that is used to look at various kinds of Internet resources.
CGI	Common Gateway Interface - A set of rules that describe how a Web Server communicates with another piece of software on the same machine, and how the other piece of software (the "CGI program") talks to the web server.
CYBERSPACE	Currently used to describe the vast range of information resources available through computer networks. The term was coined by William Gibson in his 1984 novel, Neuromancer.
DOMAIN NAME	The unique name that identifies an Internet site.
DOWNLOADS	Typically sound, image, or video files that are downloaded from a page and transferred to a user's computer from the server.
E-MAIL	(Electronic Mail) -- Messages, usually text, sent from one person to another via computer. E-mail can also be sent automatically to a large number of addresses (Mailing List).
E-COMMERCE:	(EC) Electronic commerce; the use of computers and

	electronic goods and communications in business transactions.
ELECTRONIC NEWSPAPER, E-NEWSPAPER, INTERNET NEWSPAPER ONLINE NEWSPAPER	All these terms have been used interchangeably throughout the study but give in general the same meaning which means (broadly) any (daily) newspaper containing public news on current events, or reports of general interest, published periodically on the Internet.
GIF	Graphic Interchange Format - A common format for image files, especially suitable for images containing large areas of the same colour.
HIT	A single user request for a document on a web server. Hits are used as rough estimates of the traffic on a server.
HOMEPAGE - HOME PAGE	The main web page of a set of pages, which then lead you to any others set up by that person, directly or indirectly.
HOST	A computer connected to a network that provides data and services to other computers. Services may include data storage, file transfer, data processing, email, bulletin board services, World Wide Web, etc.
HTML	(Hypertext Mark-up Language) -- The coding language used to create Hypertext documents for use on the World Wide Web.
HTTP	(Hypertext Transfer Protocol) The "command" used by a browser to get HTML documents. All URLs begin with this abbreviation.

INTERNET, NET, WEB, WWW	All these terms have been used interchangeably throughout the study but give in general the same meaning, which is, the global network of the Internet unless otherwise stated.
ISP	Internet Service Provider -- that provides access to the Internet in some form, usually for money.
LEXIS®-NEXIS®	An American online database that stores and makes available literally millions of records, from newspaper and magazine articles to legal and medical documents, data countries and businesses, etc.
MODEM	Modulator, Demodulator. A device that you connect to your computer and to a phone line, that allows the computer to talk to other computers through the phone system.
MULTIMEDIA	Multimedia is communication that uses any combination of different media, and may or may not involve computers. Multimedia may include text, spoken audio, music, images, animation and video..
NEWSGROUPS	Discussion groups on everything. People with direct and indirect links to the Internet read and post their opinions on topics that range any subject.
PLUG-IN	A (usually small) piece of software that adds features to a larger piece of software. Common examples are plug-ins for the Netscape® browser and web server. Adobe

	Photoshop® also uses plug-ins.
PUSH	Internet services that automatically update info on your computer when you log onto the Internet.
SERVER	A computer, or a software package, that provides a specific kind of service to client 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.
SGML	Standard General Mark-up Language - a standard for mark-up languages. HTML is one version of ML
URL	Universal or Uniform Resource Locator. The address of a website, such as http://www.cnn.com
WINDOWS	The more advanced pc programs (graphic WWW browsers, video & audio files, etc.) require windows or a version of UNIX if run on a pc. "Windows NT" and "Windows 95/98/2000" have Internet software built-in.

Main Sources

Dr. T's Internet Glossary (http://www.digits.com/)
Glossary of Internet Terms (http://www.matisse.net/)
Computer Currents High-Tech Dictionary
http://www.currents.net/resources/dictionary/dictionary.phtml

Preface

The research presented in this thesis represents an examination of the role of the Internet as a news service, with special reference to the Arab world. It principal focus is on the use that Arab readers make of e-newspapers and their satisfaction with these new news services. In addition, further data have been collected from publishers, editors and journalists associated with electronic news publishing. Finally, some assessment was made of the content and format features of Arab newspapers on the Internet.

Chapter One provides a general overview of the Internet and the possibilities it offers for electronic news delivery. It examines the history of electronic delivery of news and information and plots the first experiments in electronic news delivery which pre-date the arrival of the Net. Internet news services experienced a dramatic growth in the 1990s and are expected to increase their role as news providers even further in the near future. With an increasingly computer-literate populace and the emergence of Internet access via mobile telephony, the numbers of potential users of online news sites can be expected to grow as well.

This opening chapter will examine the nature of online news output, the implications for news services of the transference of their businesses to the Internet, and what is known about the readerships of e-newspapers. Several important differences between e-newspapers and printed newspapers have been discussed, such as the way they format the news, the depth of content provision, ease of access, immediacy and facility for updating news, and implications for the way news businesses are run.

There are also important considerations for the profession of journalism. Some journalists have expressed concerns about their practices becoming dominated by technology, and about the new blend of skills needed to be part of the electronic publishing realm. Issues related to readers of electronic news are important because without these news consumers, an Internet news service has no future. But what should entice readers away from hard-copy to screen-based news? In the absence of consistent market research on the Internet, the chapter concludes by exploring crucial questions about the potential of e-newspapers and what the future may hold for journalism in this electronic age.

Chapter Two provides a brief background about the Arab press which extends back to the 19th century and follows the major trends and developments that influenced the news industry in the region within its historical and political context. Furthermore, the relatively small newspaper market in the Arab World has to be considered within the context of the high rate of illiteracy, and other cultural and economic barriers. The small number of Internet subscribers in the Arab World represents one significant difficulty facing Arab publishers who choose to invest in Internet publishing. It is important therefore to consider the spread of Internet technology in the Arab World and the obstacles facing Internet usage in the region. This chapter finishes by providing a summary of the position of Arab online newspaper publishing and its potential.

Chapters Three describes the research methodology used for this study with an overview of the rationale and the objectives behind the study as well as the formulation of the research questions. This chapter details the research design, data

collection mechanisms, and issues surrounding the use of the Internet as a research tool. In this respect, an overview is provided of the way the online surveys were coded and tested with various operating systems and Internet browsers and the methods employed to attract readers and publishers to the online surveys are explained.

Chapter Four presents the conceptual framework of this study by analysing background literature relating to the emergence of new technology and its relation to existing communication theory. There is theoretical argument surrounding the Internet, concerning whether or not it can be considered as a 'mass' medium. Some scholars have called for fresh theoretical perspectives to analyse the use and impact of the Internet, arguing that the old models built upon traditional print and broadcast media do not fit this new electronic medium very comfortably. An effective analysis of the communicative nature of the Internet requires new theoretical conceptualisations. In addition, this chapter reviews studies that have addressed e-newspaper-related publishing issues, which is the main concern of the study. Among the key issues are (1) the growth of the e-newspaper market; (2) the economics of e-news publishing; (3) the views of the producers and publishers; (4) the content of e-newspapers; and (5) readership surveys.

Chapter Five presents an analysis of all Arab online newspapers' websites in order to shed some light on the determining factors behind the views expressed by readers. This includes an analysis of the distribution of these newspapers' publishing locations, their languages and the format and methods used by publishers to present their Arabic content on the Internet. This part of the investigation revealed that arrays of online news services are offered to Arab readers such as archiving and interactive

communication channels. As well as e-newspapers on the net, a range of other sources of news information can be located. These services include web-based news sites, national Arab news agencies and Arabic online TV and radio stations. Hence, this chapter deals with all news sources available to Arab users.

Chapter Six presents the views of e-newspaper publishers in an attempt to draw a wider picture of issues surrounding Arab publishing on the Internet. Publishers were surveyed for information on a variety of important questions. When did particular Arab newspapers first appear on the Internet? What were newspaper publishers' views about the impact of the Internet edition upon the hard copy version? What methods were used to track readership of the electronic publication? What subscription fee policies did they have? And were any additional services offered by their e-newspapers? Practical insights about Arab online newspapers and Internet-based publishing were obtained from journalists involved in the online publishing arena through face-to-face interviews.

Chapter Seven presents the initial, descriptive results from the readers' survey discussing characteristics of Internet users. This includes demographic profile, computer and Internet usage behaviour, software used and types of ISPs adopted by respondents as well as how long they have been using the Internet. In this chapter also, readers' responses about their main use of the Internet are investigated. Findings related to the principal research questions are also presented, about the characteristics of users, the general use they make of the Internet, and how respondents evaluated Internet as a source of news and information.

Chapter Eight narrows the focus of the research to caste the spotlight on consumption of e-newspapers on the Internet and turns attention to the users of these news services in a more analytical appraisal of the data, drawing comparisons where appropriate between the opinions of readers, between the problems of readers and the nature of electronic news output on the Internet, and relationships between readers' personal characteristics, Internet usage patterns, opinions about specific elements of e-newspapers and their overall satisfaction with these news services.

Finally, **Chapter Nine** discusses the main issues of online newspaper publishing relating to readers (receivers), the online newspaper and its additional services (channel), and content and design attributes (message). The chapter considers also the implications of this research for Arab e-newspaper publishers (sender). In this vein, it compares what news publishers and professionals believe they know about their readers with what direct research with readers has revealed. It also considers the nature of online newspapers against the benefits and problems experienced by readers who use them. In addition, the limitations of the study are discussed, with suggestions for improvement and directions for further investigation.

Chapter One: The Internet and News Delivery

1.1 Introduction

The Internet[1] is on track to become the world's premier communications medium. In less than ten years it has progressively become an almost indispensable feature in the lives of private citizens, businesses and governments. Not a day goes by without a reference to the Internet in newspaper articles, radio or TV programmes (see Figure 1). By March 2000, world-wide Internet users approached 300 million (NUA, 2000). There are over one billion web pages on five million unique servers, though it is estimated that 70 per cent of traffic goes to less than 5,000 sites (Savage, 2000). The prevalence of the Internet is not just a result of its open and dynamic nature; its rapid spread has been facilitated by its increased user-friendliness to non-computer-literate people. The advent of the World Wide Web (WWW) and the freely distributed smart point-and-click browsers, such as Netscape and Explorer, have made surfing the Net, as a source of knowledge and entertainment, more attractive. Despite concerns about issues such as privacy, copyright, cultural identity and pornography, the Internet continues its expansion rendering it a medium that is impossible to ignore. As a result, publishing industries have begun to explore new, Internet-related markets, services and products in response to the recent advances in information and communication technologies (Scupola, 1999).

[1] The Internet is frequently described as a network of networks, a

Today, news and information from any part of the world can be read with just a click of a button. A new breed of media businesses has emerged in association with the Internet that have become the 'information world's obsession' (Nicholas *et al.*, 2000). Even the newspaper industry, never one traditionally quick to embrace technological change, has looked seriously at new ways of adapting its business to this new technology (Katz, 1994). Most major newspapers today have a Web presence, allowing access to their newspapers and archives through cyberspace.

1.2 New Medium, New Businesses

As the rate of technological change continues, the media perhaps more than any other industries have been significantly affected by computerisation. Furthermore, perhaps no other professional practice has been as 'completely reshaped' as has journalism in response to the evolution of the Internet (Trench, 1997). New electronic applications are transforming the way publishers do business. Publishers have found themselves at the heart of a technology vortex. Racing to keep up with technological changes, established publishers are experimenting with many new methods of news delivery and are anxiously trying to keep pace with newer players competing to get their share of this young market. There is a 'very legitimate fear' among newspaper companies that new electronic publishers will emerge and take away their franchise (Carlson, 1996).

While newspapers have traditionally had to compete for readership markets, the new competition is of a different kind. Equipped with the latest technology, electronic news publishers are targeting new markets of younger consumers, not customarily renowned for their interest in serious news or reading of serious newspapers. The

younger generation, however, is interested in the Internet and may therefore be more inclined to consume news from a screen than from the page.

Figure 1: The Internet - the cover story of World's most prestigious magazines.

Remarks made by D. Colin Phillips, publisher of the *Editor & Publisher,* at the opening session of the Interactive Newspapers '98 Conference (February 1998) show how serious the threat of these new competitors is perceived to be. Phillips observed that in just one short year, "we have seen a storm surge of new competitors roll over the media landscape to compete for ever thinner slices of what had been our business" (Phillips, 1998, p1).

On this evidence, it seems that traditional newspaper publishing houses have little option than to jump on the Internet bandwagon. As Microsoft founder and chairman Bill Gates observed in his book, the *Road Ahead,* the future lies with digital, electronic communications that provide interactive capacity, allowing media consumers to exert greater control over the content they receive. The years ahead will witness a fundamental shift from mass publishing and broadcasting with media content being transmitted from one to many, to an interactive media environment in which content (i.e., information and entertainment) will be selected by individuals according to their idiosyncratic needs and tastes (Gates, 1996; Dusseldorp, 1998). In parallel with this shift, there has been a move away from a product-based marketing approach to a more service-based approach in the publishing industry as a whole (Hayward, 1995). This move reflects what some web gurus have trumpeted as a need for organisations to fundamentally re-think the way they conduct their business once they have entered the world of the Internet (Siegel, 1999).

With electronic news publishing, new rules and standards will be set to inform the way 'news' should be provided in a world where consumers have much more control over the process of consumption and different assumptions and expectations of news services. New 'cyber-publishers', driven by technology advancements, are seemingly

leading the way. The old culture of a newspaper that presents news once every 24 hours is no longer tenable. On the Internet, it is now possible for content providers to offer immediate, timely and sudden scoops of news stories around the clock. Furthermore, Internet users, today, are able to experience a much expanded range of choices of news delivery, that enable them to customize their news diet to meet their personal tastes and interests. Moreover, the Internet is offering all these services 24 hours a day, for free in most cases.

Online newspapers have been observed to have a number of important advantages over their hard copy ancestry. They are not constrained by space limitations in the same way as are printed newspapers. With hard copy newspapers, the news copy has to be edited to fit the available page space. In the latter case, readers are restricted to the news that is immediate and presented on the page. With e-newspapers, online stories can be linked to archived news story databases, enabling readers to go beyond the current copy and explore the background to the story (Henderson & Fernback, 1998). Online newspapers can offer other kinds of flexibility to readers when searching for the news they want to read about. Key words can be entered to find stories of interest, both from the current news menu and from archived news (Geier, 1995). These searches are not tied to the present, but could retrieve stories going back many years; the electronic news archives exist for this purpose (Mannes, 1995). Furthermore, Internet technology allows readers some control over the information (content) received from the website whereby users can customise the news to their preferred topics (Williams & Nicholas, 1999).

Online newspapers have an interactive quality that goes beyond the physical turning of the pages of a newspaper. Letter writers can get their correspondence to the editor instantly and see their words published almost immediately. Feedback from readers can be communicated to editors and journalists much more swiftly than with hard copy newspapers. Readers may even communicate with each other, by responding to other readers' comments on news coverage (Henderson & Fernback, 1998).

The immediacy of this electronic publishing medium may add to its credibility. In future, some writers have envisaged a key role for e-newspapers as reliable local news sources. Sources of stories could also have direct access to the e-newspaper page. Local government and other institutions could place notices and releases about their activities directly onto e-newspaper sites (Henderson & Fernback, 1998).

Technically, reliable and (relatively) user-friendly software enable content providers to include multimedia files in their website. Also, an important feature that can be to the advantage of newspapers is "the ability to jump seamlessly from one electronic file to another, be it on the same computer, the same LAN or on the other side of the world, [which] is the outstanding (siren) feature of the world Wide Web" (Williams and Nicholas, 1999, p.126).

Although the privilege of the printing press as a dominant medium for mass communication has been challenged many times this century as newspapers have yielded various functions to radio and television services (Dusseldorp, 1998), the press have nevertheless remained a major source of information and news. Newspapers have even successfully managed, to some extent, to take advantage of the

broadcast media to promote themselves to their target markets. Newspapers feed off television, for example, and among the tabloids in particular, much of their copy is devoted to entertainment news concerned with television programmes and personalities. The Internet, however, poses a whole new set of challenges for newspapers (Medsger, 1996; Irish 1997; Orr 1997). To utilise this new communication technology effectively, newspaper publishers and their editors must devise a strategy for taking maximum advantage of an electronic, digital environment that offers new possibilities for the packaging, presentation and consumption of news utilising multi-media formats. This new medium is virtually unlimited in space and can be updated or modified instanteously. Lapham (1995) states that:

> *"As we approach the end of the twentieth century, two powerful forces have emerged to change the mass communication model. The first is the use of computers as a means of processing, analysing, and disseminating information. The second is the constantly accelerating capacity of that technology to enhance communication so it is almost unbounded by time and space"(p: 7).*

This 'digital revolution', according to Katz (1994), has pushed publishers still closer to the wall, unleashing a vigorous flow of news, commentary, and commerce to millions of people. Thus, the Internet is reality and its services are widely used, accessible and acceptable. This new environment will create its own traditions and values. The fresh thinking required must begin with its concept of the readership market, which will become more fragmented than ever before.

Indeed, the only attributes one could confidently expect consumers of this electronic publishing environment to have in common are that they possess an Internet connection and as such have signed up to what one might call "the culture of freeness" associated with the Net. This culture depends mainly on the openness of

hundreds of Internet services together with tens of well-established news sites, as well as hundreds of daily newspapers that can be read online for free.

Unlike earlier competitors from broadcasting, the World Wide Web has grown into an alternative news medium almost overnight. It poses a challenge to all news producers – whether working in the established print or broadcasting media (Lindoo, 1998). For publishers to maintain some sort of control over their production they have to acquire new equipment and a range of new skills necessary to utilise it. It is no longer the case, as in traditional publishing, that newspaper operators will have all the production skills they need "in-house" (McDermott & Fay, 1997).

1.3 Electronic Delivery of News and Information

The phrase 'electronic delivery of news and information' refers to a broad concept of presenting news and information in an electronic form. This includes publishing on CD-ROMs as well as making information available through online services such as the World Wide Web. One definition of an electronic publication considers it to be " a publication which requires the user to employ an electronic device at some stage for its reception and/or its reading" (Vickers & Martyn, 1994; p.4). Thus, with electronic publishing, information is distributed and/or stored electronically so that any one can access it, via some form of electronic delivery system. Electronic publishing has also been envisaged as electronic commerce in 'digital goods' and services that are intended for consumption by the human senses (Clarke, 1999).

According to Salem (1996) no one gave any attention to the 'new' term 'electronic publishing' when it first appeared in the mid-1970s. By the early 1980s, however, it started to attain a more serious prominence as a topic of discussion and enquiry. This change of emphasis occurred as some press organisations started to look to it as a vital tool for their operations and activities as part of a drive to establish upgraded computer software to facilitate their daily work.

In terms of the publishing tools available currently, electronic publishing can be divided into four main categories: (1) desktop publishing applications, that provide tools for document creation; (2) portable document software that enables document conversion to a format that can be distributed to various platforms such as PDF; (3) hypertext publishing that allow structure free-form information collection from multiple sources for the creation of master documents; and finally (4) mark-up languages such as HTML and SGML that provide a set standard to describe the structure and content of an electronic document (Shay 1995; Grenier 1998).

Another fourfold classification system was presented by Lancaster (1995) who outlined four basic and co-existent steps in the evolution of electronic publishing: 1) Using computers to generate conventional print-on-paper publications allowing printing on demand or producing customized publications personalized to individual needs; 2) Distributing text electronically which is the exact equivalent of the paper version; this includes full-text articles available through commercial vendors such as DIALOG; 3) Distribution in electronic form of print publications providing "value-added" features such as search capabilities and data manipulation; 4) Generating

publications that take advantage of such electronic capabilities as hypertext, hypermedia, sound and motion.

In sum, the information delivery world is undergoing profound changes as a result of the widespread usage of personal computers and the rapid growth of the Internet. A consequence of these rapid technological developments is that the electronic delivery of news to significant and expanding readership markets has not only become feasible, but has also become sufficiently accessible that a demand for this form of news publishing has emerged with some force. Hence, "in an attempt to stem the tide, newspapers everywhere, are embracing the new media, attracted by the ever increasing Internet population, seen as a new and potentially profitable market segment" (Nicholas *at el.* 1997,p.30). Although the publishing industry has a long history in adapting new technology, the new electronic media may represent the most significant new direction for newsmakers to date (Ackerman 1993; Bender 1993; Christopher 1994).

1.3.1 Early History of E-News

The first serious attempt to use electronic means to deliver news (to a screen) was in the early 1970s and involved videotext technology. The idea of videotext is to deliver printed information electronically via hard wire (a telephone line or TV cable) either to a TV set or to a personal computer. Britain's *Prestel* service, which was launched in the early 1970s, was one of the first videotext systems in the world (Beckett, 1994; Bains, 1996; Carlson, 1996). However, in 1993 the service had to be abandoned due to the high cost and weak usage that ended up in only 30,000 users at the time of the

closure (Williams & Nicholas, 1999) . A similar service called *Minitel* was launched by the French in the mid-1970s. *Minitel* terminals contained the contents of the local telephone directories and were given free to telephone subscribers. The *Minitel* service continued to attract a market for many years. At the end of 1986, more than 2.2 million "Minitels" had been installed, a fourfold increase on just two years earlier (Pailliart, 1989). By the early 1990s, one third of French population above 15 years old used *Minitel.* The success of the French version was really exceptional for services of this kind. One reason for its success was that *Minitel* provided a significant amount of locally relevant content and services. Having said that, other statistics put the significance of *Minitel* as a news service into perspective. Although it was firmly established in many households, only a small percentage of users made a significant proportion of calls on the system. Furthermore, from the mid-1980s, games and personal messaging surpassed news and information as the major uses of Minitel (Charon, 1987; Pailliart, 1989).

Videotext (VIEWDATA in its early name) systems were introduced in a number of other parts of the world. A Japanese videotext service, *Captain,* was introduced in 1979. The same year witnessed the launch of the Canadian videotext service - *Telidon* -a two-way version of the British *Prestel* system (see European Commission, 1995; Ryan, 1995; Dusseldorp, 1998; Jones, 1991). In the USA, a number of experiments were done at about the same time (Carlson, 1996). The Americans tried to develop the first system (*Startext*) to deliver news and information to computers in 1981. Then came *Key Calm*, an experiment of the *Chicago Sun Times* between 1982 and 1986. This was an idea similar to videotext, designed to deliver information services to television sets via a dedicated terminal that the user had to buy. The whole project

closed in 1986 after losing an estimated $30 million. Knight Ridder Newspapers, who own a number of large newspapers in the USA, came up with another experiment called *Viewtron* using cable and telephone linked to TV sets to deliver the service. This ambitious project failed to survive after losing $60 million which forced the company to close it in 1986 (Carlson, 1996, Johnston & Carlson, 1999).

Although most videotext ventures failed, the modified idea of 'teletext,' that delivers textual content via a broadcast signal instead of videotext hard wires, is still in use. Teletext services became firmly established across Europe, and especially in the United Kingdom, during the 1980s (see Greenberg & Lin, 1988). All the major broadcasters in the UK – terrestrial and satellite alike – provide teletext services offering news and information on a wide range of subjects. In a sense, teletext is part news service and part entertainment magazine.

The failure of videotext was due mainly to the slow response to consumer enquiries, low-resolution texts and the non-interactive nature of the system (McAdams, 1995a). According to Mueller and Kamerer (1995), of all the videotext experiments, only computer applications have provided an electronic method of delivery that bears a sufficient resemblance to printed newspapers to significantly augment or perhaps, eventually to replace, them.

It is significant that the newspaper industry was involved in most of these (dead media) experiments, especially in the USA. Newspapers were driven to explore new methods of content delivery in response to declining circulation figures and increasing costs of production in the early 1980s (Strauss & Schoder, 1994). Early online news

publishing ventures represented remarkable efforts at the time. Despite being at the cutting edge of the available technology, there was little market demand.

A radical shift in market potential had occurred by the 1990s, opening up the possibility of launching financially viable electronic publishing services. It is worth mentioning that before the expansion of the Internet in the USA, companies that were providing more general online services, that paved the way for the mass market potential of the Internet, such as America Online (AOL), and CompuServe, offered electronic editions of national newspapers on an experimental basis.

By the middle of the last decade in the 20th century, newspaper publishers were caused to observe that the Internet, once established among the general population, would become a force to be reckoned with. Newspapers would either need to take advantage of this new medium, or be left behind by it. Phillips (1998) noted that:

> *" The online news and information business is exploding at a pace never seen before in the development of a new media industry. Current estimates are that the Internet will reach critical mass for general acceptance in around five years. It is already accepted enough to begin draining serious audience attention from our traditional media"* (p. 1).

1.3.2 Internet News Services

Internet technology, in the way it accesses and presents information, is changing the rules of publishing and news distribution in many ways. The challenge posed by the Internet for the publishing industry is unprecedented. In some ways, Internet applications could provide a fresh impetus to the industry. News publishers are faced with an ageing readership, declining revenues, sinking circulation figures and a

fragmented sense of mission (Orr, 1997). Hard copy newspapers risk losing a large segment of their readership that exhibits a particular preference for electronic information and entertainment sources, namely, the younger generation who form the majority of Internet users. According to Nicolas *et al.* (1997):

> "*What is even more worrying in the long run is that the young, for whom newspapers never played a big role in the first place -not being considered a sufficiently 'hip' medium (and regarded as something associated with their parents generation) - have deserted the press*"(pp. 29,30)

Similarly, with a different approach, *The Financial Times* (December 12, 1995) noted that newspaper readers, who are enviably affluent, educated and middle-class, are getting old and are not being replaced in sufficient numbers. The *FT* urged newspapers not to just stand back and watch the Internet, but to be part of it (FT, 1995).

At the same time as having to consider the best ways of attracting younger readers, publishers are still wrestling with many broader questions about online publishing, such as how this new medium can be most effectively utilised (Powers, 1997). What is the ideal format for an online news site? What should it contain? What are the best way(s) to present online news to attract readers, regardless of their age, and eventually advertisers who wish to gain access to specific markets? What are the best pricing mechanisms? Lapham (1995) states that the only certainty now is that there is no one right way to do things. Each newspaper must discover its 'niche' and provide insightful and original content in a format its readers want. Much remains to be learned about the potential of the Internet, and what it could do for publishers and their customers. So far, though, little is known about publishers' visions and readers' expectations towards this new communication phenomenon.

In terms of user retention, no Internet-based news service can claim that it has yet achieved a satisfactory degree of customer loyalty or advertiser confidence to be sure of long-term market buoyancy. Schudson (1996) attributed [online] subscriber's low loyalty to new services to the fact that on-line services have not become "a habitual part of a user's routine". Consequently, on the advertiser side "it is difficult to get advertisers online before we have a good number of users for them to sell to" according to McAdams (1995b). Mesing (1998) also found in her study that "because [online] audience figures are so difficult to define, many advertisers are leery of paying substantial sums on an unproven technology" (p.3).

The market for electronic publishing is made no easier to handle by the fact that new software systems for handling online content are being developed all the time. Problems are created by the introduction of new devices to the market virtually 'every other day' and this means that only a few people can make sense of what is happening (Elderkin, 1996).

A study of the multimedia marketplace in ten European countries revealed that a big part of the problem faced by the electronic publishing industry is the lack of a clearly defined business model (McDermott & Fay, 1997). The study stated that this fact acts as a damper on the industry's growth as companies operating in the industry are unsure of their place in the value chain and the best way to profit from their activities. The study emphasised the importance of a well-defined business model that would help companies to understand how the industry operates and where its clients fit into the electronic publishing value chain. In addressing 'participants and potential entrants in the area of electronic publishing', the study also asserted that the Internet is quickly

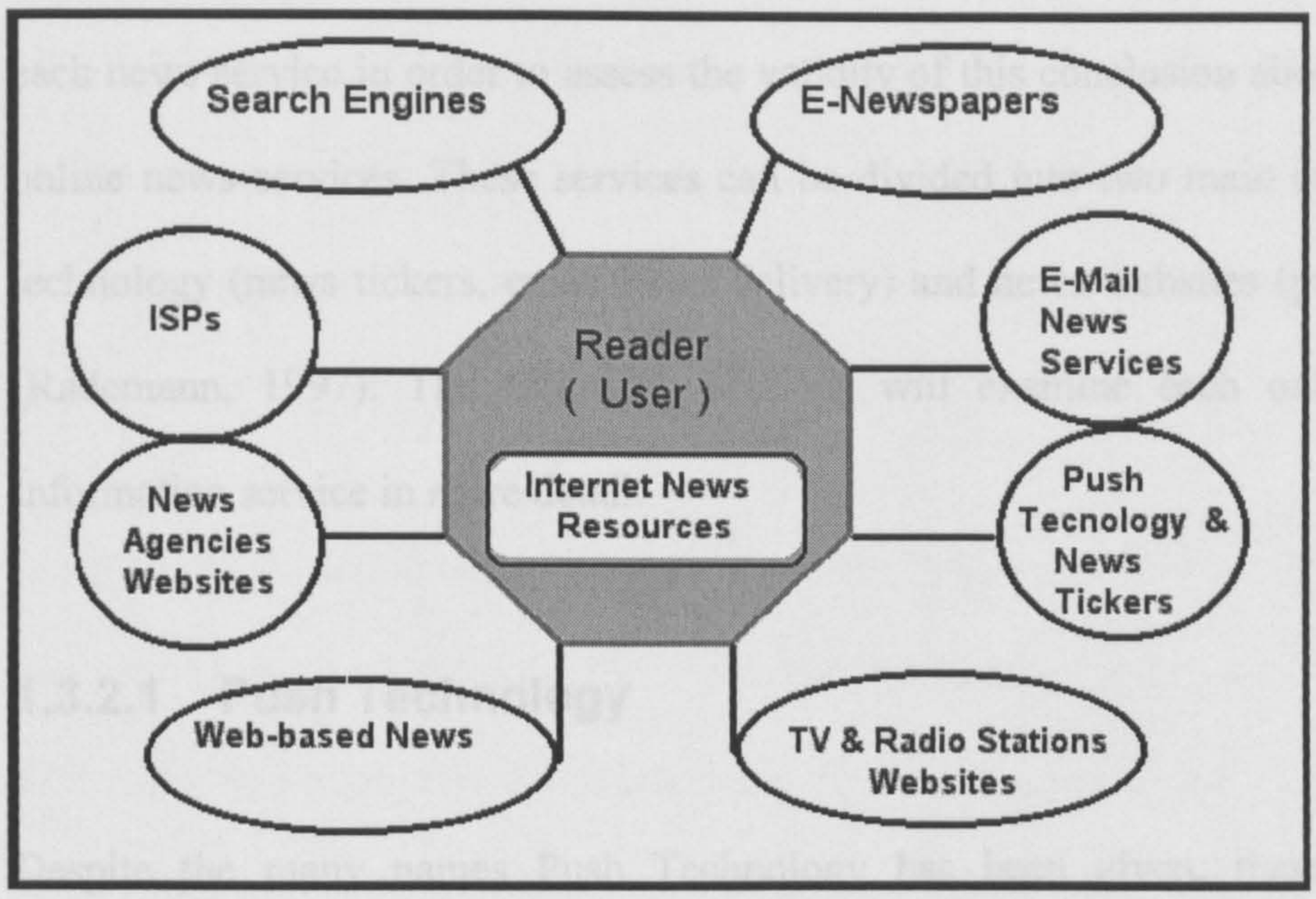
becoming the most significant electronic publishing medium, and that by the year 2000 it will be bigger than all other publishing media.

For users, numerous websites and free software packages are currently available providing online news and information in different formats. For instance, Netscape, the Web's first browser site, has a service that allows users to create a customised page on the Web, which displays personalised information whenever the user accesses it. Yahoo, the Web's most accessed search engine, has Reuters' headlines and offers customised free news services for Yahoo subscribers. Infoseek, Excite, and other search engines provide similar services. Some of these services are offered in a package with software that forms an essential part of the content delivery mechanism, making real-time delivery possible.

One of the major imperfections of some of these packages is that they consume a large amount of computer screen and memory. The subscriber may therefore miss important news items because of the software's demands upon computer capacity. In addition, news and information can be found also in newsgroups, news discussion sites and instant chat-rooms (see Figure 2). While these groups tend to discuss and spread special news about a certain field or industry, they remain a vital news source to Internet users.

In addition, there are websites maintained by radio and television stations, which form another important set of news sources that attract more and more users based on the reputations of their providers. Good examples of this kind of Internet-based news service are the websites provided by the news services of the BBC in Britain, and the American television networks, NBC and CBS.

Figure 2: Internet News Services



To some, this growth of Internet news services is giving the user more personal control over his or her daily menu of news and information. The trend has been referred to as 'news personalisation' (or customisation). According to one writer, Michael Cunningham, research/project co-ordinator of *The Guardian* and *The Observer*, this development "is shifting power to the people, and threatens the dominance of traditional mass media forms. The 'digital consumer' will be able to pull out the information and entertainment they want, when they want it, in a format they want - whether images, audio, text or graphics, or a mixture of all four" (cited by Kwan, 1996).

Boutin (1997) has asserted that there are some serious hurdles to be cleared before the new 'webcasting' model will eclipse established news sources. Web content providers, sponsors, and investors all hope 'push technology' will provide the medium to carry their messages to audiences broad enough to finally turn these new media into 'mass'

media. However, it is important to understand and clarify the differences between each news service in order to assess the validity of this conclusion about the future of online news services. These services can be divided into two main categories; push technology (news tickers, email news delivery) and news websites (pull technology) (Rademann, 1997). The following sections will examine each online news and information service in more detail.

1.3.2.1 Push Technology

Despite the many names Push Technology has been given, there is not much argument about its definition or its function. This service is also known as Webcasting, Personalized News, Netcasting, Personal Broadcast Applications, Channel Technology and Internet News Broadcasting. All these names refer to one type of online news application. With this service, instead of readers looking for news themselves, it comes to them at times convenient for them and with the content of their choice, thus obviating the need to go looking for it on the Web.

Users can get all pre-selected types of news and information 'pushed' to their desktops via e-mail updates, screen savers, tickers and, with the new 4.0 or 5.0 browsers, users can sign up to have specific news delivered direct to their computer screens. Individuals no longer have to surf for news and information; instead, news will find them (Lasica, 1997). This 'Third Wave of Net News' refers to the concept of delivering [pushing] content to Internet consumers rather than expecting them to seek out a website as in the 'pull' model. The First Wave was when newspapers launched 'primitive' sites with 'cumbersome' search tools hosted by commercial online services

like CompuServe, Prodigy or America Online. The Second Wave started in the early 1995 when the public and mainstream media discovered the World Wide Web and started to put up their own websites. The impetus behind the Third Wave (Push Technology) has been conceived as a confluence of three factors: technology, money and a receptive public (Lasica, 1997).

In one analogy, the 'pushing' model versus the 'pulling' model of news delivery has been envisaged as similar to the difference between getting home delivery of the newspaper and going down to the corner news stand to get the paper (Lindoo, 1998). Although there are news 'push' services experiments to mobile phones and pagers, the main applications under the umbrella of Push Technology can be divided broadly into (1) news tickers and (2) e-mail news delivery.

▶ **News tickers** is an online form of news delivery mechanism whereby the subscriber to this service needs first to register to download special software (client program) that will enable him or her to select from a "channels" menu, the topics of most interest. News in those areas is forwarded to the user's computer automatically.

There are number of companies offering this kind of service. The best-known example is PointCast[1] which has five software editions, three of which are in English (US, UK, and Canadian editions), one in German, and the other in Japanese that enable users to download and use the service for free. Although information in this

[1] On May 1999 - *Launchpad Technologies* acquired PointCast and now is called EntryPoint offering the same service.

service is retrieved in some sort of "pull" mode because the user initiates access, the 'push' mechanism delivers the data stored in the Web (server) to the user desktop.

► **News summaries by E-mail.** Subscribers to these services can receive a daily message (the server initiates distribution) of news briefing in standard (plain text) e-mail message or in HTML format that enables those who want more in-depth information to follow links to more extensive reports and news archives. News providers send news via e-mail to subscribers who have chosen their news preferences while signing up for the service (Sands, 1999).

An example of such services is InfoBea (InfoBea.com) which claims to have 3.5 million subscriptions to their e-mail news services. Subscribers can personalise the services by choosing only the information they want to receive via text or graphically rich HTML e-mail provided by its 100 staff members.

1.3.2.2 News Websites (Pull Technology)

With Pull Technology, the consumer is required to go to the news source rather than wait to be sought out by that source. Even with these news sources, however, a degree of personalisation of services can occur. With **Customisable News Websites,** a service is offered to users to set up tailor-made news profiles that contain keywords and similar queries identifying the fields of interests of individual subscribers. Several websites offer such news customisations for free. CNN Interactive is one example of this type of service. It has one of the most popular free news websites on the Net (cnn.com). CNN's decision to offer news for free was taken in the light of the amount of free information circulating on the Internet anyway, according to Clare O'Brien,

account executive of Turner Interactive Broadcast (Liu, 1996). CNN's slogan 'the world's news leader' has meant that besides its successful TV news station and the news websites on the Net, CNN has been forced to lead the way in offering customised news services via e-mail, pagers screens, mobile phones (CNN Mobile launched on February 1999), and via small obtrusive frame (ticker) at the bottom of Internet Explorer 5 browser. The latter service which has some 'push' features (also known as Explorer Bar) is a Web accessory for Microsoft Internet Explorer 5 that provides interactive information directly from the sources while the user browses the Internet.

Traditional newspapers are trying to join this race by experimenting with news customisation services and Explorer Bar on their own in the Internet. For instance *The Times* (London) and *The Wall Street Journal Interactive* allow their readers to set up such (personalised) services on their online editions. *The New York Times* Explorer Bar offers the day's top stories, breaking news updates every ten minutes, market information and access to stock quotes.

A similar free service to these is a Web-based news site called CRAYON (cryon.net - CReAte Your Own Newspaper) that describes itself as " a tool for managing news sources on the Internet and the World Wide Web." CRAYON uses a simple analogy that lets the user create customised news pages with daily information from a collection of links to mainstream news sites such as the Associated Press, Time, and PC Week.

1.3.2.3 Electronic Newspapers

The decline of print newspapers and the accompanying rise of Web-based news services have been the subject of much discussion among academics and news professionals who have explored the potential impact of these new technologies upon the public and publishing industry. Newspaper publishers have been encouraged by market pressures to adopt the new medium and to conduct experiments in online news provision, despite uncertainty about how profitable such ventures are likely to be in the future.

The long-established business model for print newspapers, in which revenues are generated mainly from subscribers, newsstands and advertisers, is no longer applicable in the new online marketplace. While there may be a market (readers and advertisers) for Internet news, the big question is whether this market will pay off and how. According to a survey conducted by a leading American market researcher in 1997 (NPD Group), sixty per cent of consumers who use the World Wide Web frequently read newspapers and/or magazines online. The survey also showed that newspapers are the most popular type of publication on the Internet with nearly 40% of those polled saying that they frequently read a newspaper online (NPD Group, 1997). Among the factors that make e-news a good (alternative) news delivery channel is its ability to employ technology to deliver the same content as traditional newspapers to a larger readership with less cost and in real-time distribution. Elderkin (1996) forecasts that " as we will seen, the newspaper industry is no more dead now than the buggy and carriage industry was when the world shifted to cars and trucks" (p: 4).

Today, e-newspapers are a reality and one that is growing rapidly and can be read all over the world. The recent rate of growth and penetration of e-newspapers signifies that they are a phenomenon that is here to stay. Literally hundreds of newspapers have entered the online publishing arena. This trend or 'migration of news to the Web' already marks a major shift of news delivery from conventional formats (Williams & Nicholas 1999).

In terms of access practices, e-newspapers can be separated into three categories: (i) completely free access to the information, (ii) free access with prior registration and (iii) access for a charge (Angevine *et al.* 1996). An overwhelming majority of e-newspapers, however, offer unrestricted free access. This concession reflects the high degree of uncertainty among conventional newspaper publishers about the robustness of the market for subscription e-newspapers and their lack of experience in this new commercial market.

While it is true that, in theory, anyone can set up a website and call it an e-newspaper (Akinfe, 1997), producing a news site that is likely to attract readers in large numbers and over time requires more than simply putting up a standard website with the name of a newspaper on the top.

1.3.2.4 Growth of Electronic Newspapers

Newspapers' websites are growing at a rapid pace, but the rate of change in the online world is accelerating even faster. There were just a half dozen Internet-newspapers in the early 1990s (Riley *et al.*, 1998), 100 at the beginning of 1995 (Outing, 1996), with the number expanding rapidly to 5,400 worldwide by April 2000 according to

NewsLink's online Database (ajr.org). Clearly, it is the global growth of Internet use (see Table 1) that has pushed a similar growth of online newspapers world-wide (see Figure 3)[1], which indicates that it is no longer true that Internet publishing is primarily an American phenomenon.

Meyer (1998) warned that in spite of the trend toward online publishing, which began among larger U.S. dailies, and has since extended its spread to smaller U.S. newspapers and to newspapers abroad, hard questions remain about long-term viability in a market in which less than one-third of all online newspapers expect to be profitable.

Table 1: Internet users growth by region

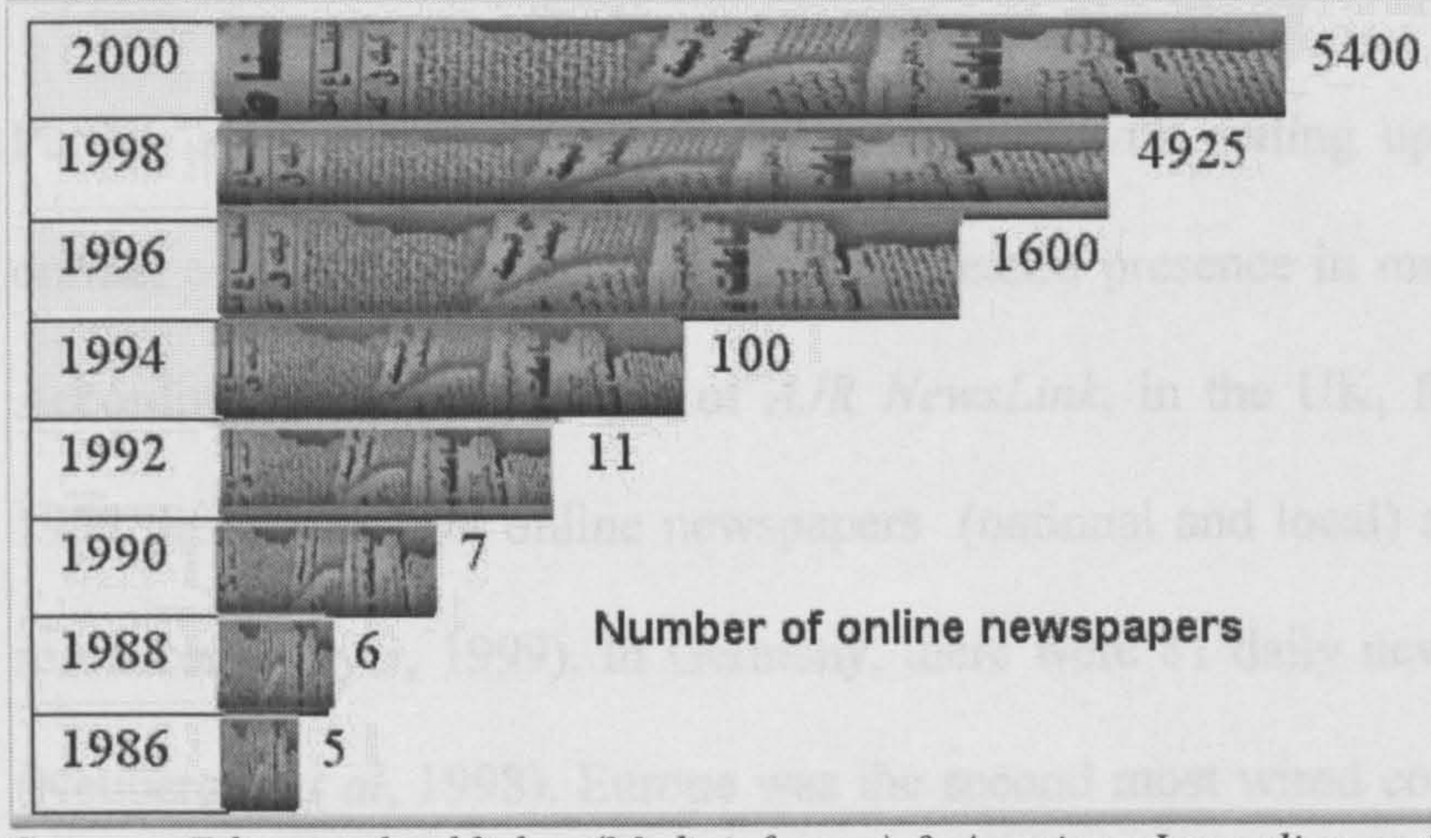
Internet Users by Region	1995	1998	2000	2005
Worldwide Internet Users (#K)	44,324	181,789	349,242	765,776
Worldwide Internet Users/1,000 People (#)	7.79	30.65	57.49	117.95
North American Internet Users (#K)	30,771	93,650	150,850	231,451
North American Internet Users/1,000 People (#)	104.9	311.2	492.6	720.6
W. Europe/Scandinavian Internet Users (#K)	8,713	42,006	87,743	213,670
W. Europe/Scandinavian Internet Users/1,000 People (#)	22.1	105.8	220.5	529.9
East European Internet Users (#K)	375	3,800	10,806	45,472
East European Internet Users/1,000 People (#)	1.28	13.01	37.2	157.7
Asia-Pacific Internet Users (#K)	3,547	33,656	72,066	189,651
Asia-Pacific Internet Users/1,000 People (#)	1.09	9.93	20.73	50.88
South/Central American Internet Users (#K)	410	5,647	19,629	56,051
South/Central American Internet Users/1,000 People (#)	0.87	11.37	38.40	101.2
Middle East/African Internet Users (#K)	508	3,030	8,160	29,481
Middle East/African Internet Users/1,000 People (#)	0.55	3.03	7.88	26.07

Source Computer Industry Almanac Inc (http://www.c-i-a.com/index.htm)

[1] The statistics differ from one source to another due to different calculation methods adopted by Newslink (ajr.org) and Editor & Publisher (mediainfo.com) the two most cited sources. The latter did not catalogue campus newspaper services till late 1996 while Newslink ignored some newspapers that can be read via BBS.

Meyer quotes a 'plaintive note' on the front page of a still-active online edition of a small newspaper from Georgia that 'summed up' the problem: "unless advertisers begin supporting newspaper websites, publishers will have to start cutting their losses".

Figure 3: Growth of online newspapers worldwide



Sources: Editor and publisher (Mediainfo.com) & American Journalism review (Ajr.org)

Likewise, Chyi and Sylvie (1998) discussed the hard questions that accompany the growth of e-newspapers, most of which focus on profitability, as publishers wonder whether sufficient advertising revenue exists to support the new medium and whether online newspapers can adequately distinguish themselves from other online services. Although these points are important, the political and technological orientations are towards a digital future in which (perhaps) only digital goods will survive. In the case of newspapers, Eldrekin (1996) noted that within 20 years the newspaper business will be in the middle of the greatest change in its history. Thus, it is just a matter of time before newspapers are transformed because of two 'basic' reasons 1) they cannot continue to make revenues on paper, and 2) they can make a killing when they go

digital (p. 6). In an attempt to turn this media evolution into an opportunity, Randy Bennett, NAA's (Newspapers Association of America) New Media director, advised publishers to establish an electronic presence early, and to start an electronic relationship with readers and advertisers as soon as possible (Bennett,1996).Yet Rodgers *et al.* (1999) observed that most e-newspapers are using a trial-by-error approach to address the question of advertising effectiveness.

Putting aside the economic issues associated with setting up a publishing venture online, e-newspapers are enjoying an increased presence in many parts of the world. According to Eric K. Meyer of *AJR NewsLink*, in the UK, for instance, by March 1999 there were 294 online newspapers (national and local) and other regular news resources (Meyer, 1999). In Germany, there were 81 daily newspapers by May 1997 (Neuberger *et al*, 1998). Europe was the second most wired continent for newspapers in the world after North America, with 728 online newspaper sites. After the United Kingdom, Norway has the next most online newspapers (53). Asia (led by India) has 223 online newspapers, South America (led by Bolivia) has 161 and Africa (led by South Africa) has 53. Australia and Oceania have 64 online newspapers (Meyer, 1998),(similar statistics from *Editor & Publishers,* see Table 2). Thus, Internet newspapers have achieved a significant world-wide presence and penetration. Yet the main question is whether the new 'e-newspaper' will replace the conventional 'hard copy' one, and how the outcome will affect journalism.

Some researchers and critics argue that e-newspapers will not replace traditional, hard copy publications, at least in the foreseeable future (Boulter, 1995; Bains, 1996; Kwan, 1996; Lindoo, 1998; Nicholas *et al.*. 2000). Many publishers treat their

e-newspapers as additions, not replacements, to their print versions (Orr, 1997). Indeed, some commentators have observed that e-newspapers are supplemental services with little in common with print newspapers and that they could not replace print (McDermott and Fay 1995; Trench, 1997; Thiel, 1998).

Table 2: Online newspapers by region as of February 18, 2000

Region	Newspapers	Magazines
U.S.	2,889	2,547
Europe	625	746
S. America	268	76
Canada	254	164
Asia	214	187
Africa	58	62
Middle East	47	48
Oceania	47	118
Caribbean	28	13

Source: Editor & Publisher Interactive database (Mediainfo.com)

The local technology presents further restrictions on the use of e-newspapers and therefore upon the growth of the e-newspaper market. It has already been noted that limited computing capacity, coupled with the screen and memory demands of e-newspapers, mean that the provision and formatting of electronic news is not as flexible or user-friendly as it could be. E-newspapers are not readily transportable onto laptop computers either (Kwan, 1996). These limitations will delay the time when e-newspapers totally replace their hard copy ancestors. In contrast, Nielsen (1998) observed that this is just about the end of legacy media (Newspapers, Magazines, Books, TV Networks) and predicted that most current media formats will die and be replaced by an integrated Web medium in five to ten years.

1.3.2.5 Differences Between Printed and Electronic Newspaper

The simple fact is that printed and e-newspapers cover the same areas of interest and will gratify many of the same needs of their readers and advertisers. Even though there are differences between them, electronic and hard copy newspapers still perform the basic function of informing their readers and selling advertising space. Since the Internet is getting bigger both in the size of its subscriber or user markets and in the volume of its content and applications, this is bound to have a spin-off benefit for embryonic e-newspapers. Electronic and hard copy news provision places different financial requirements on producers and consumers (Elderkin, 1996). The traditional hard-copy newspaper requires expensive equipment on the production side and no equipment on the reader's side. Conversely, the e-newspaper requires less expensive equipment on the production side and sophisticated reception equipment on the consumer side, which requires more investment on the part of the consumer upfront. In other words, because of the dynamic nature of technology which is the backbone of the e-newspaper production and distribution system, and the different formats in which they appear, several important differences can be identified between e-newspapers and printed newspapers.

1.3.2.5.1 Format and Design

In terms of reading, e-newspapers can be read on a small screen in a horizontal scrolling format, whereas traditional newspaper information is organised vertically in large pages. With the latter, it is easy to scan an entire page in seconds, while that is difficult when reading on screen despite the fact that online newspapers usually have

an index facilitating links to other pages and related stories. Electronic newspapers have the advantage of being able to employ multimedia files to support stories, while with traditional newspapers, the reader is restricted to the information on the page (Hutton, 1997).

1.3.2.5.2 Content

One of the best things about online publications is their ability to publish a larger amount of content that provide greater depth of news coverage unlimited by space or time restrictions, as well as enabling readers to refer to back issues and instant online archives. According to Williams and Nicholas (1999)"The sheer 'space' afforded by the electronic environment is a major factor in the design and content of online newspapers"(p.124). In the traditional newspaper, the reporter is bound by the available page space and may experience cuts to stories to accommodate the space available. With a traditional, hard copy newspaper, updating the content can only be achieved by bringing out fresh editions. With e-newspapers, updating text is much easier and can be done almost as a continuous process.

1.3.2.5.3 Ease of Access

With a computer and Internet connection, online newspapers are accessible any time, anywhere, while a printed newspaper has certain times for circulation and the reader must go to specific places to get it. However, a printed newspaper does not require the reader to purchase special devices before it can be read. A hard copy newspaper can also be carried out by the individual, whereas its online counterpart can only be read

where a computer is available and plugged into the Internet (Orr, 1997). Most readers are accustomed to reading news from a page rather than a screen. Furthermore, computers bring their own idiosyncratic problems. The machine may go wrong or crash. It needs to be free from viruses that may require the user to reinstall the whole operating system (nearly 45,000 known virus and Trojan files move from one computer to another nowadays).

1.3.2.5.4 Immediacy

"Immediacy is the key defining element of what constitutes news" (Williams & Nicholas 1999, p.127). Thus, one major advantage of e-newspapers lies in their high news update frequency that can take place any time around the clock. The editor or reporter of a certain section of the e-newspaper can provide timely updated content throughout the day, by uploading updated stories to the e-newspaper site from their PC or laptop. Immediacy, however, is limited by the constraints on labour to update news and stories as they unfold (Strauss & Schoder, 1994).

1.3.2.5.5 Interactivity

There are several ways offered by Internet applications in which readers and e-newspaper staff can interact in an exchange of opinions. One approach is by sending e-mail messages to the news organization, or exchange messages in online discussion forums. Another form of interactivity is (text-based and audio) chat which allows exchange of messages between two or more users in real time (Quintana, 1997).

According to McAdams (1995b), readers "are eager to let their opinions be known - not just in public discussions, but in personal e-mail to specific individuals (p.78)". "This aspect of the Internet has led users to demand a degree of interactivity from the web that simply would not be possible elsewhere" (Williams & Nicholas 1999, p.130). Riely (1998) noted, however, that unlike other types of online news providers, newspapers have been slow in recognizing that a fundamental condition of effective Web communication is *interactivity.* Riely further noted that most of the news reporters he interviewed were horrified at the idea that readers would send them e-mails about a story they had written and might even expect an answer.

1.3.2.5.6 Cost

In an early phase of the Internet, Rawlins (1992) noted in his report about *Technology's Impact on the Publishing Industry Over the Next Decade,* that over the past two decades the cost of the basic elements in traditional (newspaper) publishing such as printing, paper, and transportation rose "while their electronic counterparts--computing, electronic storage, and communication costs--halved roughly every four years" (p.5). Rawlins foresaw that both trends 'are expected to continue for at least two more decades. In less than a decade from Rawlins estimate, new technology has significantly decreased cost and increased flexibility of electronic publishing maybe beyond what he has to expect. Yet, as noted earlier, the absence of a reliable business model to accommodate online newspapers has hindered publishers' plans for future investments. However, online newspapers generally cost less than the hard copy. There is no paper or ink and no need for large warehouses for paper storage and

trucks to make the daily journeys to distribute the paper to subscribers or news stands. The relatively low cost of publishing and distributing e-newspapers means even small publishers can afford to take a chance and compete on the online world. Thus, in many ways, e-newspapers are more economical than their printed counterparts and more and more publishers are expected to recognize the cost-saving service-provision benefits of online publishing.

1.4 Journalists in the Electronic Era

The development of online publishing has led some observers to question whether the traditional form of journalist and journalism will be needed any more. McAdams (1995b) asked this question when she started a sixteen months mission to build an online version of *The Washington Post*. To pose such a question indicates the degree to which online news publishing is causing a re-think of journalism practice and may explain, in part, why some journalists 'have so little faith in the future of journalism' according to Schults & Voakes (1999). Their survey revealed 'signs of pessimism' among newspaper journalists that has increased since the 1980s, even among those who are basically contented with their own jobs. The researchers found that fifty five per cent of newspaper journalists believe newspapers will be a 'less important part of American life' in the next 10 years.

Yet signs of optimism are still strong. Hoagland (1997) envisaged that for any young journalist looking ahead to a career in reporting over the decades to come, the new technologies of cyberspace are bound to have an impact; and for those journalists who are willing to learn new methods, professional opportunities will grow rather than

diminish. In a different approach, Williams and Nicholas (1998) argue that newly qualified graduates (journalists) do not have "the same information seeking skills as their older colleagues who acquired them at the local face on the tide of the IT revolution" (pp. 146-147). These researchers concluded that despite the arrival of the Internet to the newsroom " we still await the charge of the young brigade" (p.147).

In the journalism profession, whether electronic or traditional, the human factor is the cornerstone of any success. However, fears of the technology domination caused by the unbalanced advancement, the non-stop publishing technology, and modified journalistic skills is apparent.

Trench (1997) noted that journalists have accumulated enough experience of what he calls false promises. One of the promises held out in the earlier phase of the adoption of IT in the print media, was that journalists would acquire greater control over the editorial process and product. Yet that promise is far from having been realised. According to Trench, journalists missed the opportunities to influence the agenda in earlier phases of technological change. However, strategies for online news in the future are now developing and lessons are to be learnt from experiences in the past decade.

If the agenda is missed, journalists' rights can be guaranteed even if it takes industrial action. On the 14th of June, 1996, the Associated Press spread a news story from Norway about a planned strike by journalists demanding their electronic publishing rights. However, they reached an agreement before the strike started having obtained

guarantees that they would be paid extra when their articles or photos were reproduced online.

In their investigation of how the Internet is impacting the information environment in the newsroom, Williams and Nicholas (1997) stated that journalists 'cannot ignore the Internet' simply because they are in the 'information front line' where 'information is the commodity with which they work' (p.217). Thus, to be part of the electronic publishing realm, journalists have to master a new set of tools to be able to make use of the online medium in the most relevant way (Dusseldrop, 1998). Yet, the question remains, how is journalism education preparing future journalists to enter online journalism? The skilful journalist can benefit from many electronic services like the newswires and the public databases that can send daily feeds directly to a journalist's computer. The Internet itself can provide a rich source of news stories. The Net can provide thousands of research and marketing opportunities for freelancers (Gach, 1994).

Journalists can do more than simply access these databases; they can be part of the daily production by maintaining their own news sections, interacting with readers, and even conducting video conferencing with guests from different parts of the world. While the effective deployment of this new technology, by itself, poses challenges to journalists who must acquire new skills in data base management, software application, and the production of text for a screen environment, basic journalistic principles must not be forgotten. According to Ellen Hume (1995) in her special report called "*Tabloids, Talk Radio and the Future of News,*" the journalist's challenge is not the medium but the message, an oppositional dictum to that popularised by

Marshall McLuhan in the 1960s. Fulton (1996) agreed with Hume's argument and stated that winning new audiences and holding onto old ones, required more than simply using a new medium to do the same old things.

McMillan (1998) noted that the audience (user) is a critical factor that determines who pays for content in CMC (computer mediated communication). In turn, Smythe (1977) argued that the primary business of content creators is not the creation of content, but the creation of audiences. Audiences attract advertisers and advertisers are the major source of funding for most mass media. Smythe, stressed, however, that for audience to adapt to new (media) technologies they must be designed to serve their real needs (see Smythe, 1994). Thus, as computer technology becomes easier to use and more affordable, increased numbers of people will go online and the market for electronic publishing will expand (Powers, 1997). Readers of online news will grow, but they will bring them their own terms and conditions.

From the foregoing review, it is probably fair to say that the Internet is not the main reason behind the decline of newspapers readership, but it does present a serious challenge for the news industry. One of the major problems facing newspaper publishers is that of gathering a mass market, and selling the access to that market, in an environment in which consumers expect free information and free services (Duseeldorp, 1998; Mings, 1998). According to one forecaster, media audiences will, in five or ten, years, derive as much of their information and entertainment from the computer as they currently do from the established publishing and broadcast media (Trench, 1997).

1.5 Electronic Newspapers – Is There A Potential?

The future scenario for the traditional newspaper market is not very bright. New electronic publishing is not the only reason for this gloomy prospect, and it may even bring fresh hopes and breathe new life into the news industry (Mings, 1998). In the UK, according to a report released by the European Journalism Centre (1999) the total sales of national daily newspapers are nearly 14 million, and of national Sundays nearly 15 million. The report noted, however, that "these figures are well below peaks reached in the late 1950s, and despite the expansion of both sectors, national newspaper reading continues to decline" (EJC, 1999). In America too, a significant decline in the public's newspaper reading has been observed over the past 25 years (Minges, 1997). The Newspapers Association of America (NAA) validated this with statistics showing that newspaper circulation has been in a steady downward curve since 1988 (NAA, 1997).

Another major problem is that online publications are largely unprofitable at present. High-profile online publications are still struggling to turn a profit. Even large subscriber bases such as that commanded by The Wall Street Journal Interactive, which has 150,000 subscribers, have failed to turn in a profit (Dusseldorp, 1998). The unwanted solution may come from large companies operating global monopolies that will eventually control the electronic publishing industry.

The past decade has already witnessed an evolving tendency among the larger media, software and telecommunications companies towards joint ventures, mergers and acquisitions. These companies are attempting to acquire both the distribution channels and the rights to the content (McDermott & Fay 1997).

So what does the future hold for journalism in this electronic age? For the moment, this is a difficult question to answer in any definitive way. To some, the Internet is merely a new channel of communication in parallel to the more traditional print forms (Giussani, 1997). Others argue that the net opens up the possibility for everyone to be a publisher, though to make a profit out of it is the real challenge. Thus, an important element for an online news service to be a viable commercial alternative is to generate a profit (George, 1997).

According to Kats (1994), the publishing industry should not ignore its past in figuring out how to respond to burgeoning competition in the electronic environment. Likewise, Jim Chisolm, the international advisor on newspaper strategy advises publishers to differentiate between what is threat and what is opportunity on the Internet. According to Chisolm, if publishers try to fight the Internet, it will not go away. Thus, they need to exploit it and ask how it can be used to improve their service to readers, advertisers and other potential customers (Chisolm, 1999).

What newspapers need to change is not the delivery technology, but rather the content of their editions. Even if electronic publishers become very skilled in their use of information technology software, this will represent a marginal solution to a fundamental problem, and a diversion of resources that could be put to much 'wiser use' (Katz, 1994). This wiser use of the Internet for news purposes still embraces the need for skilful journalism.

In the absence of reliable and comprehensive market research data on the Internet, publishers are faced with having to deal with largely undefined markets, unknown readerships, in addition to the special challenges posed by a new technology that is

constantly evolving. The potential of electronic news publishing to generate revenue is, however, already being defined by the precedents being set by established free news services. Electronic publishers must therefore reconfigure their thinking about revenue generation in the future. They must also conceive of their markets differently. News consumers in the future may utilise electronic news in a variety of different ways – some of which may model traditional news consumption habits, but others of which will represent new styles of news consumption facilitated by the new delivery and reception technologies. Future generations of news consumers may prefer more sophisticated media to the daily ritual of the morning newspaper (Lapham, 1995).

In order to compete and maybe even to survive, newspaper publishers must develop new strategies, adopt new ways to attract customers and take the initiative by re-thinking their industry (Lapham,1995). Lapham explains her idea by asserting that newspapers must start by analysing and paring down the essentials of journalism as a craft and a profession. Once this has been done, the 'real essence' of the industry will emerge and a predictive model will begin to take shape. This point was illustrated further by Michel Hooker, the former president of the University of Massachusetts when he wrote *Come the Millennium, Interviews on the Shape of our Future,* a project of the American Society of Newspaper Editors. Hooker stated that the newspaper publishing industry is in the midst of a pivotal time in its history. The reason: the World Wide Web. He asserted that:

> *"The challenge for you will be perhaps your greatest ever. As a producer of newspapers, what you must do first is determine how you conceive yourself. Are you an organization that supplies newspapers or are you an organization that supplies information? Remington and Underwood saw themselves as being in the typewriter business. IBM saw itself as being in the word-processing business. The rest is history"* (cited by Lapham, 1995).

Forecasting the attitude of the American public towards electronic news, George (1997) noted that, culturally, Americans are too accustomed to the printed newspaper to rely on a computer as their primary source of news. A similar reaction came from Tony Ridder, chairman and CEO of Knight Ridder, who argued that the US newspaper industry is basically healthy, despite the advances of television news and the impact of the Internet. He pointed out that even with the Internet providing endless information, 80 per cent of American adults still read either a daily or Sunday newspaper (as cited by Dusseldorp, 1998).

Printed newspapers may face an increasingly challenging future in holding on to readers, especially younger readers (Bogatr, 1989; Kats, 1994, Sundin, 1998). This, in turn, will have a knock-on effect on the advertising revenues they are able to command. Going online is undoubtedly an option more and more established news publishers will be encouraged to pursue as the Internet becomes established as a major news source that the public become accustomed to using. Making money out of online news services will not be easy, however. Early adopters have become accustomed to many free information services being made available through the Internet. Consumers already have to pay for access to the services of Internet companies who provide search facilities to explore the plethora of information that is now available on the World Wide Web. Nevertheless, with their reputations and trusted brand names, long-established newspapers have a unique advantage over new online news sites, with no historical reputation as credible news providers. Their brand image could therefore help hard copy newspapers to build a successful online presence.

It was noted earlier that electronic journalism could open up exciting possibilities for news provision as the Internet is not restricted in terms of space and time in the way that the printed page and television and radio broadcasts are. Cyber news also gives news consumers more choice over news selection. It can provide greater variety and the dynamic facilities that enable users to explore news archives as well as to consume from the contemporary news menu (Lazarus, 1997).

The fact that many Net users are accustomed to receiving information services for free may appear to be a stumbling block that may hold back the transition of hard copy newspapers to the electronic publishing environment. Business strategies will need to be re-thought. Net revenues may not derive primarily from the sale of information to consumers. Instead, information may be supplied free of charge to entice consumers who then become the commodity that electronic news publishers sell on to advertisers.

With advertisers the issue is more complicated. The measurement of audiences for Internet advertising is still in its infancy. There are insufficient data available to establish how effective such advertising is, compared to advertising in other longer-established media. In consequence, advertisers have been slow to free up revenue for online placements. Although Internet advertising in the USA alone grew to nearly $600 million in 1997, of the top 10 websites in terms of advertising revenue generated, only one newspaper site, for *USA Today*, made the list at the very bottom (Phillips, 1998). So far then, the sums of money flowing into online newspaper services have been modest. This aspect of online business is going to take some time to build. In the meantime, the communications infrastructure is developing very fast compared with the slow movement of electronic publishing software.

According to Jeff Boulter, the founder of the first customised online newspaper in 1995 CRAYON (CReAte Your Own Newspaper), there remains much to explore and learn about the online publishing business. Although traditional print newspapers are rushing to claim their space online, most offer online news services that comprise electronic copies of their hard copy publications. Few have yet taken advantage of the interactive capabilities of the medium. Only a select number, like *HotWired*, the online service of *Wired* magazine, have begun to explore the more dynamic information delivery possibilities of the Net (Boulter, 1995).

In one series of interviews with journalists and media managers in the USA, mixed opinions emerged about the future of journalism (Degen & Sparks, 1997). Some suggest that over time, we are likely to see newspapers that will have multiple formats while others foresee that there will be a continuation of newspapers we know them, and audiences will determine the directions. Although most Net news observers agree that technology will have an enormous impact, they believe that traditional newspapers will not disappear (Degen & Sparks, 1997).

Some writers have predicted that the commercial prospects of the Web newspaper are considerable. As research techniques improve within this electronic information environment, advertisers will be better able to target specific promotional messages at specific readership markets. Eventually, e-newspapers may turn out to be a far more effective advertising medium than current newspapers, television or home shopping schemes (Angevine *et al.* 1996). Electronic publishing may bring about a need for new marketing models, since the consumer marketplace covered by the Internet will not be the same as the markets covered by traditional media. Market structure is

usually determined by geographic limits, nature of commodity, number of competitors and barriers to entry (Chyi & Sylvie, 1998). While these factors may still be important in the context of the Internet, the way they are utilised in this new context may not be the same as the way they have been used in relation to print and broadcast media. Understanding the electronic publishing industry will require a fresh structural analysis of the market.

In sum, there are many areas still unclear for both publishers and readers of electronic newspaper, including clear and understandable pricing methods, suitable electronic formats, copyright issues, availability of back issues, guaranteed accessibility and other issues. Despite the growing market of online news services, many studies reveal that users are unlikely to pay for content, even for news they consider valuable, if free content can be accessed elsewhere (McMillan, 1998). So it is unwise to rely on subscriptions to generate revenues on the short-term plans. On the other hand, publishers should examine carefully the needs of the other important customer for newspaper - the advertiser - who may find it easier to advertise directly on the Internet, to put his adverts with other popular sites like search engines or to set up his own website.

1.6 Summary

Electronic media have successfully played a vital role by making information easy to reach at lower cost, offering impressive benefits to the public. Today with the help of this technology, the provision of news and information has become big business. It is the Net and its facilities that have made possible the publication and dissemination of information, regardless of any boundaries and helped almost everyone even with little knowledge in computer to do so. The traditional newspaper industry has found itself in the front line of this new media challenge. A digital revolution is going on with new rules, new products, new standards, and even new audiences in a dynamic environment where myriad (online) information and news resources are offered almost for free.

Some publishers are likely to view e-newspapers as threat, while others may view them as a complementary electronic alternative to traditional newspapers. Although it is too early for a profitable market to emerge, publishers are going digital in increasing numbers because it (arguably) makes sense—both creatively and economically. Yet questions remain, is there a potential and will print and e-newspaper complement or compete with one another?

Chapter Two: The Arab Press and New Technology

2.1 Introduction

The history of the Arab press extends back to the nineteenth century. Most Arab countries at that time were under the rule of the Ottoman Caliphate or European mandate. Prior to that, newspapers were 'unnecessary' because of the 'general political stability' under Ottoman rule and conventional communication channels sufficed for society's needs (Aylon, 1995). In that environment mosques and bazaars acted as media of mass communication (Mowlana, 1998).

These traditional media were flexible and timely; they did not operate on a fixed schedule, but rather whenever there was news. With this type of communication no license was needed to operate. It was a folk culture, based in the community. It was pluralistic. Furthermore, this mode of communication flow through interpersonal channels was uncontrolled by any centralised power (Mowlana, 1998).

In the early 1930s, a four-volume study about the history of the press in the Arab World, compiled by the Arab historian Philipe Di Tarrazi, indexed names and brief descriptions of 1,639 newspapers that were published in the Arab World from 1800 - 1929. Tarrazi also found that Arabs in exile published 205 newspapers and magazines in (north and south) America and 107 in Europe during the same period.

The overall number of all-Arab newspapers and magazines that appeared in the period covered by Tarrazi was 3,023 publications. Although the real hold of the

Ottomans over most Arab countries was to last only until the late 19th century, when European colonisation occurred, most countries remained nominally part of the Ottoman Empire until its collapse after the World War I.

In this fickle political environment the first newspaper to appear in the Arab World in 1798 was *al-Hawadith al-Yaumaiah* (the 'daily events') printed in Arabic with two French editions, all of which were published by the French troops in Egypt. The aim of the French-language editions was to "inform and instruct French expeditionary forces and improve their morale " (Adib Marwah, 1961 as cited by Rough, 1985 p. 6).

When the French left Egypt, the Egyptian government published *Journal al Khdaiwi* (1827) and *al-Waq'i' al- Masriyyah* (Egyptian records) (1829). Some historians, however, refer to a daily bulletin that appeared in Iraq called *Journal al Iraq* in 1816 as the first Arabic newspaper to be published by and for Arab readers (Abdurhaman, 1989). It is noteworthy that most of the newspapers, which appeared at this time, were official organs of governments.

In the western part of the Arab World, the press, according to Azzi (1998), was the product of at least two historical components: (European) colonialism and post-independence conditions. Although his study focused on the Grand Maghrib (Algeria, Tunisia and Morocco), it can be applied - to an extent - to many Arab countries that witnessed similar historical events. Azzi divided the history of the Arab media in this region into four historical periods. The first period extended from the era of colonial rule that started from the first half of the 19th century until the end of World War II, marked by the introduction and the growth of purely colonial papers. Then came the

second period that lasted until the 1930s when Arab nationals started to publish their papers under strict control of the colonial administrations.

The third period began in the 1930s and lasted until the states of the Grand Maghrib (and many other Arab countries) gained independence in the 1950s and 1960s, a period that saw the rise of nationalist press (many were underground). However, European colonial powers did not totally give up their hold over the area until the 1970s when the British relinquished the Arab Emirates in the Gulf (1971) and the French left Djibouti (1977) (Kazan, 1993). For a political map of the Arab World, see Appendix A.

2.2 Trends and Developments in Arab Newspapers

In order to understand the present status of the dissemination of information and media practices in the Arab World, it is important to examine its historical and political dimensions as well as the socio-economic transformations that have affected the whole region over the years.

From an historical perspective, Mowlana (1998) has provided an overview of how information has traditionally been disseminated in the region over the past 200 years. He examined the development of information dissemination and media in the Arab World in terms of five historical traditions. The first started with 'traditional sources of communication' (such as mosques and bazaars) that occupied the kind of news role filled by the mass media in modern times. This traditional mode of media flow had the potential to promote democracy due to its flexibility and its freedom from

government interference. Then came a phase labelled the 'colonial tradition'. According to Mowlana (1998), after 200 years (since the publication of the first Arab newspaper), the Arab World is still living in the age of colonial media. The colonial mode of communication stood in opposition to the traditional mode. It brought with it the ideology of the West, including the concepts of nationalism and modernity. The colonial-styled media were characterised by Western values and a hierarchical and elitist structure (see also Rough, 1987; Abdelrhman, 1989).

The third tradition was the 'exile tradition' or 'trans-national media'. This referred to the second wave of Arab media presence outside the Arab World. Over the last 20 years, exile or trans-national media have emerged as a critical force in Arab media. The Arab trans-national media in London, for example, can be regarded as the centre of Arab media today according to Mowlana (see also Abdelrahman, 1989).

The fourth tradition comprised the 'nationalistic media', a tradition of information flow in nation-states that can be controlled by government or the private sector and has its roots in Arab nationalism. The main characteristics of this type of media are its loyalty to the government, its secular nature, and its basis in Western models of communications (Mowlana, 1998). The last mode of media tradition was the 'Islamic tradition', a mode that had a close tie to the traditional mode. It was more universal than the national media. According to Mowlana, the four most important recent influences on Arab media are: (1) the development of modern information technology; (2) the Islamic revolution in Iran; (3) the collapse of Soviet Union; and (4) the Gulf War. Kazan (1993) endorsed these influences, adding the impact of the

oil boom in the Gulf States as an important factor that has influenced media content and growth.

* From another angle, it is important not to forget the aftermath of World War II and the important events that occurred in the region, in the post-war period, that helped enormously in shaping many aspects of the Arab life. Among the most significant of these events has been the deep-rooted Arab-Israeli conflict, which greatly influenced the Arabic literature and press. This complex developmental context has spawned new media forms, including *the resistance literature* and *the resistance press,* whose only theme is to resist Israel and incite Arabs to fight to free Palestine and the Arab-occupied territories. This orientation was crystallised in the titles of many publications throughout the Arab World, that carried names such as *al-Kifah*, *al-Nidal* (struggle), *al Thawrah* (revolution), *al-Huryyah* (freedom), and *al-Istiqlal* (Independence).

Thus, the Arab press has passed through several distinct phases of change and transformation, and existed (up to the present day in most cases) under exceptional circumstances represented by an unstable political environment where autocracy, coups[1] and martial law (in Egypt since 1981 to date) have characterised the political climate. The press have played a critical role as an effective *national* weapon, sometimes directed against the *enemy* of the *nation* (Ottomans, European colonists, America, Israel) and on other occasions against *brother* Arabs, as the press have been subjugated in many cases to participate in organised recriminatory campaigns launched by one faction against another in the region.

After achieving political independence and emancipation from foreign domination, however, many Arab states launched ambitious plans to improve living standards and to develop society's educational and economic status. While the political relationship between governments of the region and the Arab media has ebbed and flowed, the media have, nevertheless, kept pace with most technological advancements and utilized the latest technology.

Yet, Al-Qadi (1999) states that, in recent years government censorship is becoming meaningless, and even ineffective as more and more people are buying satellite TV dishes throughout the Arab world. This led Micke Stine and Barbi Weinberg[2], in their forward of the Alterman (1998) study about new media in the Arab World, to state that "despite the government heavy hand that has long controlled media in the Arab World, new technologies are making their mark" (p: ix). This observation is largely true and no better illustrated than by the use made by Arab publishers of new satellite technologies.

The Saudi brothers Hisham and Mohammad Hafiz published the leading Arabic daily *al-Sharq al-Alawsat* (the 'Middle East') in London in 1978 and transmitted it to publishing houses in the Arab World via fax and satellite (technologies), enabling the newspaper to be published on the same day in many Arab countries. The success of *al-Sharq al-Alawsat* encouraged other publishers to follow suit, including *al-Hayat* ('Life') in 1988 and tens of other less significant publications that began the second

[1] In the last 50 years there have been more than 20 military coups in Iraq and Syria alone and in one year (1969) three coups occurred in three different countries Libya, Sudan and Somalia.
[2] Mike Stine is the president of the Washington Institute of Near East Policy and Barbi Weinberg is the chairman.

wave of Arabic newspapers emigration[1]. The model of *al-Sharq al-Alawsat* and *al-Hayat* or the 'satellited daily newspaper', as Schleifer (1998) called it, is considered to be the first major impact of new (satellite) technologies upon Arab media.

Although newspapers in many countries of the region are generally privately owned, they nevertheless receive some public subsidy. They are also subject to censorship restrictions in some countries. For instance, they have to follow written guidelines provided by the authorities or practice strict self-censorship to comply with some governments' restrictions. In most cases " editors know the dos and the don'ts of their trade" (Khazen, 1999, p.88).

Radio and television stations are mainly government-owned and operate according to strict official guidelines, offering only officially endorsed news and views (see Boyd, 1993; Rough, 1987). Even in Qatar, the most liberal of the six Gulf States, that adopted an open media environment and dissolved the state's censorship in 1995, the only liberal voice to be heard is the state-owned news satellite station *al-Jazirah* (see Al-Kasim, 1999). This station regularly airs controversial news and interviews, and discusses sensitive issues, especially about neighbouring countries (Burns,1999). Nonetheless, when it comes to Qatari issues, the media tend to toe the official government line.

Indeed, in most Arab countries (notably Syria, Iraq, Tunisia and Egypt), the governing party has power over all the major media and they are permitted to present only government views (Kalb and Socolovsky, 1999). Even the six-year-old Palestinian

[1] The first wave was in the 19th century to escape censorship from (colonial and Ottomans.) authorities.

National Authority of the West Bank and Gaza practises "authoritarian-style tactics against independent-minded journalists [that] have forced most to steer clear of sensitive topics such as corruption, mismanagement, or any news that would cast Arafat or his authority in a negative light" according to the 1998 report by the Committee to Protect Journalists (CPJ) (Campagna, 1998).

Yet, the status of press freedom varies from one Arab country to another and also from time to time. Some countries have passed laws in recent years claiming more openness of the media, such as the Jordanian Press and Publications Law (PPL) of 1993 (replaced with more restrictive law in 1997) and the Lebanese 1994 broadcasting law, but, in practice, press freedom in these countries has been just as restricted as ever (Alterman 1998, Aylon,1995).

Regarding journalism education, Awatef Abdelrahman (1991), in a report to UNESCO, identified nearly 30 institutions for journalism and communication education distributed across Arab states. She found that some of these institutions take the form of a faculty, as in Cairo University, or of an independent institute, as in Tunisia, Algeria, Sudan and Yemen. Others are departments within a faculty as in Egypt (universities of Al Azhar, Suhag and Zagazig), Sudan, Iraq, Syria, Jordan, Lebanon, Saudi Arabia (five departments), Qatar, Oman, United Arab Emirates, Morocco, Somalia, Mauritania and Libya.

Considering publishing software, Salem (1996) noted that most Arab newspapers use foreign language software packages after 'Arabising' them. For instance, the Apple Macintosh desktop software packages were 'Arabised' (by the London based Arab

company 'DIWAN') in two versions, the first named *al-Nashir al-Maktaby* (desktop publishing) and the second version named *al-Nashir al-Sahafy* (desktop publishing for the press).

Although there have been some technical problems in dealing with the Arabic language structure, semantics and syntax, the two packages are the main publishing software in the Arab publishing market. Salem, however, commends an Arabic publishing package that has been created completely by Arab professionals and introduced by the leading Arab computer company *Sakhr*. This promising package offers some solutions in handling Arabic text as well as technical support and is now widely used.

2.3 State of the Market

During the last decade, the business environment has become more challenging for newspapers all over the world. Their two customer groups - readers and advertisers - are being exposed to new electronic publishing media that can often provide a more convenient source of the gratifications traditionally supplied by established newspapers. The newspaper market in the Arab World, however, is still very small in comparison with its counterparts in America and Europe. Table 3 shows that Arab countries fall behind western markets in terms of daily newspaper distributions. In Egypt (62,000,000 inhabitants), for instance, every 1000 people share 38 copies compared to 332 copies per 1000 people in the UK and 324 copies per 1000 in Singapore. UNESCO statistics for 1994 show that the total number of daily newspapers issued in Arab countries is smaller than most other regions of the world

with 139 daily newspapers compared to 1199 daily newspapers in Latin America and Caribou and 2854 daily newspapers in the USA alone.

Table 3: Circulation of daily newspapers in the Arab World compared to other countries

Circulation of daily Newspapers per 1,000 Inhabitants 1996			
Algeria	38	Morocco	26
Australia	**297**	Oman	27
Bahrain	117	Qatar	161
Canada	**159**	Saudi Arabia	59
Egypt	38	**Singapore**	**324**
France	**218**	Somalia	1
Iraq	20	Sudan	27
Japan	**580**	Tunisia	31
Jordan	45	UAE	170
Kuwait	376	**United Kingdom**	**332**
Lebanon	141	**United States**	**212**
Libya	13	Yemen	15

Source: UNESCO 1996 Yearbook.

This relatively small newspaper market can be explained in a number of ways. The majority of Arab countries suffer from a high rate of illiteracy that exceeds 50% in at least four countries (see Table 4). Another factor is that newspaper reading has not become an important and regular part of the lives of the vast majority of the educated (and mostly young) people in the region. Newspapers have failed to attract this market, most of whose membership, in any case, suffer economic hardships.

There may still be some hope for an increased newspaper readership in the Arab World, however, with the rise of new regional media firms that have 're-invigorated a sense of common destiny among many in the Arab World' (Alterman, 1998). The combination of the growing regional print media and satellite television stations has given an impetus to the creation of a new regional media market - known to marketers

as the "pan-Arab market"- which is becoming increasingly influential. Mowlana (1998) has warned of the consequences of this dramatic rise of corporate media in the region, because they are mostly owned and controlled by a few influential people.

The growth of advertising has represented a further important factor underpinning media growth in the region. The new player in the market, Pan Arab Media, took the lion's share of the combined local and regional advertising on television alone in 1997, according to report published by the Jordanian English daily *The Star* (15 January, 1998). The report noted that the Arab television advertising market has continued to grow ahead of the media norm with Pan-Arab satellite channels attracting bigger audiences and more advertisers. The report indicated that newspapers improved their advertising market share from 56% in 1996 to 63% in 1997.

Table 4: Adults illiteracy rates: Estimates for 1995

Country	**Adult illiteracy rates estimates for 1995%**		
	Male & Female	**Male**	**Female**
Algeria	38.4	26.1	**51.0**
Bahrain	14.8	10.9	20.6
Comoros	42.7	35.8	**49.6**
Djibouti	**53.8**	39.7	**67.3**
Egypt	48.6	36.4	**61.2**
Iraq	42.0	29.3	**55.0**
Jordan	13.4	6.6	20.6
Kuwait	21.4	17.8	25.1
Lebanon	7.6	5.3	9.7
Libya	23.8	12.1	37.0
Mauritania	**62.3**	**50.4**	**73.7**
Morocco	**56.3**	**43.4**	**69.0**
Qatar	20.6	20.8	20.1
Saudi Arabia	28.4	19.9	40.7
Sudan	**53.9**	**42.3**	**65.4**
Tunisia	33.4	21.4	45.4
United Arab Emirates	20.8	21.1	20.2

Source: UNESCO Handbook 1996.

Even with the onslaught of the Pan Arab satellite television, the advertising activity in the local Arab Gulf Countries Council (AGCC) newspapers is estimated at $466 million, registering a healthy 11% nominal growth over 1996. The overall statistics also show steady growth on the region's advertising market for the years 1995, 1996, 1997 and 2000 (see Table 5).

Table 5: Media advertising expenditures in the Arab World

Million US $	**1995**	**1996**	**1997**	**2000***
Saudi Arabia	269	328	328	334
UAE	149	187	189	191
Kuwait	117	149	160	179
Bahrain	19	18	25	42
Oman	21	23	25	27
Qatar	17	22	26	36
Pan Arab	155	209	308	533
Sub-Total	**750**	**939**	**1060**	**1342**
Egypt	177	204	275	395
Lebanon	168	173	172	240
Jordan	23	23	24	34
Syria Yemen	10	10	9	10
Total	**1113**	**1351**	**1543**	**2021**

*Source: Arabad.com . * This column is the Statistics as of February 2000 from PARC (Pan Arab Research Centre -Arabresearch.com)*

2.4 Internet Technology in the Arab World

"It had to happen eventually. Kings, princes, sheikhs and politicians are falling over one another in the Middle East in a mad scramble to announce Internet initiatives. The Internet does not run on oil and the Arab World does not want to be left behind in the new economy". **(Foley K., March, 2000)**

Although the population of the Arab World today exceeds 250 million, inhabiting an area approximately one and a half times the size of the USA, less than 1% of this population have Internet access. In April 1999, the Dabbagh Information Technology Group released a report showing that the online population of the Arab World was less than one million (923,000), with Egypt, UAE, Lebanon and Saudi Arabia leading the region. The latter scored the highest growth with 140.6% over a four- month period between December 1998 and April 1999 (see Table 6).

Computer use even in the rich Gulf States, along with most other Middle Eastern states, is well below international averages in the numbers of computers in use and in the number of Internet hosts (Rathmell, 1997). However, the Domain Survey (http://www.nw.com/zone/WWW/top.html) found that the number of hosts identified by country identifiers from the Arab League rose from 2,797 in January of 1996 to 11,209 in July of 1997. This increase of 300% is almost three times the rate for all hosts during the same period (an increase of 106%).

Despite this rapid growth, the World Bank development report of 1999/2000 showed that Arab states are still far behind other nations in terms of individual share of Internet technology facilities (see Table 7).

Table 6: Number of Internet users in the Arab World

Rank	Country	Subscribers Dec 1998	Subscribers April 1999	Users April 1999	%Growth in 4 months Dec'98 -- April'99
1	UAE	61,200	81,700	204,300	33.5 %
2	Lebanon & Syria	30,700	52,900	132,200	72.3 %
3	Egypt	36,400	51,800	207,200	42.3 %
4	Saudi Arabia	18,700	45,000	112,500	140.6 %
5	Kuwait	22,000	25,100	62,800	14.1%
6	Jordan	16,600	20,100	50,300	21.1 %
7	Oman	12,700	16,000	40,000	26.0 %
8	Tunisia	4,700	6,000	15,000	27.7 %
9	Morocco	11,200	14,100	32,500	25.9 %
10	Bahrain**	11,700	13,000	32,500	11.1 %
11	Qatar	8,500	11,000	27,500	29.4 %
12	Yemen	2,200	2,500	6,300	13.6 %
Total		**236,000**	**338,200**	**923,100**	

Source: Dabbagh Information Technology Group Published May 1999.

In sum, public access to the Internet is growing rapidly in the region, especially following the introduction of the Internet in January 1999 to the Saudi public. Saudi Arabia and the rest of the Gulf States are seen as the most lucrative Arab online markets, with the highest level of online presence and subscriber growth. The basic components for Internet access (telephone line + computer + Internet services provider), however, remain beyond the reach of many Arab citizens, as does the cost of Internet connection.

2.5 Obstacles Facing Internet Usage in The Arab World

Despite the fact that the Internet is growing very quickly in the Arab World, many barriers deny the vast majority of the region's citizens access and benefit from this new communication medium. Broadly, these barriers are economic, technical, social and political. To understand the wider picture, the following factors are the most obvious obstacles facing Internet spread in the region.

Table 7: Communications, information, and science and technology

	Per 1,000 people		Internet hosts
	Telephone main lines	Personal computers	Per 10,000 people
Economy	**1997**	**1997**	**Jan-99**
Algeria	48	4.2	0.01
Belgium	**468**	**235.3**	**162.39**
Denmark	**633**	**360.2**	**526.77**
Egypt	56	7.3	0.31
Japan	**479**	**202.4**	**133.53**
Jordan	70	8.7	0.8
Kuwait	227	82.9	32.8
Lebanon	179	31.8	5.56
Morocco	50	2.5	0.2
Saudi Arabia	117	43.6	0.15
Syrian	88	1.7	0
Tunisia	70	8.6	0.07
UK	**540**	**242.4**	**240.99**
USA	**644**	**406.7**	**1,131.52**
Yemen	13	1.2	0.01

Source: World Bank -World development report 1999/2000

2.5.1 Government Policies and Social Acceptance

Many Arab countries consider the Internet as a possible threat to national security, cultural identity or religious sanctity. This threat is especially significant in a country like Saudi Arabia where Islamic Sharia' is the country's constitution. Boyd, Al-Makaty, and Tubergan, (1994) discussed what they called the Saudi 'complexity' in accepting new technology and stated that this Islamic state was "one of the most religiously conservative in the world" (p.55)". From this perspective, Saudis' fear of the Internet may have its justification because some religious leaders think that the Net will destroy whatever remaining good values the society still has by propagating twisted ideas and pornographic material which would corrupt the end users. These leaders cite in defence of their fear, the repeated complaints on these issues voiced by

people in countries like the United Kingdom, Singapore and Germany regarding the content of the Internet (Alshehri, 1997).

When reviewing Internet usage in the Arab Gulf countries which contain more than half of all Arab users (51.9%), Rathmell (1997) observed that the information revolution posed perhaps the greatest challenge to the six Gulf States (GCC). The governments of Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates (UAE) and Oman regarded themselves as under considerable threat from the `Net'.

The main concern of these nations can be classed in psychological warfare terms as 'Net war'. One part of this concern is the ease with which `immoral' material, such as pornography, can enter these countries via the Internet. Rathmell (1997) argued that this threat does not represent an active offensive directed against the 'country'. What was absent from Rathmell's argument was acknowledgment of the importance of the religious dimension and social acceptance in this part of the world. There is still a strong presence of Islamic rules and a very strict concept of family values in most Gulf societies. Hence, governments must ensure that the concerns of families about such an open medium as the Internet are acted upon. It is true, to some extent, that the use of the Net for spreading dissident political opinions is another concern to Arab governments, though it certainly has not been their main concern.

Of more significance is the nature and extent of unmitigated social acceptance of this new medium and the exposure of families to immoral materials that can be accessed on the Net. The same pattern of social resistance has previously been witnessed to occur on two other occasions in the last 50 years. The first of these was the introduction of radio broadcasting in Saudi Arabia and the second was when a group

of people attacked the first state-owned TV station in Riyadh in 1963. There was also a strong response to pressure from the conservative Islamic society after the proliferation of satellite dishes in the early 1990s, and the Saudi Government was encouraged to ban satellite dishes from entering the country (see Boyd, 1993).

It is not only the Gulf States that have shown reluctance to encourage access to new communications media. Historically, most Arab countries have been conservative Muslim societies where all aspects of life, including new innovations, have to operate according to Islamic guidelines and be approved by scholars before their introduction into the daily life of people.

The ability of Net applications to deal with or present almost any issue, including those found most sensitive in the Muslim world, has caused great deal of social concern. What might be suitable in the western culture may be considered insulting in the Arab World. Generally though, most official restrictions apply only to sites that express unacceptable viewpoints against Islam, pornographic sites and politically sensitive sites dealing with what governments believe may deleteriously affect the social order (see also Durier, 1998).

2.5.2 Illiteracy

The (hope that the) potential role of the Internet in promoting sustainable and equitable development in the Arab World is hindered by the very high illiteracy rates, as shown in Table 4. Illiteracy remains the major problem facing Arab countries:

impedes the development of the societies, and challenges any government's plans to benefit from such new technologies.

The role of the Internet as a gateway to a world of learning is not fully realised where populations lack the basic educational level needed to become effective users of the new medium. Even in countries (including some Arab countries) that have succeeded in securing a basic level of education, the picture is not very positive, according to Paula Uimonen of the United Nations Research Institute for Social Development. She observed that schools are poorly equipped, classes are overcrowded, and teachers are poorly trained. Furthermore, education is one of the first sectors turned to when savings need to be made in the national budget (Uimonen, 1997).

2.5.3 Cost

The Internet is not a cheap medium in this part of the world. So far, no ISP in any single Arab country offers free Internet services such as in Europe and America. Furthermore, subscription fees are very high and act as a deterrent to a large segment of otherwise potential users. The cost of connections and equipment have "kept the Internet beyond reach for all but a handful of scientists and engineers at selected government research institutes" (Anderson & Eickelman, 1999, p.59). Clearly, economic hardships remain a tremendous obstacle facing new technology growth in a region where many countries are considered as being amongst the world's poorest nations. In Somalia (GNP $171), for instance, Internet connection can cost subscribers the equivalent of six months salary.

2.5.4 Language

The predominance of English language over the content and most of its services renders the Net an English speakers zone. For Arabic-speaking users, in this overwhelmingly English language medium, slightly more than three hundred thousand of an estimated twenty million "pages" making up the World Wide Web, are in Arabic. This point was noted by Dr. Hazem Abdelazim, executive director of Sakhr Software. Dr Hazem's company developed the sole Arabic program *Sindbad* for using Arabic on the Internet (cited by Anderson & Eickelman, 1999).

2.5.5 Infrastructure

The old Arab communications infrastructure is another factor holding back Internet development. In some countries, telecommunications services are often expensive and have too limited a bandwidth to supply Internet services. Furthermore, telecommunications services may be unavailable or unreliable a lot of the time.

Many Arab countries maintain trade barriers to imported information technology and this also hinders serious investment in this sector from local business. Foreign investors, on the other hand, who wish to establish long-term investment, demand sophisticated local infrastructures. The problem is that the development of a collective information infrastructure policy for the region is moving in a fragmented way. Few specific policies exist and most initiatives relate to the creation of research-oriented networks. (Alshehri, 1997).

Yet, because the Internet depends fundamentally on telecommunications capacity, many Arab League countries have been working to upgrade telecommunications structures (Cornell Library, 1997). The Saudi government, for instance, started a $4 billion project in 1994 (the largest in telecommunications history outside the United States) to expand and modernize the Kingdom's telecommunications infrastructure. The project, known as the Telephone Expansion Project-6 (TEP-6), calls for the provision of a fully digital communications network including 1.5 million digital lines, thousands of associated network components for switching, transmission, network management, fibre-optics, wireless, civil works and training projects.

2.6 Arab Electronic Newspapers

Unlike American and European newspapers that have experimented with electronic delivery of news and information for two decades, Arab publishers and journalists began to move in this direction only in the last few years when they witnessed that the Internet was emerging as a new communication medium available to the masses.

The development of easy-to-use Internet facilities has encouraged many Arab publishers to take the initiative and get online since the early years of the Net. Further encouragement to Arab publishers to invest in online publishing has come from the sharp increase in the number of people connected to the Internet. It became a fashion to read in the headlines of some Arab newspapers that it was "the first Arab (Saudi, Egyptian, Jordanian, etc.) daily on the Internet ". This indicates how important these newspapers value the Internet. Alterman (1998) noted that journalists and the press in

general have been among the earliest beneficiaries of the presence of the Internet in the Arab World.

Although Internet publishing remains primarily an English phenomenon, an Arabic presence on the Internet is now being felt. The Arab press - like the press industry in other parts of the world - found itself facing new market pressures, partly emanating from the Internet, with its electronic publishing potential. This new format for delivering news and other information to consumers poses a new challenge that news producers cannot afford to ignore.

According to this study's online media directory[1] (Fayez.net/media) almost every major national Arab newspaper has a website, despite the fact that none of them is making any profit. They are on the Net in most cases because their rivals have a site. Among major Arab online newspapers, *al-Sharq al-Awsat* is investing significant time and energy in its online version. This paper was one of the first (in December, 1995) Arab newspapers to establish an online version.

The *al-Sharq al-awsat* trial provides a good example of the hardships that face Arab online newspapers, as it has tried without success to make a profit from its Web edition. Its early editions presented much of the editorial content of the printed version, but the interactive version was free. The user only needed to register and get a user ID and password to access the site. This arrangement did not last very long, however. After nearly a year and a half, the electronic form of the newspaper ceased

[1] Also these comprehensive Arab online Media guides were consulted: www.sahafa.com, www.fares.net/news, www.4arabs.com/ (See also 3.8.1 the implementation of the study)

to be free -of-charge and asked its registered users to pay a subscription fee (£9 for 3 months, £16 for 6 months and £30 for 12 months). The publishers argued that this step was necessary to cover maintenance costs and to provide a better service. After another troublesome year of trialing, the online paper came up with a revamped appearance and a policy of providing free daily news summaries. For those who wished to read the news in greater detail, however, subscription fees were still levied.

Electronic newspapers, the world over, are acknowledging that users are becoming accustomed to obtaining free information services on the Internet. Free access is a key part of the attraction of e-newspapers. This factor provides a new kind of challenge for e-newspapers whose publishers must re-think their business strategies to adapt to this new delivery medium. Nevertheless, the Internet market offers new opportunities for those operating in the online industry. Within the Arab World, most newspapers have greatly improved their Web versions and made remarkable improvements in terms of Arabic text format and the content they offer in easily navigated sites that highlight local, national as well as international news.

The online edition of the Egyptian daily *al-Ahram* (the printed version appeared in 1876) is one of the outstanding Arab dailies offering rich content and a good archiving engine. It is one of the few e-newspapers that provides updated information on the weather, prayer times and links to other media sites. In addition, the Saudi *al-Riyadh* presents a fine and full website with an easy to navigate and simple format. It also provides a one-week back issues service and full searchable archive as well as a (Riyadh) city guide.

2.6.1 Arab Electronic Newspapers' Potential

Internet business more generally has hardly started in the Arab World. This fact represents a major problem for electronic publishing and explains why the Arab World lags behind the rest of the world in this line of Internet business. At present, there is no critical mass online to support the size of traffic needed for revenue generation. There is only a small segment of the Arab population currently connected to the Internet and compounded with this is the weak telecommunication infrastructure found in many Arab countries.

Considering the enthusiasm shown by some governments in the region to improve communications infrastructures, together with wider acceptance of the Internet among the public, the future is more promising. For Arab newspapers, nonetheless, the future will remain unclear if they do not shift from old business strategies over the next few years. Arab news publishers must recognise that they are entering a new type of market that has its own terms and conditions. Some hope is offered by news provided from foreign sources. The BBC, for instance, offers a rich daily content and world-wide in-depth coverage in Arabic for free. Also, most major news agencies provide similar services for free. It is doubtful that Arab users would turn to electronic Arabic newspapers, especially if only made available on a subscription basis, when they can get better content from the longer-established BBC or Reuters websites.

Another part of the problem is that Arab publishers have not conducted marketing studies that could help to assess the market potential. Most newspapers have no clear plans for the future or no clear reasons for putting their newspaper online. Abdul Aziz

AlMansour Editor-in-Chief of the first Saudi online daily *al-Jazirah*, summarised the problem by stating that the purpose of his paper's presence on the Web was to register precedence before other newspapers, so that the newspaper could take the lead in this new market. Making profit or finding new ways to generate revenue had not been the target of the primary adopters of the Internet. The online version was just a trial that might or might not eventually attain a position of prominence in the newspaper's future plans (Abdulaiz Al-Mansour, personal communication, February 1, 1999).

2.7 Summary

There are several good reasons for Arab publishers to be getting online, regardless of the current status of the market. First, they have to establish a presence and obtain experience in electronic publishing as the market becomes more firmly established. Second, the Internet and its widely used applications offers an uncensored medium that could enable publishers to reach Arab readers throughout the region and all over the world. Such is the potential of this communication network, that it could help publishers build bigger Arab readerships and generate more revenue from advertisers. The Internet newspaper market could therefore capture Arab users residing outside the Arab World who may enjoy a better standard of living than most of those inside the region, as well as advertisers who might want to reach that particular readership.

A third reason for getting on the Internet is to save money. Publishing a newspaper on the World Wide Web is not very expensive in comparison with producing a hard copy publication. For significantly less money, a publisher can maintain a daily content that is easy to access and easy to update. No distribution costs are involved.

Although Internet access is increasing in many countries, it is still limited by poor infrastructure. For most people in the Arab region, the cost has remained prohibitive, but for those who can afford it, the Internet serves as a medium for otherwise unavailable regional and international news. Arab newspapers, however, are advised to invest in marketing research to get to know their markets. This will enable them successfully to deliver their newspaper content to millions of readers amongst hundreds of free, competing, and attractive news sites not restricted by Arab censors.

In spite of the fact that the Arab newspapers started to appear in some parts of the Arab world since the second half of the 19th century, their real presence in the life of Arab societies remained feeble due to educational, economic and socio-cultural factors. Thus any evaluation of the Arab press must begin by acknowledging its historical context and the political phases that have shaped the entire region in the last century. On the surface, the Arab press industry appears to have changed significantly in the last decade. With the technological advancements, publishers had recognized the extent of these changes and were beginning to adjust. As demonstrated, this transformation was evident in newspapers' content, their production methods, economic strategies, and their relationship with governments. The most significant trend during the last decade was the movement toward new technology in the publishing and the distributing of the publications. In coming to terms with the Internet, Arab newspapers were quick to adapt. In spite of the deep and in some cases incurable obstacles facing Internet spread in the region and although online publishers face an uncertain future there are more than 65 dailies, 40 weeklies and nearly 20 monthly publications from all parts of the Arab World on the Internet today.

Chapter Three: Research Methodology

3.1 Introduction

Computer technology is playing an increasingly prominent role in journalism. The past decade has witnessed the growing use of modern communications technologies within the newsroom in relation to news-gathering and presentation. Through this new technology, efficiency, speed, and production volume have been increased dramatically. Many newspaper publishers, including those from the Arab World, have taken the initiative and started experimenting with the Internet as a communication channel through which to reach new as well as existing markets. This development represents a challenge for old concepts of communication, with theories of communication needing to be redefined.

3.2 Reasons for Research

The newspaper industry faces serious challenges, occasioned by circulation decline, decreasing advertising revenues, and difficulties in attracting younger readers. A further threat is posed to the traditional newspaper publishing industry by the emergence of new communications technologies that provide new forms of electronic news delivery. Although nearly 45% of U.S. media workers (publishers, editors and advertising directors) expressed worries about the long-term impact of the Internet (AOR & FACS, 1996), this challenge is often met with no clear strategies from newspapers. Rogers (1996) maintained that many publications have been rapidly

setting up websites without considering the implications or consequences for their businesses. Such developments often represent little more than a 'reflex action' (cited by Lindoo, 1998). In the academy, where all those who are concerned about mass communication issues often turn to learned journals for answers (Perry, 1996), "few scholarly pieces have been written about the newspaper industry and the problems they currently face" (Lindoo, 1998 p.19).

The growth of the Internet and related communications technologies therefore poses a challenge to communications theorists as well as to journalism practice. There remains much work to be done to understand online journalism and to explore its potential for news publishing. As the Internet becomes more widely and firmly established among the general population, it becomes increasingly apparent that no dedicated conceptual models exist that can effectively explain its significance as an information system.

Although a steadily growing body of work has emerged in the 1990s on issues relating to e-newspapers in many parts of the world, particularly in the United States, very little is known about the applications, potential and possible challenges that may face newspapers that go online in the Arab World. There has also been a general dearth of work that has attempted to develop theoretical models to analyse the business and production of online newspapers or the way they are used by readers. The existing literature "offers a number of often contradictory views on interactivity and online journalism" (Massey & Levy, 1999 p139). Part of the problem may be due to the fact that the field of Internet applications and user behaviour is changing almost

daily. The Internet is a relatively new communication medium that has very dynamic nature. Research in this area has so far been exploratory.

Exploratory research is usually conducted because a research problem has not yet been clearly defined, or "..when not much is known about the situation at hand... [And] to better comprehend the nature of the problem, since very few studies might have been conducted in that area" (Sekaran, 2000 p.123). This type of study is important to gain familiarity with a new phenomenon and to understand what is occurring. This chapter presents the research rationale and key questions addressed this research. It then presents a description of the design of the study and the multi–method approach used in investigating the status of Arab online newspapers.

An important reason for choosing Arab online dailies in this study is due to the fact that in the Arab World the presence of the Internet has expanded the daily news menus of ordinary newspaper readers who can now read (verity of) newspapers from other Arab countries on the same day as the news breaks. Readers in the region now have direct access to their preferred newspaper(s), unaffected and unmediated by governmental censors. News reception is no longer delayed ineffective delivery and distribution networks. Over many years, prior to the Internet, censorship restrictions linked to ideological conflicts limited the flow of news. Thus, Arab publishers have looked to the Internet as a ubiquitous and unfettered way to offer their publications to the Arab and international community. Yet, there has not been any research (at the time of writing) that has analysed the production or use of electronic Arab newspapers. The researcher noted the potential significance of such a study while conducting interviews with a number of Arab journalists who emphasised the

importance of research that could provide systematic data on the use of the Internet by Arab newspapers and their readers.

3.3 Research Problem

By the end of the 20th century, hundreds of daily e-newspapers could be reached through the Internet by millions of readers world-wide. The Internet now offers regular updated news around the clock. With the Internet, the old business culture of newspaper publishing is no longer tenable. Thus, the Arab newspaper industry found itself facing a new kind of business in content, format and delivery to markets, in which skills were needed in new technological methods and new information handling strategies. Mechanisms for presenting the news have become more sophisticated and different consumption options are provided to news consumers, meaning that the traditional styles of newspaper reading are changing as well.

Despite the growing number of academic studies about the daily e-newspapers, the limited Arabic literature on this subject derives mainly from newspaper and magazine articles that lack the in-depth analysis associated with academic investigations. The current study is an attempt to examine a subject so far largely neglected by Arab scholars in an effort to answer some basic questions about e-newspapers through an exploratory study of Arab e-newspapers, their readers and publishers. This study is the first of its kind to examine Arab e-newspapers including publishers and readers of these publications worldwide.

The aims of this study are to provide a better understanding of e-newspaper publishing in the Arab World, and more generally to contribute to the research literature on electronic news publishing. In a more practical sense it is hoped that the

findings from this research will provide the e-newspaper industry with insights into future strategies and uncover certain technical issues that may obstruct Arab audiences from reading online newspapers.

3.4 Research Objectives

The general aim of study is to examine Arab e-newspapers' presence, readership and style in order to draw conclusions to help to assess costs, revenues, and profit strategies for the Arab newspaper industry. Although this study focuses on Arab e-newspapers, many of the issues considered by the research can be extrapolated to online newspapers around the world as they share the same evolution and use the same medium to reach their audiences.

This study examines publishers and readers' attitudes to Arab electronic dailies available on the WWW as well as analysing specific online newspapers for their contents and format characteristics. The term Arab users (readers) here refers to members of the Arab community who use the Internet and to those who have the ability to read Arabic newspapers, regardless of their backgrounds.

The study will explore the nature of this new news delivery forum, the behaviour of its users (readers) and publishers' strategies in order to explore what are the correlates of satisfaction and dissatisfaction with online newspapers presented by Arab publishers. The study also highlights the advantages and disadvantages of the Internet in general and the use of the World Wide Web - the most widely used application of the Internet - as a new form of news delivery. The research will also move towards the development of a conceptual framework within which the analysis of

e-newspapers can proceed. This study will also help to bridge the gap in the Arabic literature with regards to new media usage and future plans for e-newspaper publishing.

To achieve these goals, specific questions have been formulated to cover relevant issues about Arab dailies on the Internet. Through the analysis of responses from a sample of 800 Arab readers, 27 Arab publishers, and by examining editions of all the 48 online Arab newspaper sites, it is hoped to produce a valuable, descriptive and analytical account of these Internet newspapers and their readers.

3.5 Principal Research Questions

The following questions form the core of each stage of the study.

3.5.1 E-Newspapers and Other Web-based Services Questions

1. How many Arab daily newspapers exist on the Net? Where are they issued from?
2. What are the technical formats of these papers? How can the user read them?
3. Is there any charge for the press services? How is it collected?
4. Do they have commercial advertisements? How are they presented?
5. What other news services are available to Arab users of the Internet?

3.5.2 Publishers' Questions

6. What is the impact of electronic versions of print newspapers?
7. What content do they put in their e-newspaper?
8. What services do they offer to visitors?
9. Are there printed versions of these electronic publications?

3.5.3 Readers' General Internet Use

10. What are the characteristics of readers of online newspapers?
11. What general use do e-newspaper readers make of the Internet?
12. What are the attitudes of Arab users towards the Internet as a source of news and information?

3.5.4 Arab Online Newspapers and their Readers

13. What is the frequency of reading e-newspapers and what are the most readable newspapers?
14. What are the difficulties readers experience in reading e-newspapers?
15. To what extent are the readers satisfied with e-newspapers?

3.6 Research Design

The 'essence of news publications' on the Net according to Deuze (1998) is their integrated character. The convergence of sound, image and text in online journalism is

the combination of all 'journalistic genres' and therefore requires an integrated research approach. As online journalism is still very young, research into the profession should be guided by the same notion that makes the 'Net' a mass medium: its global nature. Given the global nature of the Internet and the multi-media formats adopted by many electronic news services, this research adopted a multi-method approach.

The research comprised three main parts: (1) an analysis of the websites of all the 48 Arab e-newspapers available at the time of the study as well as collecting data about all major web-based news resources targeted Arab audiences; (2) a survey of publishers of these newspapers; and (3) a survey of readers of Arab e-newspapers. Both surveys were conducted online using questionnaires to which respondents could reply electronically. Content analysis of websites was used to examine a number of general characteristics of e-newspapers published in the Arab World.

Although these three parts represented distinct and separate stages to the overall research programme, there was a certain amount of cross-referencing between these different elements. Thus, some reader survey questions asked about aspects of e-newspapers that were also examined in the content analysis. Questions were asked of publishers about their markets that could also be linked to data obtained from the readers' survey.

Further information was obtained for this study from visits to two Arab (international) daily newspapers in London and to two (national) Saudi newspapers in Riyadh. All these publications have an online presence. During these visits, the researcher observed the daily work of e-newspaper production and completed in-depth interviews with key personnel.

3.7 Readers' survey

Why a Web-based survey?

Unlike readers of print media, readers of e-newspapers on the Internet remain undefined especially in the Arab World. This means that reaching such markets through conventional methods of audience research may prove ineffective. One of the first challenges for this research was to design a research methodology and data collection procedures through which to reach the consumers of Arab e-newspapers. To undertake reader research of relevance to the particular news medium under consideration, it would also be necessary to reach respondents with the linguistic skills and computer literacy necessary to utilise electronic news delivery by Arab publications.

Smith (1997) noted that at any given moment there are thousands of surveys and polls being conducted on the Web, yet 'surprisingly' little scholarly research is reported using this data gathering technique. The Internet has been increasingly endorsed as offering exciting possibilities as a research tool, especially in the sphere of customer satisfaction measurement (Slevin, 1997). One advantage of Internet surveys over traditional survey methods is that "customers can complete questionnaires whenever they choose from wherever they choose. Keyboard, mouse, and computer screen make answering surveys easier than handwriting responses, especially open-ended ones, and faster than being read a questionnaire over the phone" (p.1).

As a manager of field quality engineering at Advanced Micro Devices (AMD) Slevin pointed out that Web surveys have several advantages such as, radio buttons, check

boxes, and data entry fields, which are possible in HTML but not in ASCII text the standard coding for e-mail. Furthermore, Web surveys keep respondents from selecting more than one choice, where only one is meaningful. These factors can make completing the survey faster and more interesting, and result in higher quality data. These advantages have drawn increased attention to the use of the Internet as a research tool from among academic and commercial researchers (Sheehan and Hoy, 1999).

The present study represents a further continuation of this developing trend. Given the widely dispersed market for e-newspapers, it was reasoned that an Internet survey might prove the most effective way of accessing relevant respondents. Moreover, since the survey was concerned with investigating issues connected with news provision on the Internet, it made sense to utilise that same communications medium to access consumers of that content.

This method provided a form of responding that targeted participants were expected to find easy to handle and offered them anonymity. So far, Web page-based surveys have proven effective in collecting broad-based data from individuals who are geographically widely dispersed and who may self-select to respond to surveys (Sheehan and Hoy, 1999). A number of studies have now emerged that testify to the benefits of Web-based surveys (Zikmund, 1991; Pitkow & Recker, 1994; Kehoe & Pitkow, 1996; McCullough, 1998; Schillewaert, Langerak and Duhamel, 1998). The main benefits cited by these studies are listed below.

Design Flexibility: A Web page-based survey can take advantage of the graphic power available through programming languages such as HTML and JavaScript to create an attractive, interesting, and compelling survey.

Reach: Web page-based polls have been noted for their ability to generate a high number of responses

Time: A high volume of responses can be collected very quickly. This time factor alone suggests huge benefits over traditional surveying techniques.

Cost: The costs of both data collection and analysis can be minimized by the use of Web-based surveys.

Anonymity: Web page-based surveys allow for anonymity in responses. Previous research has indicated that anonymity may affect response rates positively, as respondents may be more willing to respond without fear that their answers may be identifiable to them.

Minimized interviewer error: Since respondents type in their answers directly to a form on a Web page, there is no need for an interviewer to have contact with the respondents. Therefore, survey responses will be free from errors caused by interviewers, resulting in cleaner data.

Minimized interviewer bias: The lack of an interviewer eliminates any potential for bias that the interviewer brings to the survey. An interviewer's mood, prejudices or opinions will not be reflected in the data.

In addition to these advantages, however, Internet survey users have noted that Web-based surveys have limitations that researchers must recognize when they are considering this method. Web page-based surveys must attract respondents to the

Web page with messages posted in news groups, links on other Web pages, banner ads, and other types of methods.

3.7.1 Main (Readers') Survey

A quantitative study was carried out on Arab users of e-newspapers published in the Arab World. The overall aim of the survey was to obtain a wider picture about readers of the Arab e-newspapers on the Internet. Although there is no reliable number or mechanism to know exactly the total number of all Arab users (inside and outside the Arab World) as is the case in the total number of users of the Internet world-wide, some speculative estimates, at the time of the fieldwork, gave the total number of Internet subscribers in the Arab World as being between 73,830 - 236,000 (Husaini, 1998) However given the nature of administration of this survey, via the Internet, and the dearth of established, normative statistics on distribution or readership levels of electronic Arab newspapers, it was not possible to construct a sampling frame to determine sample structure.

In their 10th survey of December 1998 which was endorsed by the World Wide Web Consortium (W3C), the Graphic, Visualization, & Usability Centre stated that since there was no central registry of all Internet users, completing a census, where an attempt is made to contact every user of the Internet, was neither practical nor feasible financially. However, to simplify the problem, the GVU noted that most surveys of the Internet focus on a particular region of users (GVU, 1998).

This was, therefore, an exploratory survey placed at a website with an open invitation to any readers of electronic Arab newspapers to respond. Abela (1997) researched Internet users in Malta and argued that any instrument that can be posted in the mail can also be transmitted across the Internet and still have a degree of interactivity, which mail surveys do not. For example, it is much easier for a respondent to send feedback to an electronic questionnaire via email than for a mail respondent using a standard postal questionnaire.

A critical advantage over other interactive modes of research is that response can occur at the participant's leisure (Abela ,1997). The main disadvantage of using the Internet to conduct research is that not everybody is connected to the Internet. This is not regarded as such a serious problem for the current research because it is directly concerned with e-newspaper readership and publishing on Internet use.

Some survey questions were technically designed to be in radio buttons that allowed only one choice to be made if only one answer was required, such as the question of gender. Some were designed to offer check boxes when more than one response choice was possible.

Prior to the distribution stage, the questionnaire was pilot tested to measure the loading time and duration of completion. This was done to check that all questions and instructions were clear and to ascertain that different makes of computers and WWW browsers handled the website in the same way. This was important to check, since different browsers might show the page in different ways.

Forty individuals took part in the pilot study. These comprised 20 students (15 male and 5 female), five male journalists and 15 male Arab readers of e-newspapers. Completion time for the survey from initial loading was determined to take an average of 3-8 minutes. This depended on the type of computer, Internet connection, and the time of accessing. Analysis of the pilot study showed that technical improvements were needed and some questions should be placed in a different format.

3.7.1.1 Questionnaire

The questionnaire (see Appendix B) was produced in English and Arabic versions. The questionnaire comprised four principal sections:

Demographic: The first section obtained personal information from respondents concerning their age, gender, occupation, nationality, country of residence and education. This background information would be used to analyse patterns of use and to differentiate among readers of electronic Arab newspapers demographically.

Connectivity: These questions dealt with the type of Internet connection participants had, what service provider they were connected to, what type of computer they had, and various questions about how long they had been using the Internet, with response options comprising: "less than 6 months," "more than 6 months - less than one year," "at least a year but less than two years," "at least two years but less than three years," at least three years but less than four years," and "four years or more." Information was also obtained about the kinds of software used.

One question asked about the operating system used by respondents (e.g., Win.3x or Win 95 [English or Arabic versions], WinNT [English or Arabic versions], Macintosh [English or Arabic versions], other). A further question examined the type of browser used (e.g., Netscape [English], Netscape with SINDBAD [Arabic], Tango Alis [Arabic], Internet Explorer [English or Arabic versions]. Respondents also provided information about where they accessed the Internet (at work, school/university, at home, Internet café or similar outlet).

Volume of use of the Internet was also investigated in terms of frequency of usage ("everyday," "4-6 days a week," "2-3 days a week," "about once a week," "less often") and in terms of the length of an average Internet session ("less than 5 minutes," "6-10 minutes," "11-30 minutes," 31-60 minutes," "1-2 hours," "2-5 hours,", "5+ hours").

***Attitude*:** The third section of the questionnaire explored users' attitudes towards the medium. They were asked to rate the personal importance of the Internet, their concern about the Internet, how much Internet information sources meant and mattered to them, and the significance of Internet information sources in their lives. Each evaluation was made along a unipolar, seven-point rating scale (1-7).

Readership: The fourth section of the questionnaire comprised a series of 15 questions that examined readership of and opinions about Arab newspapers. Respondents were asked to name the printed (hard copy) Arab newspaper, which electronic Arab newspapers they read at all, and which electronic Arab newspaper they read most often. They were asked to estimate how often they read Internet

newspapers ("every day," "most days of the week," once or twice a week," "at the weekends only," "no regular time").

Opinions about electronic Arab newspapers divided into items about general satisfaction with these services and self-reported likes and dislikes concerning these publications. More specific ratings were then obtained about the quality of navigational systems, downloading of content and updating of news in relation to electronic Arab newspapers. In each case, e-newspapers were rated on a five-point scale ("excellent," "good," "fair," "poor," and "very poor"). Respondents were asked to indicate what was the most important thing, in their personal opinion, about reading the particular electronic Arab newspapers they logged into. Six specific responses options were provided here, together with a catch-all "other" option. The pre-determined options were: "it is free," "always available when I want to read it," "I can't get its printed copy where I live," "Its printed copy is not permitted in my country," "I prefer to read online newspapers." On the other side of the coin, respondents were asked to indicate any common problems they had confronted when reading electronic Arab newspapers. Respondents were invited to provide their own responses to this question and these were subsequently content analysed and categorised.

One further indicator of the importance of Internet newspapers to their users is whether they are willing to pay from the privilege of accessing such publications. Respondents were therefore asked, "Would you be willing to pay a fee to cover the cost of reading your favourite online newspaper?" The basic options were "yes" or "no". However, respondents were asked to qualify further their choice of the "no"

option. In some cases, respondents might not be prepared to pay for reception of e-newspaper content when already paying for an Internet connection. There might also be a possibility that respondents might believe that such newspapers should be free or that the news coverage supplied can be obtained freely elsewhere. Some respondents might simply have economic reasons for any lack of enthusiasm for paying for e-newspaper access. A further question was therefore also included on how much respondents already spend on Internet usage. The significance of e-newspapers might also depend upon the principal reasons for using the Internet at all. Thus, respondents were asked whether they used the Internet for work, pleasure, research, education or news. Finally, a free space was offered to respondents for any open-ended comments they might wish to add.

3.7.1.2 Designing the Online Form

The online forms were written in HTML language free of images with very limited tables. This technically means easy access and fast downloading for visitors regardless of different browsers' capabilities or operating systems type they are using. After filling out the survey form and returning it by hitting the submit button a short 'thank you' message page automatically loaded. The method utilized to collect the completed online forms was a Cgi-Bin based mail protocol that forwarded the survey results straight to the researcher's e-mail inbox.

As some researchers warn that users of Web-based surveys should consider that not all Internet users use the same browsers, and different browsers may not present the

text on Web pages in the same manner " (Sheehan & Hoy 1999). The forms were tested by using the following Internet browsers:

- Netscape navigators version 2.2, Gold and Communicator 4.1
- Sindbad-Communicator version 4(Arabic enabled browser).
- Tango Alis Arabic version 2 (Web browser supports Arabic fonts)
- Internet Explorer versions 3.2, 4.0 Arabic, 4. English.

All tests were done with the following operating systems:

- Windows 3.11 and Windows 95 Arabic and English versions.
- Macintosh Arabic and English.

In all these tests, 14 & 15-inch monitors were used to make sure that the question pages were in the right order and the questions were viewable in both 1024X768 and 800X600 screen resolution. The speed of possible PCs used by visitors was also considered by using older processors that run most of the University of Sheffield's network in 386 and 486 models, as well as Pentium computers. These tests worked successfully and helped in solving some minor problems in the HTML programming of the forms which prevented difficulties during the process of downloading, filling, and posting the completed forms by visitors to the researcher's mailbox.

The survey questionnaire was coded into HTML format using Homsite3 and Webford 2.01 and uploaded at first to Geocities.Com free servers and then to the research own domain name site (www.Fayez.net/research).

3.7.1.3 *Attracting Readers to the Survey Website*

One point that benefited this study was that Arab readers are not heavily surveyed and, therefore, respondent resistance was very low. However in order to attract visitors to the questionnaire, a number of steps were followed.

First, a comprehensive media site was designed by the researcher and posted to the Net containing links to almost all Arab media and links to major Arab media directories. This site was linked to the survey site through an animated banner. This website, called Arab Media Guide, attracted more than 100,000 hits over a 14 month period (August 1998– September 1999) from nearly 80 countries (see Appendix C). This site was also registered with most major search engines. This helped in attracting more visitors who were used to searching through search engines for Arab media and related keywords. Through this Guide the reader could click the survey icon and fill out the form.

Second, some popular Arab media directories showed animated banner-ads with an appeal to participate in the survey. The animated banners were designed by using Arabic text and Arabic art effects. Two banners were designed for the readers' survey and one for the publishers' survey. These banners were placed on specific Arab media pages on high exposure sites and linked to the survey sites. By clicking a banner the user could access the survey page.

Third, announcement messages were posted on Arab-related Internet newsgroups (e.g., soc.culture.arab, soc.culture.egypt, soc.culture.iraq…., etc.). In addition, several

Arab and Islamic Chat Rooms were informed about the study and several e-mail databases with Arab e-mail lists were utilised in order to capture users from different locations and background.

Fourth, a short message expressed the aims of the study and gave a URL that was used as an e-mail signature by 25 friends of the author in the UK, USA, Qatar, Egypt and Saudi Arabia who offered assistance in circulating the survey address (URL) to a wider readership.

Fifth, e-mail messages were used to contact operators of some Arab popular sites who agreed to take part in the study and were forwarded by them to all their subscribers.

3.8 Publishers' and Editors' Survey

Based on Mensing (1998) model an online questionnaire was designed both in Arabic and English to target publishers and editors of Arab online newspapers (see Appendix D). While it is important to know the market for e-newspapers through systematic reader surveys, the views of media professionals are also important. Newspaper owners and editors are the driving forces behind the development of e-newspapers. By the mid-1990s, surveys of print media editors in the United States were showing that the great majority expected to have electronic versions of their newspapers or magazines in place by the turn of the century (e.g., Ross and Middleberg, 1997).

Many surveys of editors and journalists revealed that while there was widespread recognition of the need to go online, there was concern about the implications of doing so both for newspaper publishing as a business and journalism as a profession (Alexander, 1997; Ruggiero, 1998; Brill, 1999; Schultz & Voakes, 1999). Some

commentators, however, have offered a word of comfort by arguing that even though online journalism is destined to become a widespread phenomenon, the publishing of news print will not become totally a thing of the past for some time to come (Lawrence, 1993). When journalism experts were invited to engage in futurology, much emphasis was still placed by professionals on the continued importance of the traditional skills of journalism as well as the need for computer literacy (Massey, 1996).

For the editors' and publishers' survey, the author consulted a number of Internet experts before setting out on the survey instrument. From the consultations it was obvious that in order to get usable responses from Arab online newspaper owners and editors, the questions should be as concise and as brief as possible. Once again, the questionnaire form was designed to provide a simple interface for respondents. This helped in reducing downloading and navigation time so that the respondent could complete the form easily.

The main questions considered here were the length of time for which their publication had been online, the services it offered, staffing requirements, impact (on print edition), content size, and future fees strategies of online newspapers. In order to make the analysis and comparisons between variables as uniform as possible, the population was carefully defined: the online newspaper had to be updated daily, produced by an Arab publisher, and appears in Arabic or English.

3.8.1 Implementation

The survey was put online and several e-mails were sent to editors and publishers according to e-mail addresses they put on their sites. In some cases where there was no e-mail address found for publisher, the emails were sent to the maintainer (webmaster) of the site. A list of all Arab online newspapers meeting the defined criteria was compiled by cross-referencing these comprehensive lists of online newspapers:

- Sahafa (*press*) Directory [http://www.sahafa.com],
- Fares net Arab media site. [http://www.fares.net/news]
- 4Arabs search engine list. [http://www.4arabs.com/links/Media/]
- Arab Media Guide (the author's online directory)[http://fayez.net/media/]
- Saud Alhajiri's website the first popular Arab media online directory [http://www.liii.com/~hajeri/newsstand/] (offline)

The final list of selected sites included 48 online newspapers.

The survey instrument was based on the key research questions of the study and on topics discussed with some Arab journalists in London and Riyadh. Some themes in this survey were first posted to CIOS.ORG (Communication Institute for Online Scholarship) list members, publisher of *The Electronic Journal of Communication* and gained much positive feedback and comments from academicians and professionals in the field of online newspaper publishing and were then reviewed and approved by the research supervisor.

At first, each qualified site was visited to record the name, Web address (URL) and electronic mail addresses of the editors and publishers. If the site failed to provide either a usable name or email address, an electronic mail address was sent to the Webmaster of the site asking for the name and email address of the appropriate person. A personalized electronic mail message, describing the survey and inviting participation, was sent to all qualified Arab newspapers' editors.

After two months, each contact who did not respond to the first invitation was contacted again via email, with an invitation to complete the survey online through the Web-based form. Although the URL of the one-page survey was sent to all the 48 Arab newspaper editors in early December 1998 and the stated cut-off date was April 1999, completed survey forms were accepted until the end of August 1999. Surveys from 27 newspapers were returned, yielding a response rate of 56 per cent.

3.9 Websites (Content) Analysis

In addition to obtaining the opinions of producers and users about online news services, it is important with a new phenomenon such as e-newspapers to examine them more directly. The personal views of readers and editors are significant, but are subjective. A more objective assessment of the subject matter under investigation might reveal evidence about the character of Internet news sites that could then be compared with the comments of readers and the intentions of editors. The current research therefore included an analysis of news websites using a content analysis approach.

Content analysis has been a staple of media research for many years. Indeed, since 1965, content analysis has been used as the primary methodology in roughly one-fifth of the articles published in mainstream media research journals (Cooper, Potter, & Dupagne, 1994; Potter, Cooper & Dupagne, 1993). Content analysis has frequently been used to assess media news – covering such topics as crime (Barlow, Barlow & Chiricos, 1995); foreign policy (Wells & King, 1994); military conflict (Fico, Ku & Soffin, 1994); biotechnology (Priest & Talbert, 1994); and AIDS (Gozenbach & Stephenson, 1994). Content analysis has also played an important role in research programmes that have explored the relationships between news content and public opinion and behaviour (Noelle-Neumann, 1993; Protess & McCombs, 1992; Viswanath & Finnegan, 1995).

Berelson (1952) defined content analysis as " a research technique for the objective, systematic, and quantitative description of the manifest or surface content of communication"(p.18). Kerlinger (1973) emphasised the need to examine the relationship of the manifest content to underlying and often abstract meanings. Krippendorff (1980) described content analysis as a research technique for making replicable and valid inferences from data to their context (see also Gunter, 2000 pp. 55-92). Stempel (1981) offered a broader view of content analysis as "a formal system for doing something that we all do informally rather frequently, drawing conclusions from observations of content (p.119).

Some writers have argued that traditional content may be unsuited for assessing the role of news in the era of interactive media. News content is traditionally produced in discrete units called "stories" that are packaged into large units called "newscasts" or

"newspapers". News consumers could then selectively attend to these news 'units'. They could not, however, readily override the constraints of the isolated story as the basic news unit. They could not readily find or create links across stories or locate additional information related to the story to which they were attending.

Another important assumption of early content analysis research was that the news audience was a mass audience that shared a relatively common culture. Content analysts assumed that the symbolic environment was relatively homogeneous and that the social context of news production and consumption was relatively unimportant (Evans, 1998). The methods of content analysis have changed little since the 1950s. Traditional content analysis is ill-equipped to document and explain news content in an interactive environment. Online news users may select from dozens of news sources, can explore links across news stories, and access text and video databases. In this context, it may make little sense to conceptualise news stories as the basic content unit. When each consumer can create his or her own path through online news resources, there may be as many news "stories" as there are consumers (Evans, 1998). Despite the above reservations and caveats, an analysis of the format of news websites was undertaken. The concern here was centred on the ways in which Arab e-newspapers present information to their readers rather than on the types of news that were featured.

Based on a technique used by Poynter Institute team in their study; ***Newspaper Publishing and the World Wide Web*** (www.poynter.org) an independent list of Arab online daily newspaper websites was compiled over a period of three months by cross-indexing various online media indexes provided by the same Arab news sites

referred to in relation to the publishers' and editors' survey. All newspaper websites identified by one or more of these resources were visited in order to verify the final list (see Appendix E and F). Links to publications other than Arab dailies or produced by non-Arab publishers were disqualified. In some cases, the referring URL was inaccurate or modified and various investigative techniques were used to identify the correct site location, including the use of search engines and contacting the publication by fax or telephone. Many websites that did not meet study criteria were disqualified. This process yielded the same a final list of 48 online daily newspapers offering online editions. The 48 papers were content analysed to identify prominent thematic and technical characteristic of electronic Arab newspapers. The units of analysis were all Arab Internet newspapers.

3.10 Summary

This study attempts at first to gain a solid understanding of the potential of the Internet and its communicative nature as a mass medium. In choosing the subject for this dissertation, the general aim is to draw a wider picture and to explore the potentials and the challenges before Arab e-newspapers to both academic world and newspaper industry. Specifically, this study seeks empirical evidence about levels of e- newspapers use and satisfaction amongst Arab readers. Also the formats, services, staffing and the amount of content published on Arab e- newspapers are examined via websites content analysis and questionnaire survey responses and interviews with Arab publishers and editors. Online survey forms that targeted publishers and readers were placed solely on the Internet. By employing this method, especially for readers, it was possible to obtain directly responses from Arab users with Internet access and this assured that the study investigated specifically those individuals who could read e-newspapers.

Chapter FOUR: Conceptual Issues and Literature Review

4.1 Introduction

The widespread penetration of the Internet and the establishment of the World Wide Web and digital forms of communications, facilitated through a merger of computers and telecommunications networks, has been envisaged as the sixth major communications revolution (Fang, 1997). The 'information superhighway' that has been constructed out of the convergence of text- and image-based systems of electronic communication represents a key milestone in the development of communications – an important aspect of history in the making.

Fang divided the history of communication into six revolutions. The first revolution began with the invention of writing in Greece around the eighth century B.C. The second revolution was the invention of the printing press by Gutenberg in Europe in the second half of the fifteenth century. The third revolution began (in Western Europe and the eastern United States in the middle of the 19th century) with the convergence of advances in paper production and printing press technology, enabling, for the first time, the mass production and circulation of communications, in the form of newspapers and magazines. During the same period, an entertainment revolution emerged as the fourth phase towards the end of the nineteenth century, with the emergence of the affordable camera and motion photography. The fifth revolution was the creation of what Fang called the 'Communication Toolshed Home', which evolved during the middle of the twentieth century, transforming the home into the

central location for receiving information and entertainment, courtesy of the telephone, broadcasting, sound and video recording technology, improvements in print technologies, and cheap, universal mail services.

4.2 Theory of Communications

With the establishment of mass communications, in the form of print media, sound broadcasting, and audio-visual broadcasting, film and video recording, scholars turned their attention to explaining the social, psychological and political significance of these technologies and the messages they conveyed. Accordingly, " media research has evolved over time, in part reflecting paradigm shifts and the evolution of analytical models in the wider social sciences" (Gunter, 2000 p.9) Reviewers noted a number of distinct milestones in the development of mass communications theory (De Fleur, 1970; De Fleur and Ball-Rokeach, 1982). Theories of mass communication focused variously on media production, the way the media represented various aspects of society, the structure and organisation of the media, and media effects (McQuail, 1987). Much theoretical development took place during the era of Fang's (1997) fifth communications revolution.

Initial mass communications theory development focused on the role of the mass media as propaganda machinery, especially, though not exclusively, during wartime. Early film-makers and the printing presses were co-opted as arms of the dominant political ethos within countries at times of internal or international conflict, during the early part of the 20th century (Gunter, 2000). Later on in the century, radio and television came to be used in similar roles, as their penetration of societies grew. An

early assumption was that mass communications could exert direct effects upon the populace at whom they were aimed. The impact of such media messages was powerful enough to shape public opinion and influence patterns of behaviour – especially behaviour linked to the political process, such as voting. During the time of the First World War, there was a general belief that mass communications could act as a magic bullet. Propaganda messages were fired at mass audiences and readerships and exerted a direct influence on the public's thought processes (see De Fleur and Ball-Rokeach, 1982; Lasswell, 1927). This all-powerful concept of media effects, however, was to be found wanting when put to more serious test in later years, as research methodologies evolved.

Further tests of the media as a key aspect of political propaganda machinery during the Second World War led to a more moderate view of the impact of mass communications (Hovland, Lumsdaine and Sheffield, 1949; Lazarsfeld, Berelson & Gaudet, 1944; Star and Hughes, 1950). A revised notion of media effects dropped the idea that they acted directly upon individuals to change them, and instead hypothesised that the media operated upon their audiences and readers in a less direct fashion. The impact of mass communications was modified by the social context in which media and audiences interfaced, by the functions the media served for their users, and by other influential interpersonal forces. Indeed, in many ways, the media came to be regarded less as forces for change, and more as reinforcers of the status quo (Klapper, 1960).

One important model that emerged in the 1950s, conceived of media influences operating in more than one stage. A two-step flow idea emerged to explain the effects

of mass media in the political context, whereby the media were believed to act initially upon opinion leaders within the community, who then in turn influenced the political thinking of the remainder of their community (Katz and Lazarsfeld, 1955).

The apparently weakened position of mass communications as sources of social and political influence was not universally accepted. A number of prominent writers observed that there were occasions on which the media could be seen to exert direct and quite powerful effects upon the public. On some of these occasions, however, such influences were quite subtle (Lang and Lang, 1959; Blumler, 1964; Halloran, 1965). The 'minimal' effects model therefore came under serious theoretical and, in due course, empirical challenge during the 1960s and 1970s. One commentator observed that fashions in media effects models, and the tendency to veer from maximal to minimal effects orientations, reflected to some extent the stability of society at different times (Carey, 1978).

During the economic depression years of the 1930s which led to international tensions and war, there was a need to understand the role of the increasingly popular mass media in this process. During the period of stability of the 1950s and 1960s, there was less reason to view the media as sources of social upheaval. Changing economic conditions and civil and political discord that characterised the late 1960s and 1970s once again drew attention to the media as arbiters of unrest.

The effects of the media were distinguished, however by the level at which they occurred. Thus, while powerful effects of mass communications were conceived to be possible, they did not occur indiscriminately at any psychological level. The idea that

the media could shape people's behaviour was supported by an accumulating body of evidence concerned in particular with media effects upon antisocial conduct. There remained a dominant school of thought, nevertheless, that media influences upon public opinion and behaviour needed to be understood in the context of mediating factors. Direct effects of media operated at a more superficial, level such as by setting the public agenda or telling people which issues were the most important ones for them to think about (McCombs & Shaw, 1972).

As communications theory continued to evolve in the 1970s and 1980s, there was growing recognition that relationships between mass communications systems and the public are circular. The media can act upon their audiences and audiences can act upon the media they choose to consume. It is no longer informative nor helpful to our understanding of the role and impact of mass communications in society to think about media effects as operating in one direction – whether such effects are deemed to be powerful or minimal.

Regardless of whether media effects are envisaged to occur in the form of agenda-setting, the cultivation of social beliefs, learning of new information and knowledge, attitude change or behaviour modification, they are, for the most part, likely to be moderated by users' reasons for media consumption, the cognitive information processing systems brought to bear on interpreting media content, and social contextual factors that represent other forces of influence on public knowledge, opinion and conduct (Gunter, 2000).

With the development of communications technologies, the public are experiencing new kinds of relationships with information and entertainment media. The Internet revolution has changed the face of media provision and patterns of media consumption. The key aspect of change is increased interactivity between the senders and receivers of messages and the re-definition of media consumers as senders as well as receivers. This means that traditional theories of mass communication, grounded as they have been in the fifth communications revolution, characterised by a communications environment in which there is clear distinction between senders and receivers, may be inappropriate to explain the significance and possible impact of the new electronic communications systems operating through merged broadcasting, telecommunications and computing technologies. Instead, there is a need for an evolution in conceptual modelling in which theory grounded in a one-directional flow of information context embraces thinking that can accommodate bi-directional message flows.

This kind of thinking was reflected in a model put forward by Kincaid (1979). This Convergence Model defined "communication" as a process in which participants create and share information with one another in order to reach a mutual understanding. Information shared by two or more participants in the communication process may lead to collective action, mutual agreements, and mutual understanding and the communication process has no beginning and no end. The convergence model represents human communication as a dynamic, cyclical process over time.

4.3 The Need for Theoretical Evolution

The new interactive communications media require new theoretical conceptualisations. Interactivity between communicators, such as those using the Internet, can occur at a number of levels. In varying instances, communications can be from one to one, from one to many, from many to one, or from many to many. In some situations, therefore, Internet communications can be conceptualised as forms of 'mass' communication. In other instances, however, they represent a form of interpersonal communication.

The need for fresh impetus and direction in communications research has already been noted by eminent scholars who have made a point of following theory developments across the decades. A pessimistic view has surfaced that, of late, there has been a lack of creativity in theory development. In his examination of this issue, DeFleur (1998) argued that research in mass communication in general has stalled. He asked: 'where have all the milestones gone'? DeFleur's main argument was based on his belief that there is a decline of significant research (*milestones*) on the process and effects of mass communication. DeFleur noted that most of today's theories on the process and effects of mass communication appeared between about 1930 and the early eighties, "since that time, few studies have made significant theoretical contribution" (p.85). He asserted that since that 'golden' period of " well-funded, large-scale efforts' conducted with 'important objectives' and based on 'standards of methodology, there has not been a similar level of production of such seminal studies"(p.86).

Even the most 'noteworthy studies' of recent times have focused on restricted topics or have represented efforts to explore issues raised by the earlier milestones. When asked by a publisher to produce an update on his earlier review of milestones in mass communications, DeFleur claimed that he "could not identify even one [new milestone] that fit the same criteria as the earlier investigations" (DeFleur ,1998, p.86). The reasons he outlined for this state of affairs included a change in social sciences research agenda, a lack of a programmatic approach by media scholars, a shift to qualitative and critical modes of analysis, and changes in the work conditions of the academy.

Likewise, Wilbur Schramm, one of the founding fathers of communication theory, wondered rhetorically whether "we have produced only ingredients of communication theory " (as cited by Mancini (1994) p.108). Mancini commented that Schramm's statement implicitly singled out how much his fellow researchers felt a lack of legitimacy. According to Mancini, scholars in this field had been unable to produce an exhaustive, complete theory of communications.

Shoemaker (1994) attributed the problem of mass communication research to the fact that most of the theoretical work is derived from other sciences. Media researchers must find ways to build more theory themselves rather than relying on theories borrowed from other disciplines. The field lacks a systematic theory-building effort and even existing research interest groups often explicitly deal with neither theory nor methodology. Shoemaker discussed this 'crisis of theory' and suggested that "we must be more theoretical in our research and more scholarly in our curricula" (p.389).

Shoemaker analysed the 'communication crisis triangle'-theory, curricula and power- in demonstrating resentment of some media scholars about the status of their field.

4.4 Internet as 'Mass' Medium

In continuing the debate about theoretical approaches to the study of new media, Jankowski and Hanssen (1996) noted that "one of the frequent points of discussion among communication scholars is whether existing theoretical models and notions are adequate to the task of understanding and explaining new communication technology" (p.7,8). They argued that mass communication models and theories - in general - fail to consider the distinct features of many new communication technologies because they are conceptually tied to the dominant characteristics of mass media. Even recent theoretical developments have tended to be 'captive' to the inherent limitations in empirical data based on traditional mass media use studies.

To move forward in this theoretical debate, it is important to identify the stage of development that has been reached with the emerging media technologies (Filder, 1997). Part of the problem is that there must also be some idea of how information technology innovations are likely to be affected by other technological and social developments. To achieve this, according to Filder (1997), "we must first enlarge our perspective and discard most of our commonly held assumptions, particularly about the speed of change" (p.9).

The Internet and related digital technologies are advancing so fast, however, that it is difficult for anyone to predict future developments. Research needs to deal not just with technologies, but also with technological systems, consisting of physical

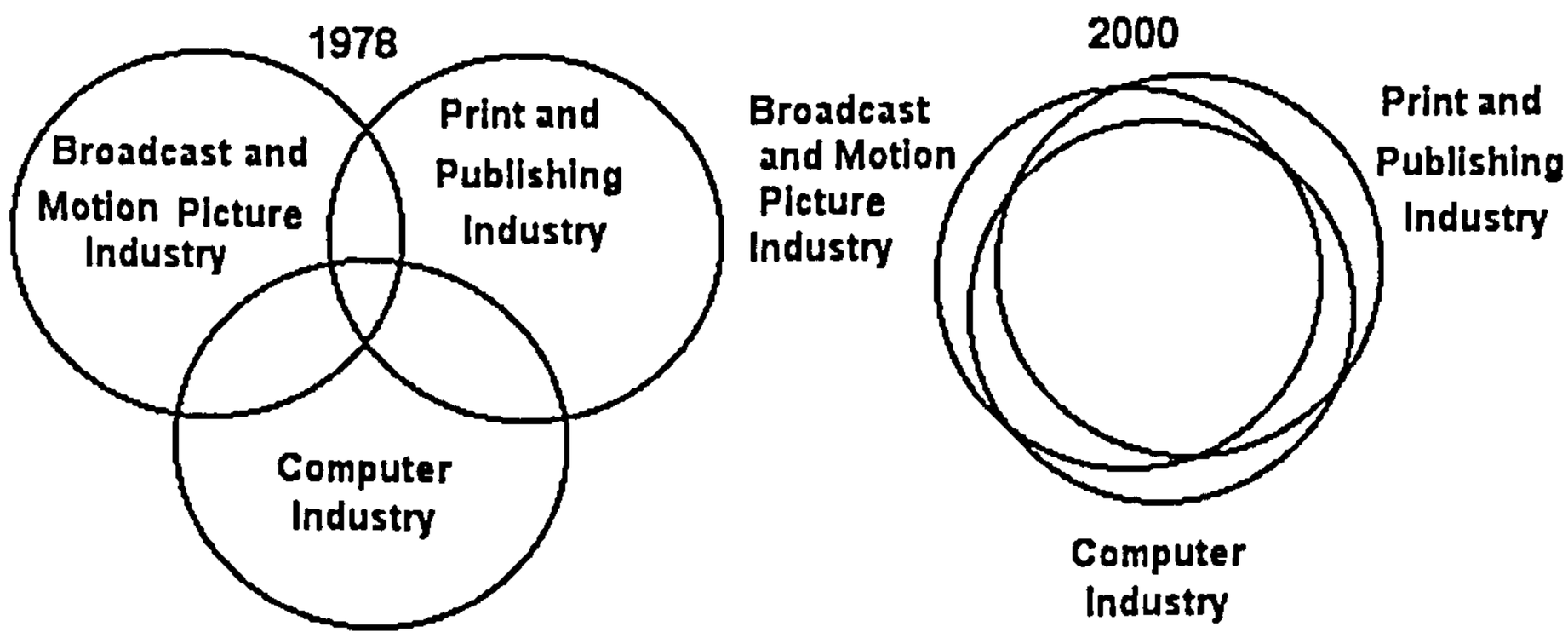
artefacts (e.g., electric power grids, railroad lines, computers and networks), institutions (manufacturers, distributors, regulatory agencies, universities), people (designers, managers, consumers), and culture (Pang, 1998).

It has become trivial to state that the Internet and its applications have had a profound effect on modern society especially in the last few years. Although some describe new media as a big puzzle (Skies, 1997), the Internet has without doubt emerged as an effective form of communication that offers access to and exchange of information, linking communities in ways never before possible. Furthermore, it arguably offers opportunities to contribute to the fulfilment of four basic needs: power, freedom, belonging, and pleasure (Glasser, 1986). Hence, the academic world as well as businesses sector have found themselves facing a new challenge in defining and examining this hybrid communications system. The term 'hybrid' is used here because the information superhighway represents a confluence of merged technologies that had previously been categorised and used as separate communications and information processing systems.

This concept of convergence of formerly disparate communications systems was first popularised by Negroponte (1979) who argued that all communication technology should be treated as a single subject. To explain his concept of convergence, Negroponte drew three developing circles labelled "broadcast and motion picture industry," "computer industry," and "print and publishing industry" as shown in Figure 4 (as cited by Filder,1997).

This schematic presents a clear visual representation of a complex technological marriage, but still does not add significantly to the theoretical problems surrounding the need to understand the implications of this media technologies merger for users. The phenomenal growth of the Internet and related technologies has to some extent perplexed researchers and business. Traditionally, media theorists have dealt mainly with one-way communications systems in which members of the public are passive receivers of information.

Figure 4: The MIT Media Lab's Construct of Convergence



Source: Mediamorphosis - Understanding New Media (1997) P.26.

The interactive nature of the Internet requires a different form of conceptual model to explain its use and its impact. Its ability to bring together elements of the printed page, graphic, photographic, cinematography, including video, film and animation into a dynamic and interactive environment that requires specialised hardware and software to function has put media researchers in a real dilemma. The complexity of the 'Net' stems from the volume and variety of content that it makes available, and the way in which that content can be accessed.

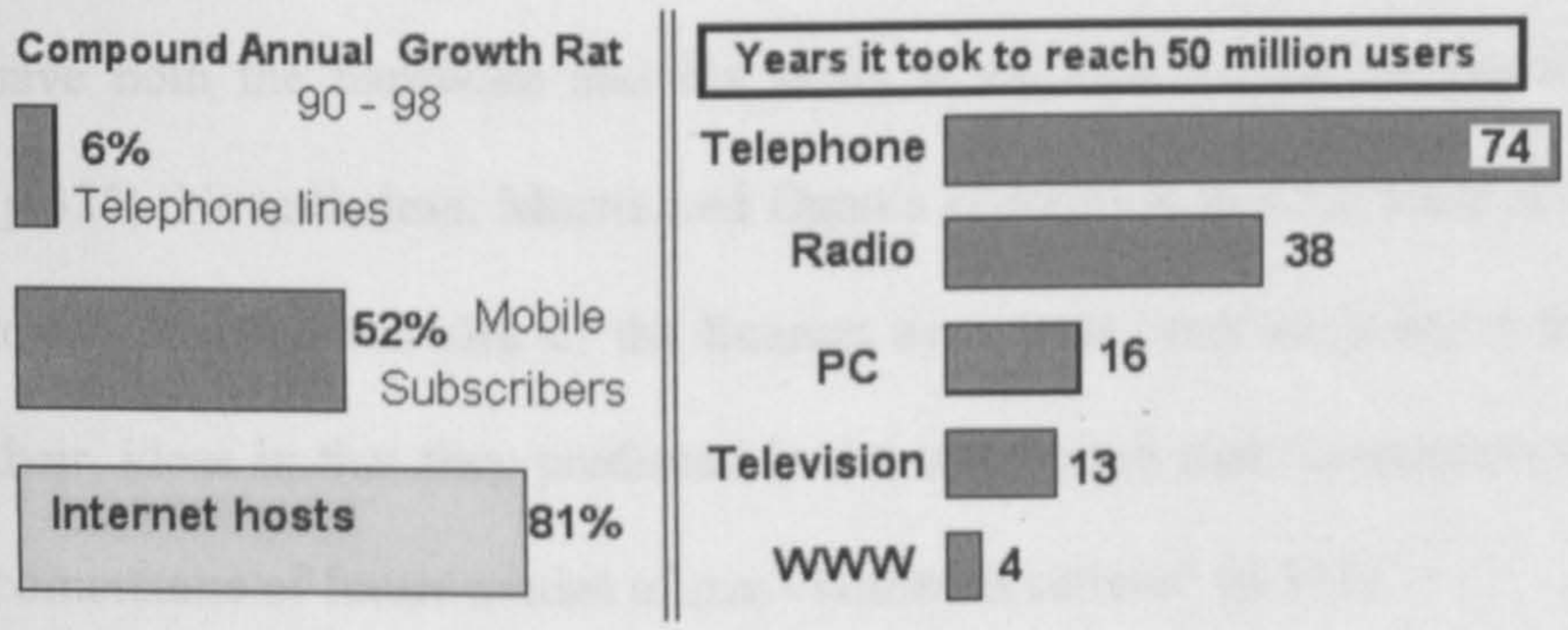
The Internet can provide content in a 'multi-media' format and its software allows consumers more control over reception than is available with traditional mass communications. The Internet in one sense resembles a huge shopping mall that users can peruse at their own pace. They seek out the items they wish to consume and do so at their own convenience rather than that of the producers. The Internet is more than a technology, however. It is a potential cultural force that can be used by consumers not just to obtain information, but also to send it (Stranglove, 1994).

In some ways the growth and increasing use of the Internet in recent years is believed to be the trigger of a true revolution that is the driving force behind the definitive transformation of a post-industrial society into an information society. Whereas it took many years after the invention of their founding technologies, for the conventional mass media to emerge as significant social forces, it has taken only a few years, since 1991 (when the US government opened the Internet to private enterprise), for the Internet to reach between 100-150 (1998 figures) million users all over the world (see Figure 5). This raises an important question about the need for more Internet-communication studies to meet this tremendous technology change.

To many observers, the diverse elements which shape this new structure are changing in their totality the basic notions of many social, economic, political and communication models dominant until now. Media scholars have only recently begun to look at the Internet as a form of "mass" communication and to start to evolve conceptual and theoretical approaches for studying the 'Net' and its audience.

One of the most significant contributions to the search for appropriate theoretical modelling within the context of studying the Internet has been produced by Morris and Ogan (1996). In a paper titled, *'The Internet as Mass Medium',* they examined a number of approaches to the study of communication on the Internet, considered constraints on Internet research, and emphasised the importance of regarding the Internet as mass medium. They also examined possible ways of applying theories of CMC (computer media communications) to the Internet.

Figure 5: Internet Compound Annual Growth Rates, 1990-1998, and Number of Years to Reach 50 Million Users.



Note: The growth rates shown are annualised rates.
Source: ITU World Telecommunication Indicators Database, Network Wizards, Compaq, RIPE.

According to Morris and Ogan, with millions of people communicating on the Internet, its potential as a mass medium should not be ignored. They also warned that if mass communications researchers continue to largely disregard the research potential of the Internet, their 'theories about communication will become less useful'. They argued that more flexibility was needed among 'those researchers who have traditionally organised themselves around a specific communications medium as technology changes and media converges (see also Singer,1998).

The use of traditional theoretical models in Morris and Ogan, view has constrained research on new interactive media, and the most basic assumptions behind researchers' theories of mass media effects have kept them from being able to see the Internet as a new mass medium requiring a new theoretical perspective. They illustrated this point with reference to DeFleur and Ball-Rokeach's attitude toward computers in the fifth edition of their book *Theories of Mass Communication* (1989), as typical. DeFleur and Ball-Rokeach compared computers to telephones, dismissing the idea of computer communication as mass communication. These authors assumed that to "have a new system of mass communication the average person would have to have both the hardware and the skills to be able to use computers in daily life" (p.335). Nevertheless, Morris and Ogan's contention that De Fleur and Ball-Rokeach totally rejected the idea of the Internet as a mass medium is not a true reflection of their, ideas in that they predicted in the same book that "computers will become the cornerstone of future modes of mass communications" (p.331).

Morris and Ogan drew attention to the Internet as a multifaceted mass-medium, that is, one that contains different configurations of communications. Its varied forms show the connections between interpersonal and mass communication that has been an object of study since the two-step flow theory first associated the two. "The Internet plays with the source-message-receiver features of the traditional mass communication model, sometimes putting them into traditional patterns, sometimes putting them into entirely new configuration" (p. 42). This may explain why Morris and Ogan urged scholars to rethink their terminology. One key distinction between the Internet and traditional mass media is the interchangeability of producers and

receivers of content. One of the Internet's most widely touted advantages is that an audience may also be a message producer. This represents a departure from the traditional distinction between producers and receivers in the mass media context.

Likewise, Strangelove (1994) observed an entirely new form of human communication--mass participation in what he called bi-directional, uncensored mass communication, created quite by accident because of the open and distributed technology of the Internet. Mass communication is a relatively new phenomenon anyway that has always involved controlled broadcasts to passive audiences who never had any significant input, or control, over the content of communications. With the Internet, these characteristics of mass communication have been radically changed. For Strangelove, the Internet is a new form of mass communication with massive numbers of people broadcasting information to massive numbers of receivers. The Internet has empowered its users, turning them into producers as well as receivers of content.

4.5 Defining the Communicative Nature of the Internet

The key debate about the Internet at this time centres on whether to classify this relatively new communications technology as a mass medium. There is little to doubt that the Internet has become a widespread form of communicating, with the numbers of people linked to the 'Net' already in the hundreds of millions world-wide, and growing all the time.

The way in which communication happens in the Internet, however, is not the same as with traditional mass media such as newspapers, radio and television. While the Internet has the capacity to transmit messages from one person to many receivers, this is not the way it is invariably used by people. The Internet is a hybrid communications technology, the use of which can switch between 'mass' communication and one-on-one or 'interpersonal' communication. In developing theories to explain the way the Internet is used and the impact it can have upon consumers of its content, researchers must therefore be mindful of the distinct nature of the medium and the switching nature of its usage.

Although the Net has the basic four elements of communication, which include a sender, a receiver, a message and a medium, the sender, in this context, is different from the usual sense of that term in that it could be a computer using an automated user ID and may not need someone to operate it. Thus, the traditional concept of the sender is no longer tenable.

Part of the dilemma concerning this new (mass) communication medium is how to define the 'person' on the receiving end of a message in a global network that comprises people and machines. Is the receiver a *customer* doing some online shopping or a member of an unknown audience visiting a website with information about holidays, university courses, the corporate activities of a large global conglomerate, or the latest movie releases? Is the receiver downloading a popular computer-based game or the reader of an e-newspaper? In these different cases, the relationship between sender and receiver varies. In some of these instances, the Internet performs much like a traditional mass medium.

A significant point of difference lies in the interactive nature of the communication process. Furthermore, the receiver can only make a link to this communications medium provided he or she has access to the necessary equipment. If individuals decide to create their own websites, which can be visited by others, they then become message senders as well as receivers. Where individuals can not only link into Internet sites, but also inject their own content directly into them, and then receive further feedback from that site, a degree of interactivity emerges that is analogous to holding a conversation with another person.

As Stuart Brand (1988) pointed out in *The Media Lab*, instead of "broadcast" the situation is changing to one of "broadcatch." Here the consumer actively seeks or "catches" information being disseminated by or available from a variety of sources on the Internet. So it is clear that among the consequences of the new communication technology and its quickening pace," it is no longer quite so easy to say what is *mass* communication and what is not " (Severin and Tankard, 1992, p.8). Severin and Tankard argue that the boundary between different forms of mass communication is no longer so clear and that "communication theories must be developed or revised to keep up with the change"(p.12). Similarly December (1996) discussed the wide range of facilities supplied by the Internet and asked researchers to rethink the practicality of using the current notions of media to define communication on the Internet.

Nevertheless, in studying media processes and new technology, one must draw a distinction between classic mass media such as radio, television, and newspaper which carry information in one direction and what Poster (1995) calls a 'second age of

mass media' with online services that operate in two directions. Users of an online newspaper, for example, expect commitment and responses from the producers. Online newspapers also allow articles to be available for months or years with large collections of data that would never appear in the print product (Alshehri, 1997).

From the mass media literature, one fundamental defining characteristic for a mass medium is the "one (few)-to-many" communication access model. But now the Internet has emerged as a "new interactive medium" which follows a "many-to-many" communication model (Hoffman & Novak, 1996). Jurdi (1995) argued that an electronic medium is "a medium that offers 'random access'; it has no physical beginning, middle, or end" (p.393). Jurdi looked to this new communication form as a 'combination' of multiple media that opens up such 'exciting possibilities for radically' new ways of communication. Online news is read on screens instead of pages. At the same time, it contains most of the same articles as today's paper and can be updated at any minute. That flexibility explains the race to adapt old media to new media such as the Net and why "traditional journalism organisations - newspaper, television, and radio organisations - are moving rapidly to establish a presence on the Internet" (Friedland and Weeb, 1996, p.55).

Randle (1996) states that it is " an especially exciting time for communication scholars to be studying mass media" (p.16). But Jones (1994) noted earlier that most major research universities have guidelines for researchers, based on the 'Nuremberg Code and/or the Belmont Principles'. He observed that ".. research in cyberspace was clearly not on the minds of those drafting these guidelines" (p.31). Morris and Ogan (1996) noted that until recently, mass communications researchers have 'overlooked'

the Internet and the entire field of computer-mediated communication, staying instead with the traditional forms of broadcast and print media that fit much more conveniently into models for appropriate research topics.

Arant (1996) observed that "the information superhighway is dangled before educators as a fount of unending educational benefits"(p.1). Immediate access to the work of colleagues and a "virtual'' library of millions of volumes and thousands of papers affords them the ability to incorporate a body of knowledge heretofore unthinkable (Arant 1996).

Electronic publishing is one area of contemporary business that seems to offer rich opportunities for the fruitful application of academic theory (Pang, 1998). There is a tendency, however, to overstate the differences between electronic and printed media. The rhetoric of disruption, of total difference, of an imminent conflict between old media and new leads to an oversimplified view of both electronic and print media. This kind of debate blinds us to the many important and subtle continuities between them, and obscures some very promising avenues of future study.

Clearly, the Internet is challenging the concept mass communication process long held by established communications theories. Research into new communication technology applications faces two major problems. First, the accelerating pace of change in new technologies means that academic research models are constantly struggling to keep up. Second, communication scholars have, for the most part, been reluctant to gamble with their reputations by joining in an unpredictable research arena. Third, the Internet is a new phenomenon advanced mainly by young

(professional) researchers who may be lacking the necessary theoretical and philosophical knowledge and experience.

Nevertheless, it is becoming increasingly accepted that the Internet is a legitimate area for research and that as this new communications technology becomes even more widely established, it is vital that we understand more about its operation. Attention needs to be given to appropriate paradigms and models to investigate and understand the communication processes within this new media arena, and to study their impact upon individuals, society and business performance.

There is a need to establish some sort of common conceptual framework and general principles to know exactly what communication type(s) we are referring to when talking about the Internet (see Newhagen & Rafaeli, 1996). This means that there is a need to identify, at the very least, the broad answers to questions such as: what communication theory could be used to examine the use of the Internet by both user (consumer, reader) and provider (publisher, producer) of the content? What is (are) the economic model(s) that could be evaluated and examined when investigating the production of online news content? What are the relations and the impact of early media to new media? We are witnessing a medium that is rapidly permeating daily life. This medium is dynamic, disorganised and yet widely accepted by the masses. In terms of researching this new technology, it is unwise to cling only to a *"Who says what"* doctrine. This doctrine may need to be re-phrased and turned around into an analysis of *who receives what.*

4.6 The Internet and Newspapers

This thesis is primarily concerned not with the Internet in general, as a communications medium, but more specifically with the Internet as a vehicle for newspaper publishing. The wider concerns about establishing an overview of the argument surrounding communication theory in this chapter was an attempt to provide an essential backdrop to this research. However, the main theme of this work centres on the production and use of e-newspapers. More specifically, its focus is placed on the role of e-newspapers in the Arab World. Before turning to examine the significance of the Internet in this particular marketplace, it will be useful to review the existing literature that has stemmed from early research on e-newspapers. Research in this area has experienced the same difficulties, theoretically and empirically, as those already discussed in relation to the Internet as a whole.

The provision of news information via the Internet may model, in some degree, its provision through traditional hard copy distribution channels. But there are important differences between traditional publishing and electronic publishing. In the context of newspaper publication, there are questions about format, ease of access, rapidity of information updating, and availability of 'back issues' that represent the key areas of distinction between electronic and traditional hard copy publishing. These are all areas that will be examined in this research.

In addition, there are other important questions about the composition of the readerships of e-newspapers and their hard copy counterparts, and the specific patterns of readership that characterise these markets, that need to be addressed. Are

readers of e-newspapers the same people as readers of hard copy versions of the same publications? Do publications that are available in electronic form only attract a distinct type of reader? Do e-newspapers satisfy their readers in different ways from hard copy newspapers?

When studying electronic publishing, another important aspect concerns the business of e-publishing. There has been 'an explosion' in the number of news organisations publishing online, though it is not always clear whether this move has been driven by sound business reasons or simply belief in the hype that surrounds the Internet. One analysis of the electronic news publishing market in North America found that many newspapers felt pressured into going online because of declining revenues. This strategic move was partly contingent on the economic and environmental costs of newsprint that make electronic publishing a logical choice for exploration (Erlindson, 1995).

Since the mid-1990s, electronic publishing activities and, more especially, online newspapers, have attracted increased attention from academic researchers. Much of this research has emanated from North America, where the Internet market is most advanced. However, interesting research has also been conducted in Asia and Europe. In the Arab World, on which this study has focused, there has been no single study (to the best of the author's knowledge) that focuses on the practices or readership of the region's rapidly growing e-newspaper market.

In the remainder of this chapter, evidence will be reviewed from analyses of electronic news publishing. This review will examine: (1) the growth of the e-newspaper market; (2) the economics of e-news publishing; (3) the views of the

producers and publishers; (4) the content of e-newspapers; and (5) the findings of readership surveys.

4.6.1 Growth of E-Newspaper Market

The electronic news publishing market is a recent phenomenon. The initial questions asked about this new development include what are newspapers doing with the Internet and what is this new communications technology doing to the newspaper publishing industry? The opinions of the two key customer groups of newspapers, the readers and advertisers, must also be considered. How do consumers respond to newspapers presented in electronic form and do advertisers regard e-newspapers as an effective medium in which to promote their merchandise? Finally, there are the views of the practitioners themselves – the journalists and editors who produce the news copy. Is the e-publishing market regarded as an attractive new direction for journalism?

Before answering these questions, however, we should begin by examining the market itself and how well established it has become. As with any new market venture, it is essential from the outset that there is clarity about the kind of product that is being developed. In the electronic news publishing arena, this has been a contentious issue. Michele Jackson and Nora Paul (1998) of The Poynter Institute for Media Studies investigated newspaper publishing on the World Wide Web and provided 'A Portrait of the Landscape'. According to these writers, one of the major difficulties that challenged their study was the fact that newspaper publishers had not agreed on a single term for what happens when a newspaper sets up a site or a "page"

on the World Wide Web. To facilitate their investigation, Jackson and Paul used the broad term "website" to refer to the material a newspaper published on the World Wide Web for public consumption. Here again, is a further example of the incoherent conceptualising that has accompanied the emergence the Internet. From the outset, the newspaper industry failed to take a decision about whether an e-newspaper was really a 'newspaper' in the traditional sense, or whether it is something else, and if so, what?

Weir (1998) in his study about U.S. early adopters of the e-newspaper noted that the evolution of the newspaper is a continuing source of discussion and argument among publishers, journalists, researchers and other media professionals. He suggested that the inability of conventional newspapers to 'grow' their subscription lists to keep pace with the population, combined with the loss of traditional support and competition from non-rational, non-media companies, has spurred interest in computerized delivery systems. Although the traditional newspaper industry is not dead, it is nevertheless the case that other media have surpassed the rate of growth in newspapers in many ways.

Despite these media market changes, some news publishing organisations have chosen to wait on the side-lines, before plunging into this new market themselves, in order to see how the e-publishing industry is likely to evolve, who their competitors will be and how likely it is that the public will accept such technologies. Weir examined a sample of early adopters of an e-newspaper and compared them with a random telephone sample in terms of personality and demography to assess characteristics of innovators and early adopters of an e-newspaper and compare those who had chosen not to adopt new media at the time of the study. The conclusion of this investigation indicated that the use of an e-newspaper is purposeful and intended

to accomplish some specific objectives. However it is not merely an 'outgrowth' of growing familiarity with computers. There are clear indications that "adopters of e-newspapers see the service as a good solution to a very specific problem, and they will seek it out with less regard for their experience with computers because of the benefits and solutions it offers" (Weir, 1998, p 23).

4.6.2 Economics of Electronic Newspaper Publishing

There is great deal of uncertainty about the economics of online newspaper publishing. It has already been noted that newspaper publishers were initially unclear about the nature of the product they were putting on the Internet. There are other significant differences between newspapers on the Internet and those that are available through hard copy that are vital to the economics of e-publishing ventures. Perhaps the major difference is that of mode of payment. Readers are accustomed to paying for hard copy newspapers. With the Internet, in contrast, a great deal of information is available free of charge. Users are accustomed to paying subscription charges to service providers and telephone charges while linked to the Net, but usually do not expect to pay additional fees 'on top' for specific content.

Newspaper publishers are therefore faced with re-thinking the economics of their business once they launch Internet newspapers. Readers may therefore cease to represent a direct source of income for online newspapers. Instead, they represent an indirect source of revenue. The accumulation of readers by e-newspapers represents a market to which they can sell access to advertisers. Internet newspapers will therefore be dependent on advertiser revenues in the future to a greater extent than their hard copy counterparts.

Mensing (1998) conducted a mail survey examining the economics of U.S. online newspapers with daily updated websites. The unit of analysis chosen was the individual online newspaper and key variables under analysis were the costs, revenue sources, and profit strategies of online newspapers. The study revealed that few papers were covering costs for their websites. Display advertising was the single largest source of revenue, followed by Internet access fees and classified advertisements. On this evidence, the outlook for Web profitability was murky, with revenue strategies problematic because of technological limitations, audience size, consumer demand and intense competition.

Interesting findings emerged when respondents were asked an open-ended question about how long they expected to be in business if costs and revenue trends remained constant. More than a third (36.1%) gave an unequivocal "ongoing" response. Another 12% said two years or more. The remaining respondents, however, were much more doubtful. Thirty per cent skipped the question and 13.3% said less than two years (another 8.4% said they were unsure). Many respondents replied that being on the Web was necessary to stay competitive, even if it was financially unhealthy. Others said they were finding ways to create a very simple Web presence, with minimal investment, and they hoped that would suffice until the audience became large enough to justify the expense.

In another American study, Peng *et al.* (1999) examined e-newspapers revenue sources and business potential. This analysis covered national, metropolitan and local newspapers. Publishers of all three types of newspaper opted for online editions to generate more advertising revenue (26.9%) and to use online publications as a promotional tool for their print product (23.9%). One in four online newspaper

publishers did not reveal readership figures. Those who did have information about readers did not give exact figures, and were dependent on measures of numbers of hits attracted by their websites, which was seen as an imperfect measure of readership. The sources of revenues to cover the cost of financing a newspaper's website were mostly from advertising and subscription fees, as well as archive access charges. Once again, though, two thirds of publishers did not indicate how much advertising revenue their Web newspapers attracted. It was also clear that for most of these respondents the revenues earned by their electronic publications only covered part of their costs.

The most interesting point revealed by the study was that nine out of ten of the editors who participated expressed the belief that print newspapers would not be replaced by the electronic ones. Instead online publishing is seen as a tool to promote the newspaper industry. Peng and colleagues concluded that the situation of generating revenue from subscription is not optimistic as the Internet is characterised mainly by free information. In consequence, "online newspapers have to make full use of the advantages provided by the Internet to offer better services for advertisers " (p: 61).

4.6.3 Views of Practitioners and Publishers

The transition to the electronic publishing context has implications not just for the economics of newspaper publishing, but also for its practice. Journalism in a multi-media environment still requires most of the basic news reporting skills that are found in the hard copy world. In addition to these skills, however, journalists and their editors need to acquire a new set of working practices. Electronic publishing opens up fresh possibilities for news delivery that require a different perspective in relation to writing and lay-out. From a different perspective, the

Internet provides a news source that can be utilised by journalists. How valuable a news source has the Internet perceived to be in this respect? Finding out how the practitioners respond to the Internet is therefore a fundamental area of enquiry. Since the mid-1990s, a number of studies have focused on the significance and implications of the Internet for journalists.

In his exploratory and descriptive study Singer (1996) pointed out that as newspapers by the hundreds spring onto the Internet, publishers have become proficient at telling one another why online is an attractive place to be. However, this proficiency does not help the majority of online publishers to make money out of their online product. Singer's tried to explore how reporters and editors regarded technological changes affecting their carrier. A questionnaire survey of 27 reporters and editors found that few had much experience with interactive media, and even fewer perceived new delivery mechanisms as having a fundamental effect on the things important to them: gathering information, interpreting it and shaping it into a meaningful story.

Yet Singer warned that "it is dangerous for journalists, whose job is deemed so crucial to society that it is protected by our nation's highest law, to stand on the sidelines as new media technologies emerge, take shape and spread" (p: 24). So far though, according to her study, they are. She also pointed out "that role as spectator is affecting their attitudes, whether they are chafing at the bit, afraid of the unknown or merely indifferent to the changes taking place" (p.24). For journalists to maintain, practice and strengthen their journalistic values in the interactive media environment, they must be equipped both in terms of their 'mind set' and their technical skills. The "equipment" must come from two places. One is

from the newspaper industry by providing inside the newsroom greater access to online media, for logistical and psychological reasons to help make interactive media seem routine, familiar and simply a part of the journalistic milieu. The second is to seek to integrate the newspaper's own interactive service more fully with the newsroom as such services come on line. Singer suggested that these steps would help reporters and editors to start thinking seriously about such services. In addition, journalism educators have an obligation to encourage their students to explore online media and think about them in creative ways. The benefit of such an attitude is that "If students with online savvy more readily land jobs, then spread the enthusiasm for new media among their new colleagues, they may help create a widening circle of acceptance and excitement that benefits academy and industry alike" (Singer, 1996, p. 27).

Two years later, Singer *at el.* (1998) conducted a more detailed survey of online and print editors at 466 U.S. newspapers, identifying key online staffing issues such as salary and experience levels, job classifications and benefits. The overall results indicated that online newspaper staffs remained small, with salaries and benefits roughly commensurate with those paid to print employees in comparable jobs. Online editors expressed concerns about the pressure to turn a profit, as well as about the perception that they and their staffs were seen as second-class citizens by many of their print colleagues.

The study also showed print managers' most critical concerns in directing their staffs fell into two main categories: news content and staffing issues. Some were concerned about finding, hiring and keeping qualified people. Online editors, main concern was with finding multi-talented staffers who understand both

technology and journalism. This finding supports the suggestion that new college graduates may have an advantage in finding a job if they are able and willing to work on the online product. The researchers noted two areas, not even mentioned by print editors, that came out in online editors' comments; (1) the relationship between the two staffs and (2) their concerns with their product making money. Online editors also had a different take on content issues. While accurate, fair local news was a main concern for print editors, online editors' commented on the fact that they had a non-traditional, new audience to capture and hold. They also had a totally different sort of space problem from their print counterparts.

Online editors also were troubled by the non-stop demands of ever-changing technology, their isolation from print colleagues and the question of money making. The researchers pointed out that publishers' deep ambiguity about the Web was putting considerable pressure on the people whom they were asking to tackle the job. They warned publishers of the growing perception among online editors that they and their staffs were seen as second-class citizens and asked for "immediate management attention before the challenge and excitement of doing something new devolves into a routine of overwork laced with bitterness and, before long, burnout".

Schultz and Voakes (1999) study provides another perspective about the future of newspapers in general expressed by some pessimistic journalists about their carrier's future in the digital age. They surveyed 1,037 randomly selected full-time journalists from 58 newspapers in the USA. More than half (55%) of these journalists believed that printed newspapers will be "less important part of American life" in 10 years time, compared with 40 per cent who felt that

newspapers will be where they are now. Only a tiny minority (4%) thought newspapers will become more important.

Schultz and Voakes (1999) noted a widespread and growing pessimism about newspapers amongst journalists. The most interesting finding was that journalists' pessimism about the future extended to online newspapers as well, with only a small minority (8%) regarding e-newspapers as having a promising future. The majority (53%), however, said that online newspapers would decline in importance over the next decade. The three major threats outlined by the study were alienation of readers, as readership rates have dropped sharply for number of reasons, market-driven journalism, and new media. The diversification of mass media has increased completion across media and demand is unlikely to expand in concert with supply. In parallel with Internet news sources, news competitors have emerged in the form of round-the-clock news services provided by broadcast radio and television and cable television stations. These other new media are also popular with young people, who have been regarded as the primary target market for electronic publishing.

Despite the increasingly competitive marketplace for news, there is still an argument that many news consumers will continue to turn to tried and trusted news sources. As long as journalists supply information that is credible and useful to readers, changes in technology should pose little threat (Filder, 1997).

From a more specific perspective, Ruggiero (1998) critically examined the perceptions of traditional American journalists toward the Internet as a news source by conducting an analysis of rhetoric about the Internet available in major

American newspapers. The main argument was based on the assumption that because traditional American journalists are socialized both ideologically and professionally into the dominant ideology, many are refusing to share their elite positions as disseminators of news with the Internet. Ruggiero analysed data from the Lexis-Nexis database and American journalism review magazines and indicated that a concerted effort by traditional American journalists to repair the elite news paradigm against incursion by the Internet is occurring. In the Market-driven economy - the same threat discussed earlier face newspapers - the future of the Internet, as an acknowledged disseminator of news, at least for critical scholars, remains unanswered.

The journalistic values and what online journalists say is important to them was the subject of another study (Brill,1999). The study sought to 'advance the knowledge and understanding of the roles and values of online journalists' by examining the similarities and differences between the online and traditional environments and the journalists working within them. The author circulated a questionnaire to journalists from selected 12 different online newspapers.

The findings showed that in comparison to daily print journalists, online journalists reported that most of their work was similar to that of their print journalist counterparts. Online journalists ranked traditional journalism skills very high, with news judgment (66.2% rated it very important) topping the list, along with spelling and grammar skills (rated as very important by 62.9%). Print newspaper journalists and online journalists were also closely aligned in how they viewed the news dissemination function of their profession, with 50% of each group agreeing that it was very important to avoid disseminating unverified facts.

Getting information to the public quickly was rated as very important by 70% of the print journalists and by 62% of the online journalists.

In contrast to the journalists interviewed by Schwartz and Voakes (1999), journalists questioned by Brill viewed the future of online products as "very positive" (52%) or "positive" (38%). In general, while the online journalists surveyed by Brill (1999) adhered to some of the tenets of journalism, especially regarding necessary skills, they also viewed their roles and values somewhat differently from other journalists. The online journalists identified with the news dissemination function of their profession, as did the daily newspaper journalists. The study also found that neither the print nor online journalists seemed to view the adversarial function of journalism as very important. The functions of letting the public express views, setting the political agenda, and providing entertainment were considered more important by online journalists than by print. Print journalists, however, rated developing the cultural interests of the audience as more important than did online journalists. Reaching the largest possible audience and understanding the audience was considered very important by most of the online journalists surveyed in this study. Brill concluded that it will be critical to understand online journalists and how they view their roles and functions. Indeed, if some media analysts are to be believed, they may be the only journalists to study in the next century.

Alexander (1997) examined online newspapers in New England to 'assess the benefits, drawbacks and future of electronic publishing'. Alexander used an open-ended survey form sent out to the region's daily and weekly newspapers and

received 210 responses. The survey found that most of the benefits cited were related not to producing a better journalistic product, but to business considerations. Using new technologies to change the style and substance of newspaper news was cited as a benefit by only few electronic publications. The study also showed that newspapers said keeping current readers happy was at least as important as attracting new readers. However, an ambivalence toward online publishing was apparent in many responses. Interestingly, the study found that some features that have been lauded as revolutionary in electronic publishing, such as the ability to deliver news instantly and immediate updates, are the same elements cited as drawbacks facing e-newspapers. Respondents also cited lack of staff and training, cost, equipment and limited payback in terms of revenue potential as the most drawbacks that face electronic publishing. The vast majority of respondents (80%) reported that e-newspapers may complement but will never replace traditional newspapers. Alexander concluded that one newspaper's opportunity appears to be another's burden.

Garrison (1998) conducted a review of the use of the WWW and other online services by U. S. daily newspapers via mail surveys with a longitudinal design. Newspapers with a circulation of 20,000 or more copies were selected for analysis over a three-year period, 1994-1997. The study analysed general computer use, value placed on the Web as a news tool, preferred browsers, search tools used, most widely used sites, site qualities and problems, and online successes and failures. Computer use in newsgathering was found to have grown in two areas: first, journalists who become more dependent on the WWW and the Internet as

sources of information; second, the overall use of computers in newsgathering, which increased steadily from 66% in 1994 to 88% in 1997.

The study showed that the daily use of the Net almost doubled across the period analysed and that about 92% of the newspapers surveyed used the Web by 1997. Furthermore, research by reporters increased to 48% from 25% from 1995 to 1997 and their preferred browser (for 67.5%) was Netscape communicator, with AltaVista as the most popular search engine (for 47.2%) in daily newspapers' newsrooms. The most widely used websites (23.9%) were the government sites (both federal and state sites) followed by search engine sites. However journalists showed concerns about the quality and validity of the WWW to newsgathering with information verification (cited by 19.6%) as the biggest problem. Garrison conceded, however, that although journalists seemed to be aware of the usefulness of the WWW, their use of networked information resources for newsgathering was still in its infancy. He also observed that many newsrooms viewed online resources in the sceptical manner they viewed traditional documents and human sources.

Neuberger *et al.* (1998) examined the producers, their products and the users of German online newspapers by using standardized mail survey of all 81 daily newspapers with a WWW presence in May 1997 (return quote: 78%). The users (2,524 respondents) were surveyed via an online questionnaire. The researchers found that almost half of the staff in online editorial boards had journalistic duties, and that technical duties were of growing importance. The majority of German online editorial boards surveyed depended on the editorial decisions of the print

editors and the news sections in online papers consisted mainly of duplicates of the printed "parent" paper found researchers. The study also showed that articles for the online version were rarely edited and that very few external links and no graphic or sound effects were added. In terms of users' behaviour, the study revealed that about two-thirds of users would have chosen the print newspaper and just under a third would have preferred the online version if only one of the versions had been available. The impact of print product culture was apparent in that online publishers and users based their activities and/or expectations on the print newspaper. The study revealed that the staff of the German online editorial boards tended to be relatively young. The researchers pointed out that in terms of generating revenue, publishers will need a lot of patience as users in the long term will have to accept either advertising (and thus longer download times) or subscription charges.

In the UK, Williams and Nicholas (1998) conducted a one-year research project to examine the 'truth about the Internet' by interviewing 247 people from more than two dozen (press) organisations. The researchers approached the topic from a point of view of the changing information environment the Internet is creating. They justified their choice of journalists as a case study because they (journalists) are in 'the information front-line' and 'information is the commodity with which they work'.

The results of this in-depth investigation revealed a number of interesting findings. Significantly, the researchers found that the main factors influencing journalists' (lack of) use of the Internet were job (anxiety) role and security, especially amongst younger journalists working in short-term contracts and

'extremely heavy workloads'. The experience factor was also found to be important among the older journalists who had experienced electronic information years prior to the Internet. Accordingly, senior reporters who enjoyed 'ease of access' were found to be heavy users of the Internet. Despite signs of change, young graduates were found to be inadequately trained compared to their older colleagues as journalism courses barely pay lip service to the existence of online services. In terms of gender factor, men outnumbered women in their use of the Internet.

News services and online newspapers such as *The Washington Post* were found to be the most consulted sites journalists referred to as well as many other official websites. Yet, the study found that, in overall use less than one in five national journalists (and fewer in the regionals) benefited from the Internet in the UK and that "the Internet was certainly not a panacea for all journalists' communication, and retrieval ills" (p.12). Furthermore, those (journalists) 'who have actually taken the Internet route' were in their thirties and forties, contradicting the stereotypical image of the online user (journalist) who has been typically labelled as a young male.

One of the important contributions of this study was the categorization of the (journalist) users of the Internet. Seven user/non user groups were determined: 1) **Net 'worshippers:** young generation (often untrained journalists) ' who have embraced every aspect of the Internet as a 'means of extending information democracy by weakening the power of large news agencies. 2) **The economically-driven:** those skilful people (including freelancers) who use 'the

system to access information that would otherwise be expensive to obtain'. Members of this category normally 'work in small specialist newspapers/magazines' and see the Internet as a 'godsend', with its myriad information sources. 3) **The pragmatists** - 'incorporate the Internet into their array of general information sources'. They tended to examine each enquiry in a professional way to decide ' whether it will be researched from online services, cuttings, CD-ROM, the Internet, or a combination of sources'. 4) **The occasional dippers** - 'includes a large number of journalists who use the Internet only when other sources do not solve their information problems'. Their use of the Internet was limited, due to time and access problems. 5) **Enthusiastic novices** - 'have never used the Internet, but they are intrigued by what they have heard'. Like the 'occasional dippers', this group put the blame on 'time constraints and access problems for not mastering the system, and also for the lack of training'. 6) **The non-believers** - 'are not interested in the Internet'. Some justified their non-interest because of the problem of authenticating data, or information overload. Some, 'however, didn't even feel they had to justify their non interest'. 7) **Resentful dinosaurs-** a small minority who see 'the Internet as a threat to their privileged access to information'. 'They are irritated by the fact that anyone with a PC and modem can reach a potential audience of millions by posting material on the Web'.

The overall findings indicated that most journalists believed that it is just a matter of time before they begin to use the Internet. The researchers concluded by stating that the Internet is a more 'Jekell and Hyde' than a 'knight in shining armour for

the media'. From the outcomes of their research, Williams and Nicholas summed up that " it [the Internet] offers, but it disrupts, it gives and takes away, it provides opportunities but it also gives competitors the edge" (p.12). Williams and Nicholas' conclusion indicates how profound the Internet can be in impacting media and information working practices. It was most obvious when they stated to the end of their conclusion that:

> *"In many ways the Internet in the newsroom is, then, if not a sleeping giant, certainly one whose faculties have not all been awakened yet. It has definitely arrived, and with more than a whimper - but not (yet) with the expected bang".(p.13)*

4.6.4 The Content of E-Newspapers

Under this heading, it is not only the content of online newspapers that is an important consideration, but also the format and ease of access to that content. Electronic newspapers will attract readers not only because they provide quality news services in terms of up-to-date content, but also because that content can be readily accessed and is presented in a format that renders the news easy to digest.

Inevitably, there are technology issues that lie at the centre of these concerns. Newspaper publishers must ensure they have the skills base to produce attractive multi-media news formats and news content databases that consumers find easy to search. Even the highest quality news reporting will not be enough to maintain a readership if that content is difficult to retrieve. A number of studies have examined this subject.

Gubman and Greer (1997) carried out a content analysis of 83 sites produced by US newspapers to 'examine whether the criticism directed to the industry for failing to

adapt to new technology is well-founded'. They examined five areas of importance on which newspapers must concentrate when going digital: structure, content, news writing, reader interaction, and user services. The study's findings showed that the structure of news was fairly standard. A significant minority of the newspapers studied (44%) presented some news on the first page. Indeed, a majority (70%) provided headlines and short stories on the first screen. Nearly every publication (89%) provided local news and the majority of the sites updated their content daily.

Turning to writing style, there was evidence that few e-newspapers showed signs of adapting their writing style to fit the new medium. Only 13 (16%) of the newspapers surveyed used any type of linked boxes or non-traditional storytelling, three of which broke up the news copy into blocks shorter than one screen, three used blocks equal to one screen, and seven used blocks of text longer than one screen. In terms of reader interaction, virtually all the sites (95%) provided some type of reader feedback, and more than half (55%) even provided either the reporter's or editor's e-mail addresses or gave addresses for specific departments such as news, opinion, features. The study showed that nearly 58% of the surveyed papers appeared responsive to reader comments.

With regard to the fifth criterion of user services, less than one third of the sample offered free news searchable archives. Advertising was accepted by all but nine of the surveyed papers with just over half (51%) allowing users to search classified ads with further charge. Although this research corroborated some of the earlier criticisms of online newspapers, there was further evidence that, in some areas, e-newspapers were making genuine efforts to provide a better service to their readers.

Kamerer and Bressers (1998) examined the content and the technical features of some American online newspapers using systematic random samples in a developmental study (74 in April and 166 in Nov. 1999) over a period of six-months. The study showed a growing technical sophistication of online newspapers in the period of the study. For instance, the study found that graphics use and the ability to e-mail the papers from the website increased dramatically in the period covered by the study. The provision of online archives also jumped from 34% in April to 52% in November. However, the study revealed that e-newspapers remained poor in their multi-media features. With regard to their content, the sampled newspapers increased their national news coverage more than their local news coverage, but also exhibited an increase of the editorial coverage. Most of these newspapers were freely accessible with an increase in classified ads (51% in April 76% in November.)

Kamerer and Bressers also found that daily newspapers had the most sophisticated sites in comparison with speciality papers and non-daily ones. The overall result of the study showed that e-newspapers grew in the six-month study time and became both more technically sophisticated and more comprehensive in their news coverage. Although the content of these e-newspapers was to an extent dependent on content prepared for the printed editions, the researchers observed a growth in the interactivity of online newspapers, which represented a significant departure from how things are done in the print world.

Peng *et al.* (1999) examined the current trends in Web-based newspapers in the United States by looking into various aspects of such operations as advertising, readership, content and services. They used a stratified sample of 80 newspapers

including six national, 28 metropolitan and 46 local daily publications selected to represent various regions and states. This study revealed that the publishers' top three reasons for using the Web were 1) reaching more readers, 2) income generation and 3) promoting the print version.

In addition, online newspapers were found to be displayed in four different types of format: text plus graphics in addition to directories; headlines plus text and directories; headlines plus directories; or directories only. National and metropolitan newspapers tended to follow the traditional hard copy format (59%), while local dailies most often (41%) chose a directory format only. As the Internet offers the capacity to provide additional services, over and above those available with hard copy publications, such as archives, two out of three of those publications studied provided access to such services.

On the eastern side of the globe, a similar study was conducted by Massey and Levy (1999) focused on 44 Asian-English dailies that had Web editions covering 14 different Asian countries. The selection of this type of newspaper was justified by the authors because English was 'commonly lingua franca' in Asia and typically used among nations' educated classes. In addition, the papers selected were among the nation's most influential. The unit of analysis was the entire newspaper website. The newspapers were content analysed using a five-dimensional conceptualisation of interactivity: complexity of content choice to consumer; online journalists response to consumers; the extent to which consumers were allowed to create and add content to the newspaper's website; the way online newspapers facilitated interpersonal interactions among consumers; and the extent to which newspapers used the Net's potential for immediacy. For the complexity of content choice, the study revealed that

the sampled newspapers tended to score highly on news volume but offered little entertainment. Commercial services were generally sparse and the papers tended not to give consumers many options for hypertext linking for more detailed background or customised news delivery. In the case of responsiveness from journalists, the newspapers generally scored poorly.

The study also showed that less than one-fifth of these Asian newspapers offered easy-to-use interpersonal communication services (such as chat rooms). With regard to immediacy, only one newspaper (*The South China Morning Post*) was reported to offer real-time news and another three papers offered regularly updated news tickers. Although these Asian English newspapers gave consumers what they expected, that is, news, they failed to provide immediacy. Web newspapers would seem to need a fairly sizeable online staff as small staffs otherwise they will not have sufficient slack time to do anything more than prepare content for uploading the Web.

4.6.5 Readers and E-Newspapers

Research has shown that the Internet has become the medium of choice for many news consumers. For instance, Jupiter Communications (JUP.COM) surveyed more than 2,200 online consumers about their attitudes toward news online. The results showed that more than 80 per cent of US online consumers trust online news as much as they trust newspapers, broadcast television and cable news outlets. An additional seven per cent viewed online news as more reliable than other media (JUP.COM ,1999).

Vargo *et al.* (1998) conducted a focused groups study that provided important insights into how initial summary and link presentation might affect electronic publications'

usefulness and appeal to readers. One interesting point to emerge from this research was that despite the image of newspaper publishing as a change resistant business, it was remarkably brisk in its adoption of the Internet and World Wide Web observed researchers. Even so, newspaper publishers need to give more attention to the needs and abilities of their readers, especially where electronic news publishing is concerned they suggested.

The researchers examined readers' comments about specific features of e-newspapers. The actual test began with respondents seeing three story summaries stacked in a column in different format. Some groups saw short summaries of the stories (a simple headline), some saw medium-length summaries (a headline plus deck), and some saw long summaries (a headline plus a 3-sentence abstract of the story). The questions were about whether news summary gave them enough information so they could make a decision to continue reading, and what that decision would be, how interested subjects were in the story topic, the attraction of news links and sidebar links and similar questions. It was found that the initial summaries and the links to the sidebars can be too long as well as too short. Readers' opinions about these aspects of e-newspapers could be crucial to future market development. However, it is difficult to say exactly where the boundaries ought to be in regard to some format elements. Even though a clear majority of respondents chose the headline-plus-deck option as the preferred summary length, other statistics from the study suggest it may not be the most useful length. Specifically, many respondents said the longer abstracts gave too much information and therefore would keep them from wanting to read the stories. But the statistics do not support this argument. In fact, the data show that the varying summary lengths had no effect on whether subjects wanted to read the stories

commented researchers. Nor did the amount of information in the links to the sidebars significantly affect whether respondents reported wanting to read the sidebars.

In all groups, across all three stories, more respondents said they would read the story after they saw it than said they wanted to read the story after just seeing the initial summary. This was surprising - commented the researchers - since it would seem more likely for readers to be hooked by a good headline or summary, then turn to the full story before deciding they had seen enough and did not need to read about all the details. As expected, respondents were more likely to agree they felt informed in the abstract condition than in the headline-alone or head-plus-deck conditions. Overall, 90 to 100 per cent of subjects were able to locate the links to the various sidebars. The most common cause for distraction with the words-in-text and headline links was placement, while placement and length were both a problem for the abstract link. When asked if they would like to read news presented in layers and links, almost all respondents (93 per cent) thought they would like to see a summary without having to see the full text of a story.

Ulrika Wiss (1996) from the Centre for Distance-spanning Technology University of Luleå, Sweden examined readers of a test local newspaper put on the Internet by conducting online questionnaires. The researcher also analysed the requests that were logged by the HTTP server, by grouping these into "coherent reading groups". During the test period 783 coherent reading groups were identified, coming from 270 different hosts. In total, 79 questionnaire replies were received. Results were analysed for numbers of readers, reading habits, opinions on e-newspaper, attitudes towards paying for an e-newspaper and factors important for reading an e-newspaper. The

study found that it was not possible to get an exact count of the readers during the test period. Two groups of potential readers for the electronic local newspaper, emigrants and people with non-traditional reading habits, were clearly identified by study. On the question of paying for access to e-newspapers, the study found that readers were rather reluctant to do so.

It was also found that people had different reading habits for local hard copy newspapers and e-newspapers. Hard copy newspapers were read in the mornings at home, while the e-newspaper were read during the day or evening at work or at school. Also, most reading of electronic news was conducted in short sequences, indicating that the reader took a short look at the paper every now and then during the work day. One important category of reader for local e-newspapers was the "emigrant", persons that have moved away from the part of Sweden in which the study was carried out. These individuals therefore found it difficult or impossible to get a hold of the local paper newspaper for that area in hard copy form. Wiss saw this as a special niche for local newspapers, since they have a content (local news) that with hard copy publication is available in a limited geographic area, while the people presumed to be interested in this information are becoming increasingly mobile.

4.7 Summary

As demonstrated throughout this chapter no adequate theoretical framework has been developed for the analysis of the Internet as a communications medium. While the Internet has enjoyed rapid growth to achieve the status of a major source of information and entertainment for many millions of people, globally, the very nature of its communicative character requires a re-think of communications analysis. The Internet can be both a mass medium and a narrow-band medium. It offers one-way and two-way forms of communications and takes the form of an alternative interpersonal communications channel in some contexts. In the context of electronic publishing, the Internet offers both mass and interpersonal communications facilities.

The e-newspaper market grew rapidly in last decade of the 20th century as many newspaper publishers looked upon the Net as an effective and economical way to reach readers. The Internet offered new hope to an industry suffering diminishing circulations and the threat of a younger generation not interested in hard copy news. There was a push to achieve a presence on the Internet among major and minor news publishers. Most of the new ventures have been loss leaders however. Internet newspapers have found it difficult to establish markets unless they offer copy free of charge. Internet users are accustomed to accessing content for free. Hence, there is a need for newspapers to re-think their business plans and to recognise that in cyberspace, new revenue streams have to be explored. Most revenue in future will come from advertising. of course, advertisers will only subscribe to significant degrees to this new medium once it has established a significant market.

The move onto the Internet also has implications for journalism practice and practitioners. Many of the same, basic journalism skills are needed in writing stories. However, the Internet offers new possibilities for new delivery. Certain new software skills are needed to operate effectively in a multi-media environment. The skills base at present is inadequate. Furthermore, the lack of revenue generation of e-newspapers means that their parent organisations have been reluctant to invest greatly in their production. Thus, journalists on hard copy publications have found themselves co-opted onto electronic publications for which they have not been trained. The easy option has been to reproduce the hard copy publication on the Internet. Unfortunately, this fails to take advantage of the new information delivery facilities offered by this new medium. The real promise of Internet news lies in news archives, interactivity between readers and journalists or between readers and other readers. Failure to provide such services leads to disappointment among users.

For readers, of course, the Internet news experience is also different from the standard hard copy paper experience. Readers must have access to the necessary reception equipment. They must find news websites easy to access and navigate, otherwise they will give up. Not all sites have been user friendly. Where sophisticated news Sites have been designed, however, with the needs and interests of readers fully in mind, they have attracted a readership. Thus, the promise exists, but the realisation of that promise remains some way off. The remaining chapters of this thesis report new research conducted on electronic newspapers in the Arab world. It examines the extent to which news is published on the Internet in this region, the way in which it is presented, the aspirations, objectives and concerns of Arab news publishers venturing onto the Net, and the feedback from readers.

Chapter Five: Analysis of Newspapers' Websites and Other Web-based Services

5.1 Introduction

An Internet newspaper is defined as a publication available on the World Wide Web. Such sites use Hypertext Mark-up Language (HTML) and other computer-assisted graphic devices to present text and graphics containing news information on a computer screen. Graphics, in this context, include photographs as well as charts (Li, 1998). Internet newspapers have grown dramatically and represent an increasingly significant news source. As with television before it, the unique contributions of the Internet to major news events at key moments have helped to put it on the map as a news source. With television, events such as the 1953 Royal Coronation in Britain, the 1960 American presidential debates, the assassination of President Kennedy in 1963, and the first man walking on the moon in 1969 served to establish the potency of this medium as an instant news source. With the Internet, the posting of the results of the 1996 US presidential elections on websites drew the attention of the public to the power of this new medium (McKenna *et al.*, 1996).

The Internet is believed by many of its supporters to afford significant fresh opportunities for the presentation and delivery of news that will benefit its readers. Many newspapers outside the Arab world began delivering information electronically through commercial services before the recent Internet era, but their presence in the field was limited until they started to publish electronic versions on the World Wide Web (WWW). So what are the advantages of publishing news on the Internet?

Internet technology can free up more space to present news (Lapham, 1995). The WWW offers a number of other presentational opportunities. It can present excellent colour graphics. It can provide readers with access to extensive news archives. In addition, the news can be updated more readily than in the case of print. Indeed, going online affords newspapers a whole range of opportunities. The rapid advances in technology, however, have left professional and business practices behind and have been under-researched so far. Thus, knowledge of how to publish news effectively on the Internet is poor (Morris and Ogan, 1996). This point is particularly important in light of criticisms that have been levelled against the Internet. Many early online newspapers lacked user-friendliness. Accessing all the content could prove difficult, time-consuming and, ultimately, expensive (Katz, 1994). Navigating around some websites can lead to a frustrating experience especially when the user tries to locate a specific article and expect instant feedback from the newspaper server. Moreover, it would be quite frustrating for a user of this service in the long run, because a lot of the services and some of the links appear and then disappear. Indeed, some researchers have contended that access to newspaper content on the Internet was a privilege belonging only to the most technically advanced readers (Mueller & Kamerer, 1995).

The rapid growth of online news publishing has therefore spawned many questions about effectiveness of presentation, ease of content access, the computer skills required of consumers, the multi-media presentational skills required of journalists, and the new approach to business needed by newspaper publishers. For researchers, it has posed questions about methodology and, perhaps more significantly, about conceptual models that can be devised effectively to investigate and improve

understanding of all these issues. A few models have so far been proposed for the analysis of electronic news publishing. Li (1998) discussed three such models: (1) the interactivity model; (2) the new hybrid model; and (3) the media transition model.

Under the interactivity model, Rogers (1986) noted that the most essential capacity of electronic media is that of interactivity. Interactivity has been assumed to be a natural attribute of interpersonal communication, but has become a concept applied to new media such as the Internet (Rafaeli, 1988). Rafaeli's model distinguished three levels of interactivity: (1) two-way (non-interactive) communication; (2) reactive (or quasi-interactive) communication; and (3) fully interactive communication. Rheingold (1994) also discussed the role of people in Internet communication as an interactive group and argued that this new communication revolution was shifting power to the people. This power shift seriously threatened the dominance of traditional mass media forms, especially television, radio, magazines and newspapers, which were built from the one-to-many communications model.

It is not just interactivity that is significant with new communications technologies. It is also the inter-connectedness of new technologies which underlies the "logic" of electronic media growth that is significant. One-way systems become two-way or even multiple-user networks (Neuman, 1991).

Under the hybrid model, it is believed that the Internet could open up previously unthought of opportunities for news delivery. Multi-media presentation formats mean that news texts can be accompanied by photography, graphics, animation and video. The Internet could represent the site of a merger of previously separate news formats and delivery channels (Gilder, 1994).

By using computer technology to produce and deliver a new product, newspapers have welded both the old (literacy-print) with the new (computers-digital delivery) and created a hybrid model. According to Li (1998), however, this model does not address the impact of web page design or effects of different approaches on the communication process. The hybrid model only provides a general idea of how the function of a newspaper is enhanced by computer technology. It does not measure the impact of relative levels of interactivity, nor does it identify where the old component, the convention of newspaper publishing, and the new component, the technology, stand in the model, and how they work together and react to each other.

The third model discussed in this context was the media transition model. Bordewijk and Kaam (1986) developed a model when discussing the flow of information in new communication systems. They described four basic communication patterns and showed how they were related to each other. (1) *Allocution*: Information is distributed from the centre simultaneously to many peripheral receivers which is typical of the "old media" of mass communication. (2) *Conversation.* Individuals interact directly with each other bypassing a centre or intermediary and choosing their own partners as well as the time of communication. (3) *Consultation.* This refers to a range of different communication situations in which individuals look for information at a central store of information. (4) *Registration.* This is the consultation pattern in reverse in that a centre 'requests' and receives information from a participant at the periphery (usually without their awareness). Bordwijk and Kaam concluded that the trend is moving from allocutory to consultative to conversational. This implies a broad shift of balance of communicative power from sender to receiver. However, it is not clear yet to what degree this shift of control is taking place in Internet newspapers.

This chapter will examine part of the status of e-newspapers in the Arab World. It will examine the nature of the industry through an examination of its news products and through an investigation of other media resources available to the Arab user of the Internet. This analysis begins with an overview of which newspapers are published on the Net and where they originate.

In this part of the analysis there will be an examination of how these newspapers present news and what additional features and services they offer that take advantage of the electronic medium in which they operate (see Analysis Form in Appendix G). The presence of electronic Internet newspapers is then considered in a wider context of other Internet news sources.

The chapter then moves on to consider evidence from a number of news agencies that operate Internet sites and daily news services that are also supplied through the Internet by television and radio stations that operate within the Arab World. Hence, e-newspapers not only have to work to establish their own market position against competitors from other newspaper publishers, but also in the face of competition from other news suppliers beyond newspapers.

5.2 Analysis of Newspapers' Websites

Traditional newspaper content has been changing under the pressure of technological advances. However, in a few years with the introduction of the Internet and the phenomenal stampeding by newspapers to the Web, format, content and the way news is gathered and distributed have changed significantly. One of the major challenges

for online newspapers, though, is how to best create an online newspaper and what is the appropriate model in constructing news stories on the Web as well as finding the best business model. Another question is, how should the newspaper industry react to this evolving new field and incorporate these vital intersections of new technology advancements, audiences' interest and business considerations.

Gubman and Greer (1997) state that analysts have identified five areas on which newspapers must concentrate when going digital: structure, content, news writing, reader interaction, and user services. Hence, in order to provide a descriptive profile for Arab e-newspapers, this chapter analyses data gathered from all the 48 Arab e-newspaper sites. The analysis includes: place (where do these newspapers issue from), their languages, services offered to reader, and what formats they adopt as well as interaction methods with readers.

The results shed some light on the determining factors behind the views expressed by readers of these online publications. Obviously, very little systematic research has emerged which analysed online newspapers' websites, and how they look. One of the aims of the study, however, is to help to fill that gap through the analysis of Arab daily e-newspapers websites.

5.2.1 Countries of Issue

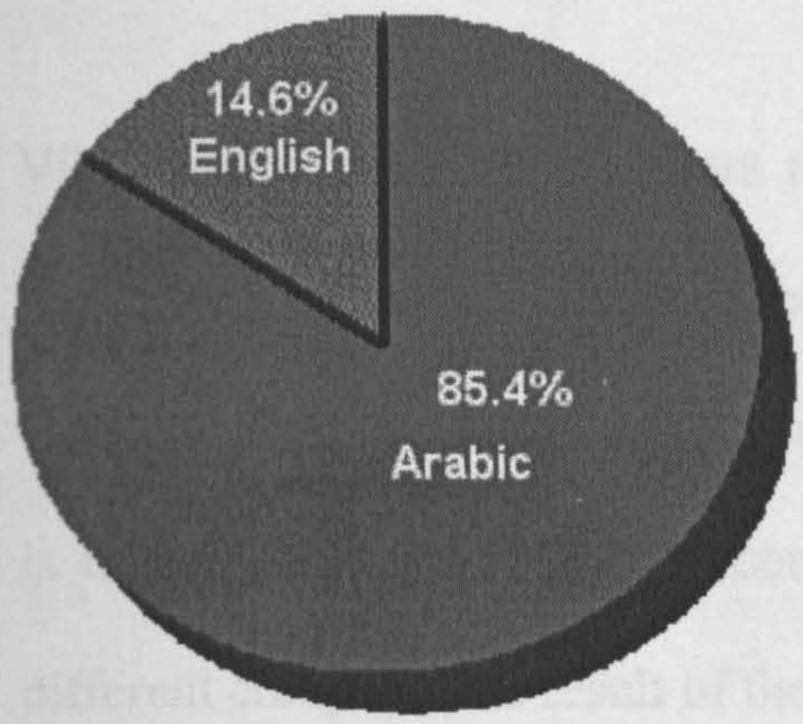
The data gathered from newspapers' sites shows that the online Arab newspapers are produced in three continents. United Arab Emirates (Asia) and Egypt (Africa) scored equally the highest ratio (12.5% each) followed by the UK (Europe) representing

altogether over one-third (35.4%) of the total geographical locations of Arab newspapers. The next publishing location was Lebanon with four newspapers. Five Arab countries (Jordan, Qatar, Syria, Oman and Algeria), were represented with three newspapers each. Bahrain, Kuwait, Yemen, and Palestine were represented with two each, while the remaining two countries (Sudan and Morocco) were represented with one each. A more detailed perspective and analysis is presented below.

5.2.2 Newspapers' Languages

Although there has been a very limited number of publications in languages other than Arabic and English such as French (mainly in Arab countries of North Africa), the study focused on only newspapers that appeared either in Arabic or English. Of all the 48 Arabic and English newspapers analysed, 85.4 per cent were Arabic publications. Only seven English publications were identified, representing 14.6 per cent of the total sample analysed. (see Figure 6).

Figure 6: Language of the newspaper



5.2.3 Arabic Text Format

5.2.3.1 Background

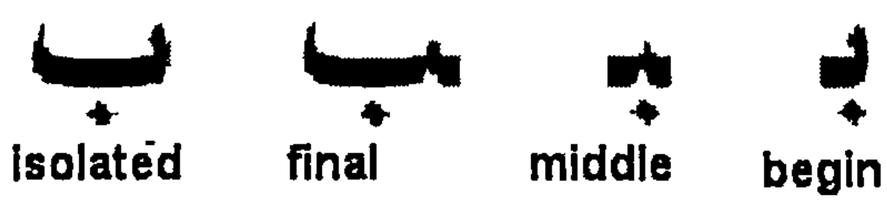
The format and the structure of presenting the text on the Internet is one of the major technical hindrances Arab online newspapers are trying to surmount. For Arab newspapers, the problem is even greater as most Internet applications and computer systems do not recognize the Arabic text unless it is designed and worked in Arabic operating systems. For newspaper publishers the problems transcend the difficulties in converting their print publication to HTML for the Web to the user who needs Arabic enabled browser to view the text in Arabic.

Part of the problem of transporting Arabic text over the Internet is because of its non-ASCII character sets (Al-Badr, 1998). Dr Knut S. Vikør (1997) of the Centre for Middle Eastern and Islamic Studies at the University of Bergen in Norway specified the two main reasons why using non-English languages including Arabic pose problems. One was that the different *computer operating systems* (DOS, Windows, Mac, Unix) on the Net differ in how they handle non-English texts. The other was the specific *restriction* of the network itself that hurts in particular non-English languages.

Vikør explained that computers usually transmit each letter in a text as a numeric value, and the correspondence between the letters and numeric values are called character sets. In the case of the Net, the type of computer at the other end of the cable is unknown. Hence, technical confusion occurs and affects communication between different computers as result of the various codes.

LangBox International, a company specializing in operating systems and software applications is one of very few companies attempted to develop multilingual packages. One of the problems facing the company has been the complexity of the text because Arabic is a calligraphic language where an Arabic character may take one, two, or sometimes four different shapes and the shape of the character is determined depending on its position in the word. Figure 7 shows a sample for the '*Bah*' (B) Arabic letter in its four different shapes, isolated, initial, middle and final. Also multiple characters can be combined into a single ligature glyph. Not only this, direction of writing is different. Arabic text is written from right to left, opposite to most languages, which can cause complications when mixing text languages in one electronic text file (LangBox.com, 2000). This confusion is even greater in the case of HTML where there is no general agreement amongst manufacturers to built their systems on one standard code (see Table 8).

Figure 7: Different Arabic letter shapes



Thus, the question of what kind of Arabic (code) should be used is not yet settled, and there is a silent struggle between Microsoft Arabic Windows and the rest of the world. According to Vikør this has led many publishers to publish their Arabic online publications as "pictures", which can be displayed in any browser that displays pictures, whether or not it has any Arabic capability (Vikør, 1997).

Table 8: Arabic computer codes

Code	Description
ISO 8859-6	The standard 8-bit encoding scheme for Arabic
ISO 8859-6 Mac	Is a superset of ISO 8859-6
ASMO 708 Arabic DOS Code	Also based on ISO 8859-6.
Arabic Windows code	Based on the ISO 8859-1 (Latin 1) standard.
Windows 95 /98 code -1256	Also Adds support for Persian characters.

In this electronic environment, Arab e-newspapers' adoption of certain formats has been circumscribed in three main ways (or a combinations of these ways) to publish their Arabic content online:

1- Arabic text coded in HTML which requires an Arabic supported browser to read. As demonstrated the coding and displaying of Arabic (HTML) text is still be a major issue. Yet, recently, new Arabic Windows (Versions, 95, 98 and 2000) and Microsoft Office applications environments have partly solved the problem (see Figure 8). Arabic coded in HTML can be read (with Internet Explorer) and processed (with FrontPage Express) much better than before. Nonetheless the advantages offered by the high priced Arabic version of Windows are minimal compared to the 'small but reliable, low-price tools running in a European version' (Barontini 1998). Furthermore they need more processing by the user, who must cut 'n' paste or Drag & Drop frequently.

Although Arabic text coded in HTML seems to be complex at a first glance it has the advantage of being very fast and productive for regular visits and for large text downloads. Compatibility, however, is at risk because solutions are built upon various methods, for instance Unix and Macintosh use the ISO standard codepage *ISO 8859/6*

Latin/Arabic while Windows uses its own non-standard *CP 1256 Latin/Arabic* codepage (Barontini, 1998).

Figure 8: *Al-riyadh* newspaper in HTML format

2- Scanned GIF image. The Graphic Interchange Format is a common format for image files, especially suitable for images containing large areas of the same colour. Many Arabic newspapers employ graphics to overcome the problem of viewing Arabic text. They usually scan Arabic text pages as they are, and post them to the Net as GIF files. With this format the reader can read the newspaper regardless of the language of his/her operating system, but the pages can only be

read as a text image and cannot be copied or saved for word processing (see Figure 9).

Figure 9: Gif (scanned) format for the front page of the Kuwaiti daily *Al-seassah*.

3-Portable Document Format [File] (PDF). This is one of the most popular methods used by Arab sites to overcome the problem of viewing the text. With the proper Acrobat Reader®, the text is displayed the same way on all systems and the programme prints virtually any Arabic font perfectly. However, the problem with PDF is that the reader must first wait for the file to be downloaded completely and

then special software (Acrobat Reader) integrated with the browser, loads automatically to read the file. Further, the user needs to do a lot of scrolling to read PDF in larger documents. Another major weakness in Acrobat (Reader) is that the word or text string search feature performs incorrectly with Arabic characters in PDF files. Arabic text cannot be copied out of a PDF file and pasted into a word processor document. So far, only Adobe.com has the type of program needed for viewing PDF files, (see Figure 10).

Figure 10: *Al-hayat* in PDF (Portable Document Format)

5.2.3.2 Analysis of Arab Newspapers Text Format

As can be seen in Table 9, Arab newspapers which employ text images (GIF format) ranked first (35.4%), followed by 10 (20.8%) use PDF system for publishing their content online. The analysis shows that only 10 newspapers (16.7%) appear in Arabic HTML text only. Naturally the seven English (12.5%) newspapers appear in English text where English does no share the difficulties of Arabic text. Some other newspapers combined two different formats.

Table 9: Text format

Text Format	Percent	Cumulative Percent
Text image	35.4	52.1
PDF	20.8	79.2
Arabic HTML text	16.7	16.7
English text	14.6	100
Text & text image	6.3	58.3
Text image& PDF	6.3	85.4

5.2.4 Services

The Internet is believed to be the environment where almost all information services and (multi)media features can meet and function. A close look at a website like CNN.COM can validate this claim as the user can listen, watch, read and search for news stories that are updated around the hour. Moreover, with the CNN website, the visitor can customise his/her daily news preferences and choose the way he/she wishes to receive his/her tailored news bulletin.

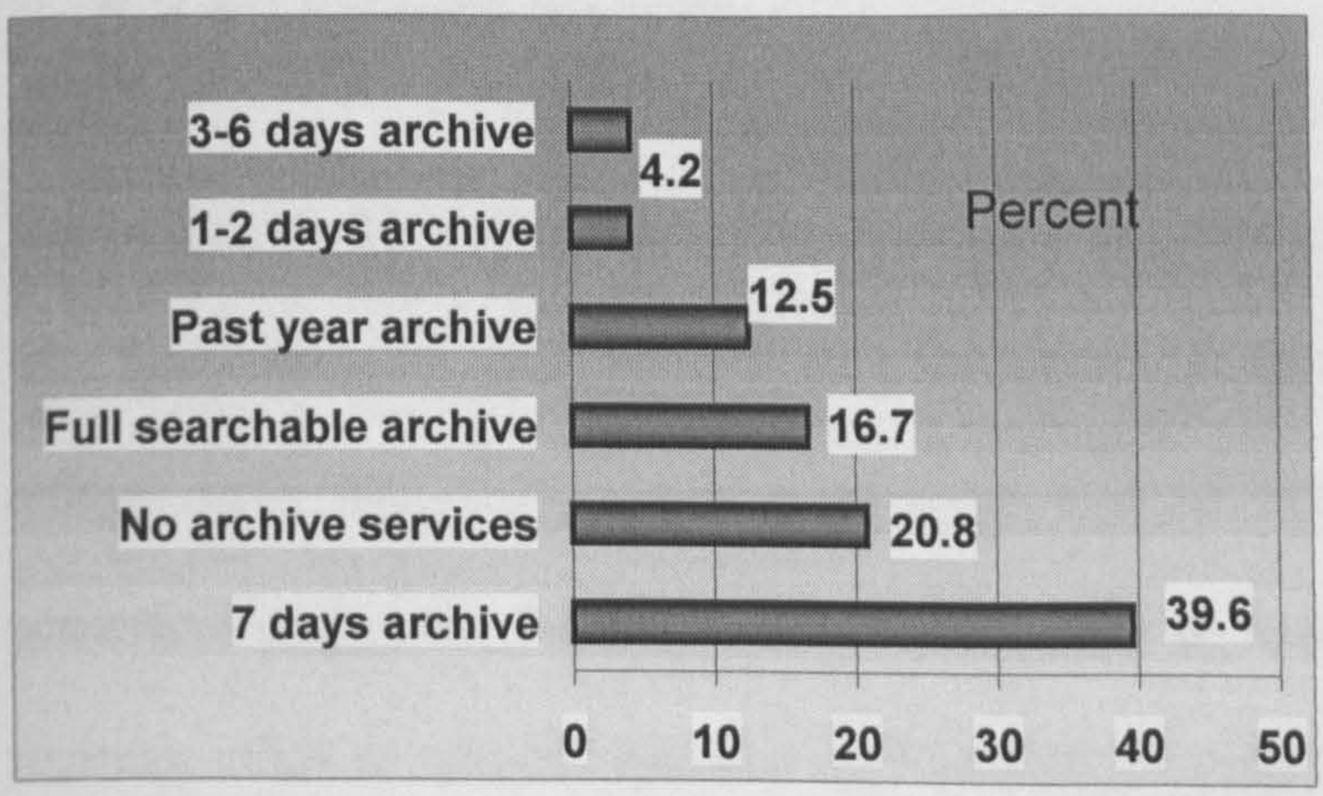
Yet, the analysis of Arab newspapers websites revealed that this concept is unattainable and in most cases, these sites lack technical support and appear in a

humble presentation. So far very few newspapers seem to have started exploiting the great potential of Internet services.

5.2.4.1 Archive Services

The analysis of newspaper websites, shows that most Arab newspapers (79.3%) provide archive services to their readers ranging from 1-2 days archive to full searchable archives which are provided by 8 newspapers (see Figure 11). However two in five newspapers (39.6%) provided seven days archive or what is known as "past week issues". Six newspapers had archives for the past year and with equal ratio the 1-2 days archive and the 3-6 days archive services are offered by 4 newspapers. One newspaper was found to have an archive of six months. However, only eight newspapers (16.7%) offered full searchable services while two in five (39.6%) of these online publications offered seven days back issues online. In contrast, one in five (20.8%) newspapers appeared to have no archive services of any kind on their websites.

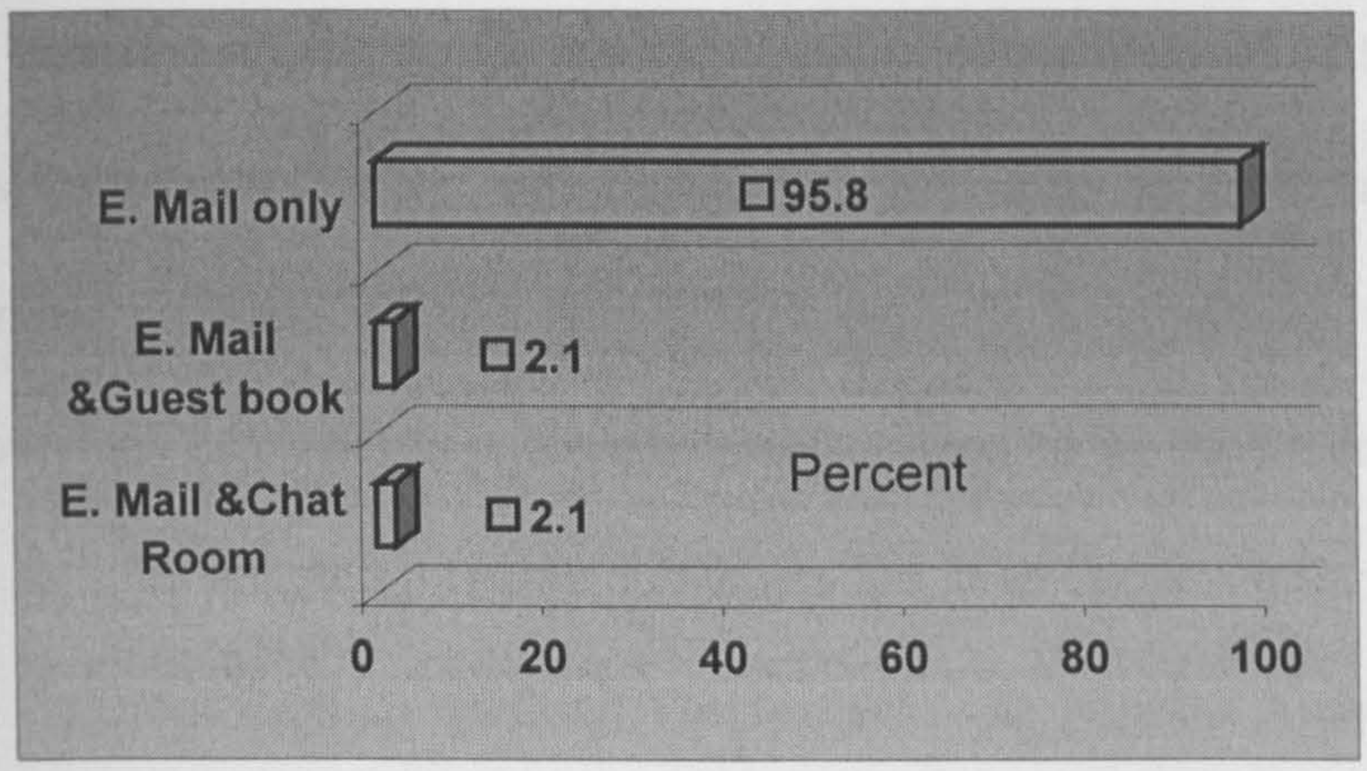
Figure 11: Archives service



5.2.4.2 Interaction With Readers

In order to see how Arab newspapers interact with its readers and to explore the extent they use Internet interactive applications, interactive communications were used as one of the variables of analysis. E-mail was identified easily in all analysed sites. A guest book facility was also provided by one newspaper along with e-mail addresses. Only one newspaper offered Chat Room that enabled instant chat between readers and journalists and where readers themselves could exchange ideas and information, though, the room was silent most weekdays, (see Figure 12).

Figure 12: Interactive communications



5.2.5 Domain Names

The Internet is divided into smaller sets known as domains, including .com (business), .gov (government), .edu (educational) and others. A domain name is defined as the unique name that allows users to reference Internet sites without knowing the true numerical addresses. Domain names consist of at least two parts. The left most segment refers to specific machines, while the right most portion refers to the network

hierarchy to which the machine belongs such as CNN.COM. Most countries also have a domain. For example, UK (United Kingdom), SA (Saudi Arabia), and .EG (Egypt). There is an organization called InterNIC that registers domain names for a small fee and keeps people from registering the same name.

InterNIC policy of "first come, first served" in the registration of domain names increasingly led to problems over trademarks, as domains began to be registered that conflicted with registered trademarks. For some this was a flourishing business, because after registering a domain with a famous name, they hope to eventually sell it to the rightful owner of the trademark or trade name.

In this respect registering unique domain names seemed to be one of the important issues faced by many Arab newspapers that carry an exact name in Arabic. Popular Arabic newspapers with names such as, people (*Alshaab*), revolution (*Althawrah*), homeland (*Alwtan*) have already been scooped up by one business or another.

A solution adapted by some publishers has been to use similar-sounding Arabic words in different English spelling. For instance, the popular Arabic name Al-Gumhuryah (*The Republican)* appears as AL-Gomhuria (Egypt), Jumhuriya (Iraq) and al-gumhuryah (Yemen) that gives a similar-sounding domain name in Arabic (see also Table 10).

Although some newspapers with similar names attempted to overcome this domain names dispute by registering for top national domain names under 'sa' for Saudi Arabia, 'eg' for Egypt and so on, the vast majority appeared under international (American) domain names (such as alhayt.com) in an attempt to gain easy

recognition, to benefit from the cheap hosting services in the US and to more easily reach their potential readers outside of their national borders.

Table 10: Examples of newspapers use of similar-sounding domain names

Newspapers			
Alwatan (*Homeland*)	Althwrah (*The Revolution*)	Alshaab (*The People*)	Alayyaum (*Days*)
watanom.com *Oman*	thawra.com Syria	ech-chaab.com *Algeria*	Al-ayyam.com *Palestine*
Al-watan.net *Saudi Arabia*	althawra.com *Yemen*	elshaab.com *Egypt*	Alayam.com *Bahrain*
Al-watan.com/ *Qatar*	nisciraq.net/thawra *Iraq*		Al-ayyam-yemen.com *Yemen*
Alwatan.com.kw *Kuwait*			

5.3 Online Newspapers and Other Web-based Services (Research) Questions

As it has been already demonstrated by analysing online newspaper websites, the author was able to collect more information about all the 48 newspapers including those (n=21) who did not respond to the online questionnaire. This section deals with answers to a group of principal research questions concerning online newspapers. More information was gathered about countries from where those newspapers are published, subscription fees, their number, format, and reading requirements. In addition, this section presents answers to research questions concerning whether these online publications have printed versions and whether they have commercial advertising activities and if so how advertisements are displayed.

5.3.1 How Many Arab Daily Newspapers Exist on the Net? Where are they Issued From? (Q1)

Unlike the rapid growth American and European e-newspapers witnessed especially in the 1990s, Arab online newspapers emerged gradually (see Table 11). By the beginning of the 21st century nearly sixty five Arab e-newspapers were being published in Arabic, English and French. The first Arab newspaper to launch a website was *al-Khaleej* of the UAE in September 1995. In the same year two other newspapers followed; *al-Nahar* (in October) and *al-Sharq al-Awsat* (in December) which are also the first and only two online newspapers to levy fees for reading their full daily content.

As Figure 13 shows, with regard to the online publications now available, the Gulf Sates (Saudi Arabia, Bahrain, Qatar, UAE, Oman and Kuwait) and the Yemen produced nearly 44% of Arab e-newspapers. A further 25% come from Arabic Mediterranean countries (Syria, Lebanon, Jordan and Palestine). The UK is also an important source, publishing nearly half as many as the total from the four Arab countries of North Africa Egypt, (Sudan, Algeria, Morocco).

Interestingly, except for an Iranian official Arabic online daily (*al-Wifaq*), (not included in the study) no single Arab(ic) online daily was found to be published from North America (USA & Canada) the birth place of the Internet, where also one of the largest and well-established Arab communities outside the Arab World lived. Six Arab countries were not represented in the online daily publishing world (Somalia, Djibouti, Comoros, Mauritania, Tunisia, Algeria and Iraq).

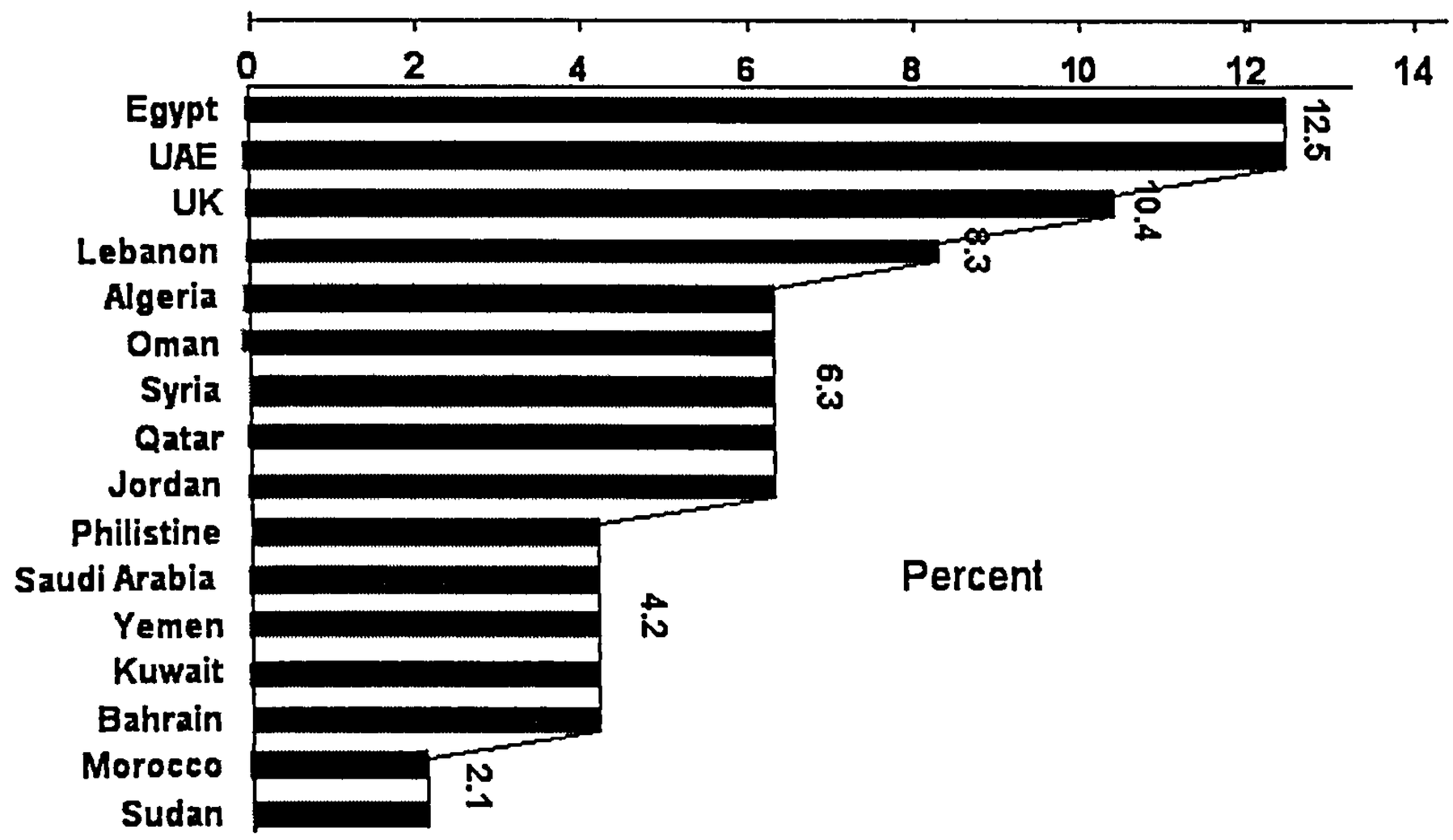
Table 11: E-newspapers country of origin

Year	Newspaper	Month	Country of Origin
1995	Alkhaleej	9	UAE
	Alnahar	10	Lebanon
	Asharq Alawsat	12	UK
1996	Al-ayam	1	Bahrain
	Ad-dustour	2	Jordan
	Alittihad	3	UAE
	Al-Ayyam	6	Palestine
	Al-Hayat	6	UK
	Al-safier	8	Lebanon
	Jordan Times	10	Jordan
	Al-watan	10	Kuwait
1997	Alarab	1	UK
	Azzaman	1	UK
	Gulf Times	4	Qatar
	ALQabas	6	Kuwait
	Alanbaa	7	Morocco
	Alwatan	7	Oman
	Al-Jazirah	9	Saudi Arabia
	Al-Rayah	12	Qatar
	The Daily Star	12	Lebanon
1998	Al-Sharq	6	Qatar
	Tashreen	6	Syria
	Alqudos	7	Palestine
	Al-Ahram	8	Egypt
1999	Al-Riyadh	3	Saudi Arabia
	AL-Rayyam	3	Sudan

However Iraqi publishers[1] (mainly government organs) have started recently to put out online stories, updated three or four times a week hosted by slow servers and poorly presented. Although Tunisia has a reasonable presence on the Internet, most of its news websites appeared in French, including two online dailies. Arabic news appeared once or twice a week in websites of two Tunisian national printed dailies *al-Sahafa* and *al-Sabah* in a somewhat crude format.

[1] The Iraqi authorities launched in the eve of the year 2000 a number of semi-daily publications based on daily prints such as *Babil, al-Jumhuriya , al- Qadissiya and al-Thawra* and from Muritania two semi-daily(*RajulShar'a* and *Estiqlal*) appeared around the same date .

Figure 13: Countries where online newspapers published



5.3.2 What are the technical Formats of these Papers? How Can the User Read them? (Q2)

Although this question has been partly and indirectly answered through the demonstration of newspapers' websites format, the simple technical fact is that the type of format a newspaper adapted is determined by the type of software or plug-in needed (available) to view its content.

The analysis of Arab online newspapers, however, showed that the scanned texts that appear in GIF or PDF files are the most popular methods used for displaying Arabic newspapers content. Close to six in ten (56.7%) newspapers employed either scanned text (35.4%) that appear in GIF files or PDF files that can be read by small utility software called AcroRead. All newspapers using this method were Arabic speaking publications. The analysis revealed that only eight newspapers (16.7%) adopted

Arabic text and smaller group of three newspapers offered a combination of the two formats (text and scanned images).

Hence, newspapers that use **GIF** files need an advanced browser that enables (text) images to be seen and it was obvious that the two dominant browsers i.e., Netscape and Internet Explorer, have fulfilled this need. As the GIF format is designed to display pictures, not letters, the user needs a graphics programme to save and view the GIF file he/she wishes to see in isolation of the web browser. On the other hand, the **PDF** formatted newspaper cannot be displayed without an Adobe Systems Acrobat Reader. The newspaper in PDF format can be viewed, navigated, and printed from any computer regardless of the fonts or software programs used to create the original. One of the advantages of PDF format is that Adobe's Acrobat Reader software is free and downloadable from the company's website and is available for Macintosh, Windows, and Unix.

Yet, unlike HTML, PDF-format lacks the flexibility of using hypermedia capabilities (though this is improving in newer versions of PDF). Although PDF preserves the appearance of the original document, it seems to act more as an electronic photocopy of the document, hence, PDF files cannot be indexed by most Web search engines, and for the user, files can be slow to download.

The **HTML** format that has been utilised by some Arab newspaper requires an Arabic-enabled browser to view the text in its written fonts, though, it cannot be copied or dealt with unless the user has an Arabic operating system. HTML is, in many ways, more convenient for the user, quick to download and supported by all Arabic-enabled browsers without the need for any special plug-ins. Unlike PDF, that

preserves the fonts, formatting, colours, and graphics of a source document, HTML is not capable of displaying the layout that the publisher wants. Further, the HTML presentation may look different from one screen to another depending upon a browser's pre-set options in terms of colours, font type and size and user's screen resolution. The following browsers are the most widely used readers to view Arabic HTML coded text:

- Sindbad Arabic: (Windows, Mac, UNIX) this is not a browser by itself. It is an add-on developed by the Arab IT company *Sakhr* that can be used with Netscape Navigator. Sindbad Arabises the interface of Navigator browser and its suite of software including the HTML composer, and the newsgroup reader. It supports Arabic e-mail and chat in Arabic, yet, this software has many technical and operational weakness and often crashes the system or freezes the screen.

- AraMosaic: this browser enables Arabic text to be viewable on Arabic Unix systems. But it does not support frames, execute Java (Applets or Scripts) and ActiveX (controls and components) which are vital for most online services.

- Tango is a stand alone browsers from *Alis Technologies* (http://www.alis.com/). This is a multilingual web browser that enables the user to surf the web and read tens of different languages including Arabic. Also included a multilingual e-mail client that allows user to create, send and receive e-mail in many languages. This browser supports Arabic in a Windows environment only.

- Internet with an Accent from *Accentsoft* (http://www.accentsoft.com). Arabic is bundled with other languages that the user can chose from when installing the software in a Windows environment. So far this has proved unpopular.

- Microsoft Internet Explorer (IE) (Windows, Mac, UNIX): This is probably the best browser as it does not require plug-ins or additional downloads, it is distributed for free, and has comparable features and capabilities to Navigator. The full version of IE contains a software bundle for text chatting, video conferencing, e-mail reader and HTML composer. Some sites are best explored using Internet Explorer because of features such as ActiveX and Microsoft's implementation of dynamic HTML. The latest version is Internet Explorer (5.01) for the Windows, Mac and UNIX platform which contains links to streaming video, audio, and radio sites. The most celebrated feature in this version is its excellent support for Arabic text on non-Arabic operating systems. Hence, it is recommended by most Web developers and is expected to sweep away any other competitors.

5.3.3 Is There Any Charge for the Press Services? How is it Collected? (Q3)

The analysis of the 48 online newspaper sites as well as the responses collected from participant publishers in the publishers' survey supported by previous studies indicated that subscription to e- newspapers is still a bothersome issue for both content producers and Internet users. So far only two Arab newspapers (*al-Sharq Al-awsa* and *al-Nahar*) ask for fees, nonetheless the trial proved to be unsuccessful. As Mohammad Alagha the supervisor of the electronic version of *al-Sharq Al-awsat*,

stated in the editors' interviews, the newspaper experience in levying fees has been a failure by all measures. Only few subscribers were now paying the fees.

The way these two newspapers collect fees is similar. *Al-Sharq Al-awsat* follows a very simple and straightforward method for subscription. The user needs only to fill out an online secured form with his/her credit card details and choose his/her preferred user name and password. The fee and period fall into three categories: 1) £9 for 3 months, 2) £16 for 6 months, 3) and £30 for a full year.

The newspaper handles all the transactions via a middle company that developed a new system for online payments called NetBanx in 1996. This system allows any website to start taking payments online with credit and debit cards and clears card transactions in seconds. Cardholder accounts are directly debited in a way similar to the card swipe machines used by retailers when processing payment by credit or debit cards.

The second newspaper (*al-Nahar*) uses a similar online form but, with an interesting notice that says: 'Please note that, by emailing this form, the information you wrote above is not secured and could be monitored hence, for security reasons, it is advisable to fax this form'. The pricing of the newspaper content is similar in terms of subscription periods to that of *al-Sharq Al-awsat* but higher in the amounts. For a full year *al-Nahar* asks for $125, $65 for six months and $35 for three months subscription. The subscriber can then read the full content of the newspaper in PDF. The newspaper offers the paper to students for $60 a year. The newspaper has a service called 'information on demand'. This service divides and sells the newspaper

by sections as follows: *Local News* $35, *Economics* $20, *Articles* $20, *Middle East news* $20, *Analysis* $15, and $15 to read the *Sports* section. The relatively high price of the local news could be attributed to the newspaper's realisation of the high demand for this type of news which in someway confirms the argument that local content is an important factor for small Internet newspapers hoping to be read globally.

5.3.4 Do they Have Commercial Advertisements? How are they Presented? (Q4)

Newspapers, magazines and commercial television are still the dominant advertising media in the Arab World. Internet-based advertising is in a nascent stage. Even so, online advertising revenue grew 141 per cent in 1999 over the $1.92 billion reported for 1998, ending the year at an impressive $4.62 billion according to a study conducted independently by the Internet Advertising Bureau's (IAB, 2000). Nevertheless, from the overall analysis of the Arab newspapers' websites, it was clear that advertising in Arab online publications was negligible and no single Arab online newspaper reported revenue from online advertising.

Most of the very few banners some Arab newspapers show on their websites are either for the purpose of self-promotion, adverts for and from the host or the designer of the paper's website or, as the case of the Saudi *al-Jazirah*, a compliment from the paper to its big advertisers. While some newspapers display commercial banners, most of these banners are unpaid adverts from web-based services that enable websites to exchange commercial adverts. Only three newspapers were identified that

had announced policies regarding advertisements linked to the papers' home pages. These newspapers are *al-Sharq Al-awsat*, *al-Anwar* and *al-Nahar*.

The pricing of online adverts space varies to a great extent from one newspaper to another (see Appendix K) and it was clear that there is no defined mechanism(s) or baseline model for displaying advertisements in terms of place and size of the banners and thus no standardized measurements that could guide advertisers to identify and reach targeted audience.

In *al-Sharq Al-awsat* the online advertising policy seemed to be extemporary rather than a planned and specific strategy, reflecting the state of the absent market. From a look at the newspaper's online adverts classification it was obvious that there was no technical or practical standard. For example, the paper specifies an *electronic* advert that is to be displayed *electronically*, in terms like: " all banners will have the width of an A4 page" or "adding links to other websites will have to be agreed on a customer basis".

A more Internet compatible policy has been introduced by *al-Anwar* that prices online adverts at $35 per thousand random page views. Yet the price varies with the location of advert in the paper's different sections. Interestingly, *al-Anwar*, advertisers can also sponsor certain sections and special features of the paper. Moreover, the newspaper announces publicly in its website that it offers its 20,000 customers e-mail address database to its potential advertisers, a policy which raises the long-debated issue of the privacy of online customers.

The third newspaper *al-Nahar,* which is the second of only two Arab online newspaper that levy fees for reading its full content, has a similar policy to that of *al-Anwar.* It prices the online banners according to the sections of the paper in which they are placed. Unlike *al-Sharq Al-awsat,* only one standard banner format is accepted by *al-Nahar* which is 200 X 50 pixels in GIF format (Maximum size 10k for still picture and 20k for animated files). As already indicated, however, the analysis of the Arab online newspaper showed no signs of any paid banners in any of the 48 newspapers' websites.

5.3.5 What Other News Services are Available to Arab Users of the Internet? (Q5)

5.3.5.1 Introduction

The analysis of Internet news sources also investigated Arabic Web-based news services other than e-newspapers, such as Arabic news websites, news agencies on the Internet and online TV & radio stations that provide daily Arabic news. This analysis revealed many alternative, reliable and well-structured Arabic news resources on the World Wide Web. They appeared in various formats, from plain text with few pictures (such as most Arab official news agencies), to news stories that include audio and video clips (BBC Arabic site). The main categories of online news sources are examined below.

5.3.5.2 Web-based News Sites

Although most of these Web pages offer their services for free, some of the specific sites require registration or subscription to be able to view the full text of their stories. Most of these sites can be advantageous for an Arab reader who wishes to keep up with the latest headlines (Table 12).

The first Internet news site, **Moheet** (*comprehensive*) is a completely free and useful site for regional and international news in Arabic, located in Egypt, and owned by a Saudi IT company. The website divides its news content sections into: Arabic affairs, international affaires, economy & business, sports, family & community, Islam, culture, computer & communication, science, cars, books, travel, facts & figures, world gallery, headlines, press briefs and special reports.

Arabia Online was one of the first Arabic websites that attempted to put an Arab news gateway on the Web. This Saudi-Jordanian joined venture company operates a successful and a professional free Arabic and English dynamic, online news site. The company aims to reach Arabs inside and outside the Arab World, as well as international audiences with an interest in the Middle East. The daily content is divided into many main sections titled: news, sports, business, technology, Arabia life, weather, shopping, horoscopes, poll centre and millennium section. The site also offers instant chat, free Web-based e-mail account, free homepages space and interest groups mailing lists facilities. Arabia Online is believed to be the only Arabic news service on the Internet that offers this full range of personalised services including customised news and personalised e-mail news bulletin.

Table 12: Arabic Web-based news sites

Name of the Site	Country	URL
Moheet	Egypt	http://www.moheet.com
Arabia.On.Line	Jordan	http://www.arabia.com
Access to Arabia	Jordan	http://www. accessme.com
Naseej	Saudi Arabia	http://www.naseej.com/news
Awalnet	Saudi Arabia	http://www.e-arabicnews.com
Kul-alakhbar	Saudi Arabia	http://www.kul-alakhbar.com
BBC Arabic Service	UK	http://news.bbc.co.uk/hi/arabic
Arabic news	USA	http://www.arabicnews.com
Planet Arabia	USA	http://www.planetarabia.com

Naseej (*Web*) is the oldest news website that is based in Saudi Arabia. This website is administrated by the leading Internet services provider, Arabian Advanced Systems in Saudi Arabia. The site provides daily news in Arabic and summaries of top news stories in English as well as a daily summary of most Arab mainstream press. The company also provides links to more than 20 daily, weekly and monthly magazines that are hosted by the company's servers.

Arabic news is an Arab-American company that operates from Ohio -USA- and one of the most organised and commercially designed Arabic sites. Besides its daily free news summaries, it offers two main services: 1) free email subscription to receive its daily news bulletin plus news specific to one country of interest 2) a paid subscription that allows access to the full site which includes many stories not available through unpaid service. ArabicNews.com claims to have a high ratio of readers who constitute decision-makers in business and government. The company seems to have a clear advertising policy that depends on standard Internet banners (468 by 60 Pixel) and long-term sponsorship of its different sections (the front page, weather page, story pages, recipe pages, etc.).

Because it offer its content in English, the site is the only Arabic site that states clearly that it is accessible through IBM compatible PC Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows 2000 and Windows NT, Apple Macintosh and SUN Java and UNIX browsers and DOS, and may be available through Active-x Microsoft Explorer and Netscape Navigator and communicator with channel and Pointcast support.

Awalnet (*First Net*) news website is operated by Awalnet, a major ISP in Saudi Arabia. This site specialises in technology news with updated daily content in Arabic and English. Awalnet operates a comprehensive news website called **Kul-alakhbar** (*All the News*). This website slogan is: "All news for all Arabs". Kul-AlAkhbar site says about itself "one of the international news sites that covers all world news while concentrating on the Arab World news in all its aspects". The site's main goal is to cover issues that are of interest to the Arabic reader. The company claims to cover news and events from more than 300 Arabic and international sources. Kul-Alkhabar divides its sections into: international issues, Arabic issues, business & economics, health & medicine, science & technology, the book world, culture & art, and religion & travel section.

BBC Arabic Service. In continuation of its success in providing highly regarded radio news services in Arabic, the BBC launched its Arabic site as one of the most reliable and comprehensive news sites in the Arabic language to appear on the Internet. The BBC has nearly 100 experienced journalists working around the clock to put together text, audio and video from the vast range of material that comes in every day. The BBC is one of the world's biggest and oldest news providers, and a very well-known news source to Arabic audiences for decades.

Access to Arabia is another news service offered by the Jordanian ISP Access Me. The company offers news stories in Arabic and English that focus on Middle East issues and news. The site also offers a daily selection of Arab and international stories selected from CNN, Arabicnews.com, and many other news wire services.

Planet Arabia is another US based Arab company. The founders of this site aim to make Planetarabia.com the Internet destination for Arab communities, businesses and individuals interested in the Arab World. The site provides a number of diverse services to the Arab community in the USA including the latest news, weather forecasts updated around the clock, free Web-based e-mail, personal ads and discussion boards.

5.3.5.3 Arab and Arabic News Agencies on the Internet

"I doubt if there has ever been a more exciting time for news agencies and for journalists as we find ourselves now in this age of new media. ... We news agencies are going through a period of fundamental change, not so much in the way we collect news as in the way we present it"
Monique Villa Director, Strategy Development, AFP (Agence France Presse)

This quotation succinctly summarises the challenge that the information and news industry is experiencing in relation to the Internet. This challenge has led some of them to rethink the way they do business and, in some cases to rethink their entire profession. Monique Villa commented further: 'We ourselves at AFP have been through long periods of self-doubt .... how to position ourselves on the Internet is still an unresolved question'. But how have news agencies reacted to these changes? According to Villa, "some news agencies in Europe and elsewhere remain ultra-cautious about what content they will allow on to the Web"(Villa, 1999).

Nonetheless, Chagas (1999) assessed comments made by representatives of the Associated Press (AP), Reuters, Agence France Presse (AFP), and the Press Association (PA) who met together at the NetMedia99 conference to discuss the past and future prospects of news agencies and found that 'all of them agreed on one thing - traditional journalistic skills are still a very valuable commodity in online media. ' But the editing skills, the way to present something well on a screen is now very important as well,' according to Mark Hird, the PA's New Media director (Chagas, 1999).

Internet challenges to news agencies was also top of the agenda during a meeting of delegates to the Executive Board of the Organisation of Asia-Pacific News Agencies (OANA) in Haø Noäi (October 1999). For example, Wang Zongyin of the Chinese *Xinhua* news agency pointed out that the challenges facing his agency are fivefold: 1) all government agencies are going online; 2) a growing number of news organisations have online presence; 3) a number of commercial websites are providing news; 4) large enterprises now have their own websites; and 5) above all, foreign information service providers are co-operating with Chinese commercial websites or launching Chinese-language online services on their own websites (Vietnam News, 1999).

Kim Chong Chol, President of the Korean News agency (*Yonhap*), observed that OANA members, including his own agency, 'stand at the cross-roads' because of the' information revolution' and the Internet. Yet for news agencies to survive, the 'revolutionary' solution suggested by Chol, is to 'counter the challenges straight to their face and actively'. The *Kyodo News* (Japan) response to the online world has been even stronger. For the first time in its 50 years history, the agency began to review its legal status as a non-profit, co-operative news agency, according to its President Ichiro Saita (Vietnam News, 1999).

On the Arabic scene, the challenge before news agencies does not only stem from the Internet. In 1996, the UNESCO report *'Information and Communication Technologies in Development'* that attempted to identify obstacles to applying telecommunications-based technologies in the 3rd World including Arab countries, found that:

> *"Third World news agencies are confronted with high costs for telecommunications combined with obsolete technologies and software, which have serious implications not only for the quality of information that is being reported and but also for the very survival of the agencies"*. (UNESCO, 1996 p: 13)

Most Arab news agencies remain poorly organised to adapt to the online news revolution. In comparison, foreign news agencies that serve the region are well prepared in this arena. The most obvious example is Reuters Arabic Online. This name has been recognised for many years as the World's leading news agency. For decades the agency has provided news in Arabic to and about nearly all Arab countries. The service targets specific customers in the Arab World such as newspapers, radio and TV stations and even national news agencies. Reuters entered the field of Internet news services from the early days of the Internet and its online service is accessable by the public. Reuters Arabic site is registered with an Egyptian domain name (Reuters.com.eg) and provides a daily content in Arabic. Reuters claims to employ nearly 130 people from 24 nationalities in the Arab World. Its business offices are located in Abu Dhabi, Dubai (UAE) Khobar, Jeddah, Riyadh (Saudi Arabia) Kuwait, and Oman and news bureau in Bahrain.

All governments of the region supervise and own the national news agencies with no single Arab news agency being run by the private sector. Yet, since the introduction of the Net and due to its open nature, most governments have had no option but to participate in the Internet race (see Table 13). An analysis of Arabic news resources identified some of these agencies.

Qatar News Agency (QNA), the official Qatari government news agency launched a website which offers daily content in English (only) divided into seven sections: local news, world news, economy, culture, sports, today's photo and events of the day. In a like manner **Iraq News Agency** offers a slow and poorly designed website with local

daily content in English and an Arabic news bulletin, reflecting the Iraqi government's activities.

Perta News Agency, the Jordanian official news agency (Petra) website offers the typical daily menu of news content in Arabic and English covering Jordanian, Middle-eastern, and international event. Yet, the Petra website design and volume of content surpasses many of its rivals in the region. The agency also announced clear policy in Internet news provision through an assigned staff in its Internet Department who prepare news bulletins in Arabic and English and transmit the daily news stories to the agency's online sections. The agency also offers a daily general bulletin in Arabic and in English, a restricted bulletin (for subscribers).

Table 13: Arabic online news agencies

Name of the Site	Country	URL
Algerian News Agency (APS)	Algeria	http://www.aps.dz/
Iraq News Agency	Iraq	http://www.nisciraq.net/iraq
Kuwait News Agency (KUNA	Kuwait	http://www.kuna.net.kw/
Morocco Arab Press	Morocco	http://www.map.co.ma/
National news Agency	Lebanon	http://www.nna-leb.gov.lb/
Oman News Agency	Oman	http://www. omannews.com/
Palestine News Agency (WAFA)	Palestine	http://www. Wafa.pna.net
Perta News Agency	Jordan	http://www.petra.gov.jo/
Qatar News Agency	Qatar	http://www.qatarnewsagency.com
Reuters Arabic services	Egypt	http://www.reuters.com.eg/
Saudi Press Agency (SPA)	Saudi Arabia	http://www.spa.gov.sa/
Sudan News Agency (SUNA)	Sudan	http://www. sudanet.net/suna
Syrian Arab News Agency	Syria	http://www.sana.org/
The Middle East News Agency	Egypt	http://www.mena.org.eg/
Yemen News Agency	Yemen	http://www. sabanews.gov.ye/

The **Saudi Press Agency** (SPA the Saudi government official news agency) website offers Arabic and English daily news coverage of most Saudi government activities. The agency announced that nearly eighty per cent of the English news coverage is

about Saudi Arabia while the rest of the news highlights the GCC (Gulf Cooperation Council), the Arab League, and other major developments in the regional, Arab, Islamic, and international arena.

The **Syrian Arab News Agency** (SANA) is also another government organ that has a website that offers a news bulletin in Arabic, English and French covering many aspects of Syrian daily life including government activities, news updates, news analyses, reports, press review and news headlines. The website content is accessible for free with no restrictions.

The Middle East News Agency (MENA) is one of the oldest official news agencies in the Arab World (established in 1955). The agency offers to the Internet audience daily news stories in three languages (Arabic, English and French) as well as reviews of the major Egyptian press in Arabic and English.

The **Omani News Agency,** the official news agency of the Sultanate of Oman, posts a daily news bulletin in Arabic and English on the Internet. However, the agency website is poorly designed and has very limited content.

The **Yemen News Agency,** (SABA), is the official agency of the republic of Yemen. Its website offers daily content in Arabic and English as well as an archive covering news for the past month. Most stories cover the official activities of the government and its ministers.

The Bahraini **Gulf News Agency** website offers similar content to that offered by most other official news agencies, such as daily news coverage that appears in Arabic

and English. Likewise, the **Palestine News Agency** (WAFA) that is operated by the Palestine National Authority, offers daily content in Arabic and English focused mainly on the peace process in the Middle East. Similarly, the **Morocco Arab Press** agency official website provides a daily news bulletin in Arabic (via e-mail) English and French. The agency however has a unique service as its archive can be searched from 1997 to the present day for free. Besides its daily news content in Arabic, English and French the **National news Agency** (Lebanon) website is the only Arab agency (with the exception of the Kuwaiti agency) that allows users to listen to news bulletin updated three times a day.

The **Algerian News Agency** (APS) and the **Sudan News Agency** (SUNA), like most of the above governmental-owned news agencies, offer typical daily content in Arabic, English and French (from APS only), covering local, regional and international news.

In contrast to most Arab news agencies the Kuwaiti **News Agency** (KUNA) website is almost certainly the most organised and well-established site. Although it is controlled by the Kuwaiti government, KUNA provides daily multi-views comprehensive content in Arabic and English. It also offers 10 updated audio news bulletins in international news and six audio bulletins of local news. Its special services for subscribers offer more detailed stories and services such as archive and photo archive searching and especial reports, Gulf newspapers headlines and foreign press review.

5.3.5.4 Online TV & Radio Stations

5.3.5.4.1 Introduction

Until recently broadcast and print media were the main sources for news consumers. Television and radio surpassed print as the quickest forms of transmitting information, but print was able to convey larger quantities of news. However, the shift to the Internet as a mass communication medium and the wide acceptance of its news delivery services, is a serious threat to the dominance of these traditional forms of mass media (Lapham, 1995).

Optimistically, however, Richard V. Ducey Vice President of the Research and Information Group at the American National Association of Broadcasters has stated that there is "a synergy between broadcasting and the Internet which may well be a critical success factor for future growth" (Ducey, 1996p.1). Addressing the annual meeting of the Internet Society, Ducey emphasises that "even with all the speculation and initial success of the Internet and online services generally, the main conduit into our lives for electronically distributed information and entertainment will remain radio and television broadcasting".

Yet, the limitation of traditional media is that it is optimised for a particular kind of communication. The Internet, however, can handle various news formats representing a convergence of traditionally separate means of computers, communication, telecommunications, broadcasting and publishing.

In recognition of the potential significance of the Internet as a news carrier, newspapers have rapidly launched themselves onto the Web, the world over. Broadcast media, likewise, joined this race. By April 2000, the database for *Editor & Publisher* online (Mediainfo.com) offered links to 1,895 radio stations sites and 1,305 television sites (see Table 14). These statistics show a remarkable growth in the use of the Internet by broadcast media. Users, on the other hand, are expected to grow as well. According to a research released in January 1999 by Edison Media Research/Arbitron, online radio listenership among web users has grown from 18 to 30 per cent in one year. The same researcher found also, that 35 per cent of (American) online users said they are watching less TV due to their usage of the Internet (Arbitron.com,1999). Yet, according to Berry (1999), although online TV and radio websites may have audio or video files, for the most part they still exhibit a very print-oriented design. He illustrated this point with reference to the websites of CNN, and MSNBC (NBC news) that contain links to the main news topics and to news programs regularly appearing on these networks. When following these links to more detailed content about the stories, one finds full-text transcripts with photo enhancements that look very much like a traditional newspaper or newsmagazine.

Table 14: Online TV and radio stations as of April 2000

Region	No. of Radio Stations	No. of Television Sites
Africa	27	9
Asia	144	66
Canada	131	1
Caribbean	5	5
Europe	221	170
Middle East	8	11
Oceania	71	29
S. America	24	28
U.S.	1,264	986
Total	1,895	1,305

Source: Editor & Publisher database (mediainfo.com)

5.3.5.4.2 Online Arabic TV and Radio Stations

In this wave of communication and media development, it seems that Arab TV and radio stations have had no option but to comply with this new technological determinism. Hence, the growing number of Arabic broadcasting stations that provide online news and live transmission on the Net is creating further competition for online newspapers.

Slater (1997) identified two groups of broadcasting activity on the Net. The first group is the traditional over-the-air radio broadcaster who via "real-time" transmits the actual broadcast signal on the Internet from the station's website. The second group is the Internet-only broadcaster who via real-time transmits programming from a website.

In the case of Arab TV and Radio stations on the Net, the latter group is totally absent. Below is a list of some identified Arab and Arabic radio (Table 15) and TV stations (Table 16) that have an Internet presence, providing daily web-based news services to the Arab community.

Table 15: Arab and Arabic radio stations on the Web

Name of the Station	Country	Language	Wed Address (URL)
Morocco Radio	Morocco	AR/FR	http://www.maroc.net/rc/
Kuwait Radio	Kuwait	AR	http://www.radiokuwait.org/
Palestine	Palestine	AR	http://www.bailasan.com/pinc/
ANA Radio	USA	AR	http://www.anaradio.com/
Oman Radio	Oman	AR	http://oman-tv.gov.om/
Tunisia Radio	Tunisia	AR/FR	http://www.radiotunis.com/
Radio Egypt	Egypt	AR	http://www.sis.gov.eg/testram/
MBC FM	UK	AR	http://www.mbcfm.com/
Radio Lebanon	Lebanon	AR/FR / EN	http://www.vdl.com.lb/
BBC	UK	AR*	http://www.bbc.co.uk/arabic
Voice of America	USA	AR*	http://www.ibb.gov/programs/
Radio Canada	Canada	AR*	http://www.rcinet.ca/pages/
Germany	Germany	AR*	http://www.dwelle.de/arabic/

AR (Arabic) EN (English) FR (French). * Foreign broadcasters

Table 16: Arabic TV stations on the Web

TV Stations	Country	Language	URL
Saudi TV	Saudi Arabia	AR	http://saudiembassy.net/RealVDO
Morocco TV	Morocco	AR/FR	http://www.tv2m.co.ma/
Jordan TV	Jordan	AR	http://www.jrtv.com/
ANA TV	USA	AR	http://anaradio.com/
Bahrain TV	Bahrain	AR	http://moci.arabian.net/tv.ram
LBC	Lebanon	AR	http://www.dm.net.lb/lbcsat/
Oman TV	Oman	AR	http://www.oman-tv.gov.om/
AlJazeera	Qatar	AR	http://www.aljazeera.net/
Future TV	Lebanon	AR	http://www.future.com.lb/
Tunisia TV	Tunisia	AR	http://www.tunisiatv.com/
Ajman TV	UAE	AR	http://ajmantv.com/
TeleLiban	Lebanon	AR	http://www.tele-liban.com/
MBC Channel	UK	AR	http://www.mbctvsat.com
Sudan TV	Sudan	AR	http://www.sudantv.net

AR (Arabic) EN (English) FR (French).

5.4 Discussion

The most important trend that has been identified is the movement of established Arab printed newspapers towards online publishing, representing most Arab countries. Some of them presented only part of their printed product (a selection of the daily content), others offer all of their content, but in most cases, they appear in the same optical format as in the printed version. In other words, it is obvious that the traditional concepts of (print) journalism and information provision still have a considerable influence over the design and presentation of the daily content in most online newspapers. In this respect, the study has proven that full use of Arabic text to display Arab e-newspapers' content was difficult to achieve. This is a major challenge because Arab newspapers have faced difficult technical obstacles in displaying Arabic text in Internet publishing, an issue which has limited ability to reach a wider audience. Hence, most Arab newspapers have substituted active Arabic text with scanned images of the content either by using scanners or by converting the whole paper into PDF files. This move has proved to be easier and less costly.

Despite the movement towards the Internet, it seems that most Arab news publishers do not have online publishing strategies and it was clear that most of them are unaware of the seriousness of the Internet to their traditional business. Data analysis revealed that only two newspapers charge for reading their content (*al-Sharq Al-awsat* and *Alnahar*). These two papers were also among the 27 newspapers that participated in the publishers' survey that is presented in Chapter 6.

With regard to the services offered, some of those newspapers offered a range of other online services that were not possible in the printed product, such as news archives,

e-mail messaging and to a lesser degree, instant chat facilities and audio/video services. For the latter services, publishers could still include more audio and video on websites to increase their multimedia capacity. But, it was evident the policies of most Arab newspapers so far have been to provide low-cost electronic versions of the printed papers on the Net

The analysis also showed little or no advertising activity in all the online newspapers studied. There will be an important need for online newspapers to develop this part of their business in order to establish a viable revenue stream. Online readers usually expect to receive Internet news for no charge. Online newspapers that require subscriptions from readers may fail to establish sufficient revenue resources to survive.

It may take quite some time for the online publishing sector to gain its share of the advertising spend. It further suggests that there will not be a major shift to online advertising till an Arab online sizable market emerges that would attract advertisers and the online newspaper itself starts to create its own separate identity.

Yet if e-newspapers are seen more as a new product that needs genuine and fresh methods of management, and as more than just a supplement to the main print publication, publishers will need to go beyond the notion of ' let's wait to see', to establish a real presence in cyberspace. Advertisers unwillingness to advertise on online newspapers could be explained by the fact that the size of the audience is what attracts advertisers to pay for online space, and so far, online newspapers have failed to convince advertisers that online advertising would be worth their while. On the other hand building consumer loyalty online is not an easy task for Arab newspapers. Indeed, it has been difficult even for well-established American and European

newspapers. Online consumers are hard to please, hard to be kept loyal and above all unwilling to pay for 'information goods'.

The findings also indicate that online newspapers need to market their product more effectively. But before doing so they must identify a stable mass market and fulfil its needs. They need to be more proactive in operating their business by using market plans, assigning experienced staff to the Internet arm of their business and help introduce the Internet into to the public.

The variety of (free) news services that appear in different forms on and from the Web seem to be ready to deliver serious competition to most of the printed newspapers. From the analysis and the observation of the online news activity, it was clear that hardly a day goes by without new news services being added to the Internet. This expansion of online news services is likely to increase in the near future. With the rapid growth of the Internet and online news services, Arab newspapers are being pressured into joining in. They may succeed in finding a place and some may flourish. Yet there will be those who will fade away as they fail to adapt or change to accommodate to this new technology. Since the introduction of the Web, the news market has become an increasingly competitive and complex business. However, the threat of these online news activities to hard copy newspapers in the Arab World has been largely ignored by both marketing and academic studies. No one has asked how do Arab newspapers fit into this picture? In short, it is important that Arab publishers know their new markets, so that they can develop effective Internet strategies. To compete and even to survive, they must work harder at developing this understanding, employ skilful staff, conduct market research and set genuine agenda for their online activity.

Chapter Six: Publishers' Survey and Editors Interviews

6.1 Introduction

The movement of established print newspapers towards electronic publishing via the Internet has profound implications for their businesses and for journalism practice. Although the essential writing and reporting skills of journalism remain a central part of the process of electronic news delivery, web-based news publishing provides new opportunities for newspapers in the way they present the news and provide access to a wider range of news services than are possible with traditional forms of news publishing.

In this chapter, we turn our attention to the media professionals and media owners involved in electronic news production. How do these groups perceive the transition to Internet publishing within the Arab context? To find out more about this subject, an online survey was conducted among Arab newspaper publishers and their editors. Of the 48 Arab e-newspapers being published at the time of this research, 27 (56.25%) participated in this research. Responses were supplied either by the publishers themselves or by a senior editor on the staff of the electronic news publication. Supplementing these data are findings obtained through a small number of face-to-face interviews with Arab media professionals.

Past research among electronic newspaper publishers has highlighted the steep learning curve that many find themselves on, once they have decided to move across to Internet publishing. One of the problems is that many established newspapers have been tempted to make the transition to electronic publishing even though they have

few, if any, staff with experience of the mew medium (Singer, 1996). Journalism has to adapt to the Internet and so too does the business of news publishing. Not all media professionals, in the newspaper business, have expressed optimism at the future in publishing, though many have had to concede, nevertheless, that this is where the future lies (Schultz & Voakes, 1999).

In many respect, the essential skills of journalism practice will still be put to good use even in a web environment (Brill, 1999). However, the new communications technologies, associated with the Internet, provide fresh opportunities for information delivery to readers that require the acquisition of new skills in the spheres principally of information presentation and organisation (Alexander, 1997). There is often a temptation when making the initial transition onto the Internet, for a newspaper to try simply reproducing its hard copy version online. There is much more to running a successful Internet news business than this, however (Neuberger et al., 1998).

The Internet offers opportunities for news delivery, and also, for journalists, it provides another on tap source of information that they can call upon to assist with researching stories (Williams & Nicholas, 1998). As with all new communications in the past, the Internet will be capitalised upon by some early adopters and reluctantly adopted by resentful others in the longer term. The current chapter examines the degree to which Arab media owners and professionals fall into these two camps.

6.1.1 Arab Newspapers First Appearance on the Internet

Media professionals were initially asked to state when their newspaper first put up a website. This question aimed to identify the time (month/year) Arab newspapers launched an Internet publication. The data show that 1997 marked a breakthrough for the Arab online newspapers with a significant increase in the number of online newspapers.

Figure 14 shows that the year 1997 witnessed the publication of nine news papers (34.6%), while only four[1] pioneer newspapers put up website in 1995 (the 'year of the Internet' as declared by *Newsweek* Magazine). No single Arab newspaper had any presence in the Internet prior to 1995

Table 17 shows more detailed information with regard to the distribution of newspapers appearance on the Internet over time (months of the years from 1995 through 1999). Two respondents failed to identify the time when they first started their online edition (one did not report the year and the month altogether and the other ignored the month).

Figure 14: Arab newspaper first appearance on the Internet (Year).

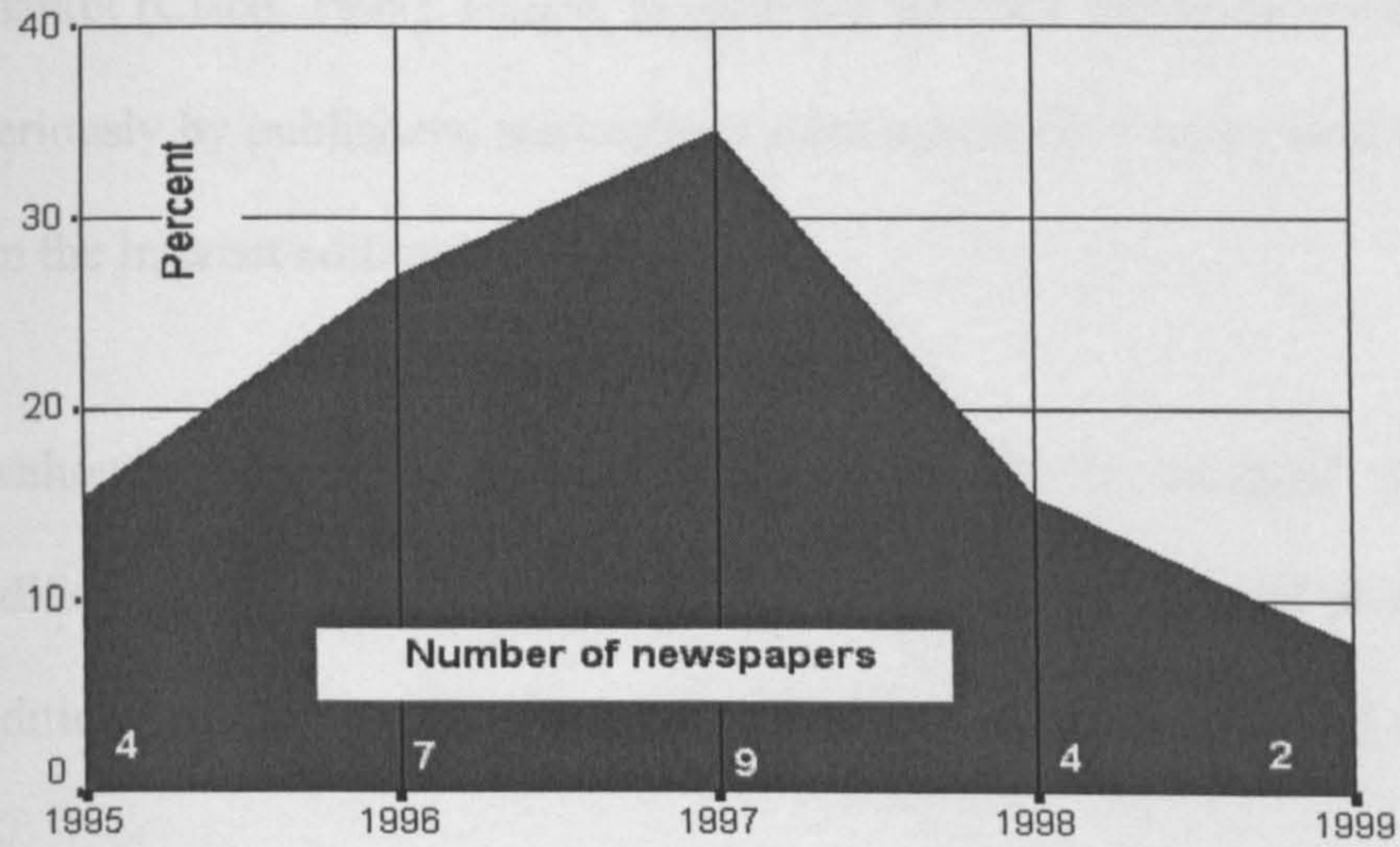


Table 17: When did your newspaper first put up a website?

Month	Year									Total
	1991	1992	1993	1994	1995	1996	1997	1998	1999	
January	-	-	-	-	-	1	2	-	-	3
February	-	-	-	-	-	1	-	-	-	1
March	-	-	-	-	-	1	-	-	2	3
April	-	-	-	-	-	-	1	-	-	1
May	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	1	1	2	-	3
July	-	-	-	-	-		2	1	-	3
August	-	-	-	-	-	1	-	1	-	2
September	-	-	-	-	1		1	-	-	2
October	-	-	-	-	1	2	-	-	-	3
November	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	2		2	-	-	4
Total	-	-	-	-	4	7	9	4	2	26

"Month" valid cases 25 missing 2. "Year" valid cases 26 missing 1

6.1.2 Online Newspapers Staff

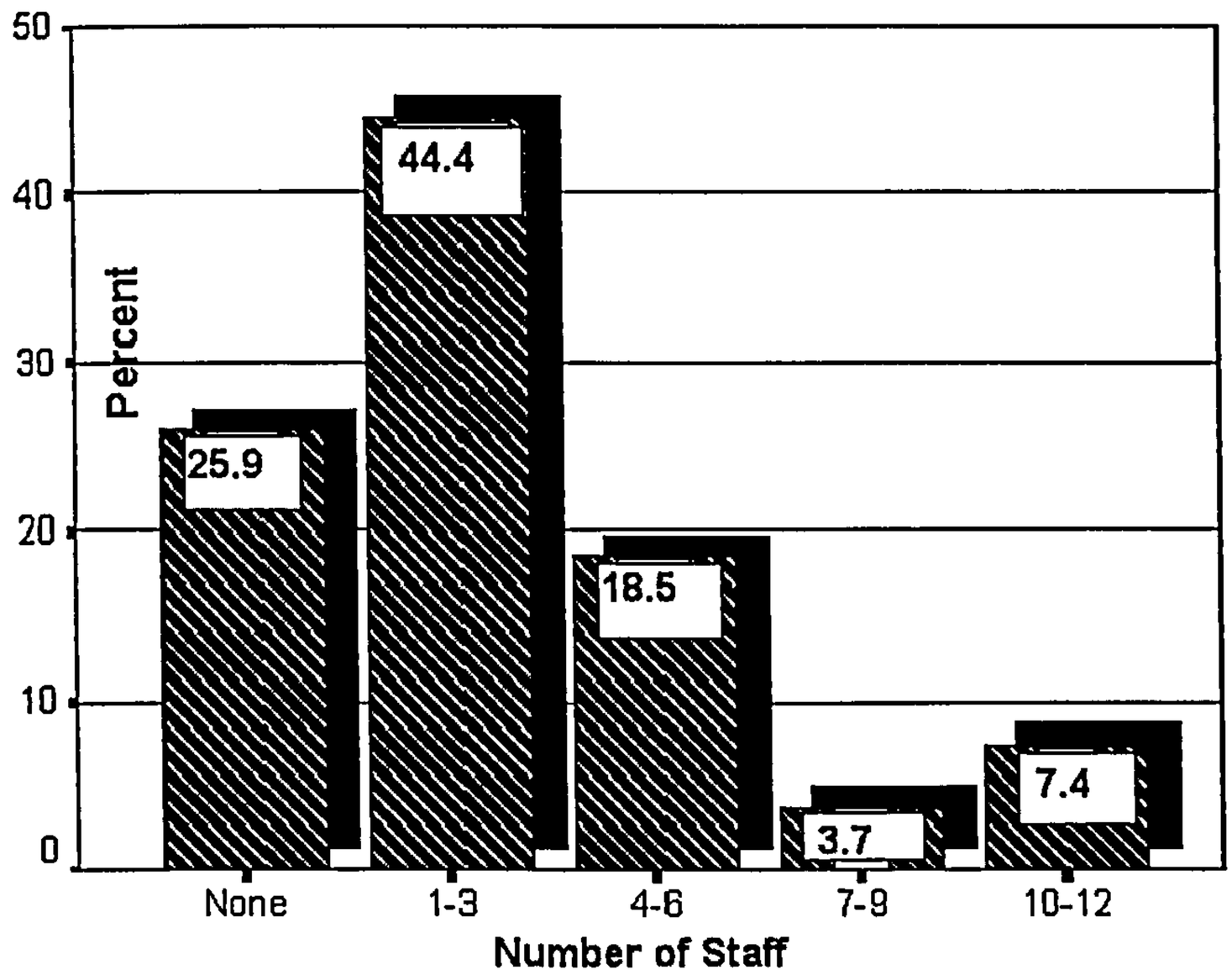
One serious predicament for the Arab World in Internet news publishing is the short supply of skilled IT professionals. Recently, Jerzy Szeremeta, advisor at the United Nations Development Programme (UNDP), warned that Arab states would need to create around seven million skilled workers by 2015 to accommodate the expanding market (Cisco, 1999). Hence, to ascertain whether online newspaper staffing is taken seriously by publishers, respondents were asked: How many staff members work only on the Internet edition?

Although most respondents (74%) indicated having assigned staff for the Internet edition, the largest portion (44.4%) had less than three staff dedicated to the online edition (see Figure 15). However, the data revealed that not all respondent had staff

[1] The Palestinian al-Ayyam claimed to be online since Dec. 1995, yet its domain record shows that it was registered with Network Solutions in 8 /6 /1996 (See Table 17).

assigned only for the online newspaper. Very often hard copy staff were co-opted to work part time on the Internet edition.

Figure 15: No. of Staff work only on the Internet edition



6.1.3 Visitors Measurement Methods

Measurement of the number of visitors to a website is one of the essential processes in understanding consumer navigation behaviour in online environments. Barbara Z. Gyles of the Newspaper Association of America stated that after decades of 'perfecting ways to establish exactly how many copies publishers sell each day', today they find themselves in a world where advertisers want to know how many people see their [online] advertising messages (Gyles, 1997).

Yet, there is a wide agreement that measuring the number of visitors to an Internet site is still a challenging issue. Thus, the 'Internet business has no single agreed-upon method of defining a Web audience' (Ledbetter, 2000). Current measurement tools are

seen as either misleading or too simplistic in terms of interpretations (Nicholas *et al.*, 1999), or in some cases somewhat inaccurate and incomplete as measurement instruments (Randall, 1997).

In order to assess how Arab publishers deal with this issue, participant publishers' were asked first to indicate if they estimated (measured) the number of daily visitors to their online newspaper. Then they were asked, in an open-ended question, to report how they track their online visitor numbers. Only four respondents (14.8%) indicated that they did not use any measuring method. Nearly one third (33.3%) used digital counter and nearly 26 per cent indicated getting server visitors' "statistics" that provide hourly and daily reports based on the number of 'hits' and the statistics produced from the log files (see Table 18).

Table 18: Methods used to measure daily visitors to the online newspaper.

Measurement Method	Percent	Cumulative Percent
No	14.8	14.8
[Yes] Counter	33.3	92.6
[Yes] Daily statistics	25.9	59.3
[Yes] no method mentioned	18.5	33.3
[Yes] Daily Statistics +Counter	7.4	100.0

6.1.4 Subscription Fees Policies

One of the major issues facing online newspapers is the difficulty of generating enough revenue to run and maintain their websites. No Arab newspaper can claim that it has reached the right formula to find readers who are willing to pay for reading the news online. Although the newspapers' websites analysis presented in Chapter 5

revealed that only two newspapers levy fees, publishers where asked to confirm whether their newspaper levy fees from readers or not.

This question and other two subsidiary questions were asked to learn more about how well the Arab newspaper industry has been preparing plans and strategies to levy fees from reader of their newspapers online. If respondents answered that they did not levy fees they were then required to indicate if they intended to levy subscription fees in the coming 12-24 months. If respondents said that they did levy fees, they were asked to specify how often subscribers were required to pay by selecting from four pre-determined answers: "monthly", "quarterly", "every six months", and " annually.

As Table 19 shows, 25 out of 27 respondents (92.6%) did not charge readers for reading their online newspaper. Of those, 28 per cent (7 of the 25) planned to charge for reading their newspapers in the next 12- 24 months. Only two newspapers (7.4%) charge for reading full content. One of them (*al-Nahar*) indicated that their payment policy depended on the subscription period reader chose.

Respondents were asked to indicate whether they asked readers to register before reading. The purpose of this question was to see if Arab newspapers have strategies in attracting readers to their newspapers and then collecting information about them (in the registering process) for the benefit of their marketing strategies and pricing policies. Only three newspapers (11 %) reported any registration procedures while most respondents (89.%) had no registration requirements.

Table 19: Subscription fees for access to newspaper site.

Response	Percent	Cumulative Percent
[No] and we will not charge in future	66.7	66.7
[No] but we will charge in the next 12 -24 months	25.9	92.6
[Yes] we charge quarterly	3.7	96.3
[Yes] depends on subscription period reader chooses	3.7	100.0

6.1.5 What is the Impact of Electronic Version on the Print Newspaper? (Q6)

Respondents were given three predetermined answers about the possible impact of the electronic version of their newspaper on the print version: 1) increases interest in our print copy, 2) decreases interest in our print copy, and 3) not clear. Respondents were also given an opportunity to add any other reasons that might describe their situation better.

Although the majority of respondents (59.3%) indicated a positive impact (increases interest in our print copy) of the online version on the printed one (26 % higher than Mensing (1998) have found in her study), fully one third (33.3%) reported that the situation is not clear. One publisher said that "we release the Internet edition a few hours after the print version" and only one publisher indicated that the online edition 'decreases interest in our print copy' (see Table 20).

Table 20: The impact of the Internet edition on the printed newspaper.

Impact	Percent	Cumulative Percent
Increases interest in our print copy	59.3	59.3
Decreases interest in our print copy	3.7	63.0
Not clear yet	33.3	96.3
We release the Internet edition a few hours after the print version	3.7	100.0

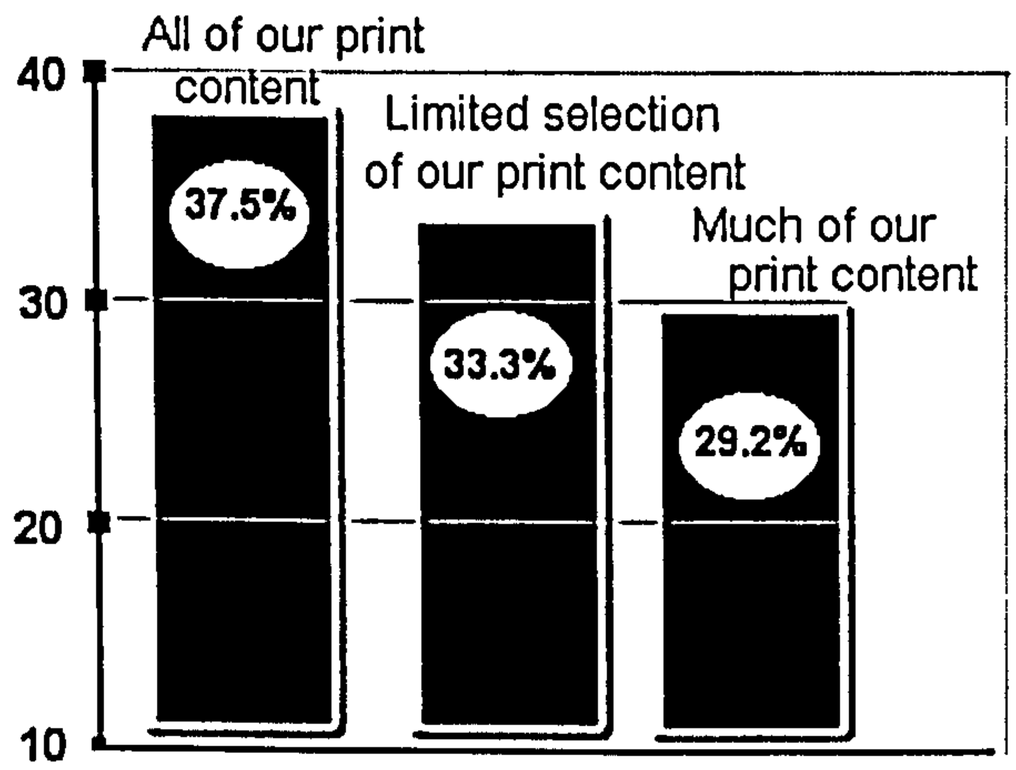
The length of time a newspaper had been online bore no relation to the publishers' views on its impact over the traditional newspaper. Even some of those publishers who started in the early years (1995, 1996) of Arab newspapers presence on the Internet (4 out of 11) indicated that the impact of e-newspapers on the print was not clear yet.

Interestingly, more than one half (55.6%) of those respondents who put all of their print content on the Internet edition (including the publishers of the only two Arab newspapers that charge for reading its online edition) indicated that the impact of their e-newspaper on the print one is ' not clear yet'. A positive impact (increases interest in our print copy), however, was indicated by four in ten (43.8%) of the same group as well as more than six in ten of those who put a 'limited selection of the printed content'.

6.1.6 What Content Do they Put in the Electronic Newspaper? (Q7)

Evidence on this question derived from two sources; the publishers survey and the analysis of the content of all Arab online daily newspapers. More than four in ten (44.4%) of the Arab online newspapers that responded to the publishers' survey (n=27) indicated that they put all of their print content in the online edition. Overall no Arab e-newspapers put out breaking or headline news only and none of the publishers indicated producing 'original content for the online version'. The websites analysis of Arab online newspapers (N=48), however, indicated that 37.5% of Arab online dailies put all of their print content online (see Figure 16).

Figure 16: What Contents your website includes?



The number of online staff bears no notable relation with the amount and type of content publishers put on their websites (Table 21). The two newspapers that levy a charge for reading their online editions offered all print version content to subscribers with summaries of some of the news stories of the day. From those responded to the publishers' survey, it was obvious also that the time the newspaper had been online bore no relation to the nature of its Internet content.

Table 21: Number of staff work only on the e-newspaper and content size relations

No. of staff	All of our print content		Much of our print content		Limited selection of our printed content	
	N	%	N	%	N	%
None	3	25	-	-	4	50
1-3	6	50	4	57.1	2	25
4-6	3	25	1	14.3	1	12.5
7-9	-	-	1	14.3	-	-
10-12	-	-	1	14.3	1	12.5
Total	12	100	7	100	8	100

The text format of the newspapers, however, did bear some relation to the amount of daily content offered on the newspapers' websites. Over eight in ten (83.3%) online newspapers of those that put all of their print content, come out either in PDF

(44.4.%), scanned text images (GIF) (27.8%) or in both formats (11.1%) while only two newspapers that display their full content in Arabic (HTML) text (see Table 22).

Table 22: Newspapers text format and content size relations

Text Format	All of our print content		Much of our print content		Limited selection	
	Count	%	Count	%	Count	%
Text (HTML)	2	11.1%	6	42.9%	1	6.3%
Text image	5	27.8%	2	14.3%	11	68.8%
Text & text image	1	5.6%	-	-	-	-
PDF	8	44.4%	1	7.1%	1	6.3%
Text image& PDF	2	11.1%	1	7.1%	-	-
English text	-	-	4	28.6%	3	18.8%
Total	18	100%	14	100%	16	100%

Interestingly, no single English-language daily of the seven (14.6% of total Arab online newspapers) published by Arab publishers, put full content on their online editions. Those seven English dailies were divided between those who put ' much of our print content' (4 newspapers) and those who put ' limited selection of the printed content ' (3 newspapers) in the online edition. On the other hand, the analysis showed that four in five Arabic-language newspapers (43.9%) appeared to put all of their print content compared to three in ten (31.7%) who put a limited selection of the printed content and one-quarter (24.4%) who put much of their print content online.

6.1.7 What Services do they Offer to Visitors? (Q8)

Traditionally, news and information provision form the core of a newspaper's business. However, since the introduction of the Internet "going online has challenged some of the fundamental ideas newspapers have held about the products they offer" (Kamerer *at el.*, 1998). The analysis of (48) Arab newspapers' websites (in Chapter 5)

indicated that these newspapers have not yet fully exploited Internet facilities. To follow up this issue, newspapers publishers were asked to specify the services offered in their newspapers websites such as:

- Archive services
- Customized news delivery
- Classified advertising
- Interactive communication
- Video/audio/files
- Free software

Two thirds of those who responded to the survey, indicated that they offer 1-2 days archive services (18 newspaper) and fully one third offer back issue for the past 3-6 days. Over one third (37%) claim to offer classified adverts to their visitors (see Table 23). Although one of the most cited features of the Internet is its interactive nature, the analysis of Arab newspapers' websites revealed that these publications have so far largely failed to offer this specialty service. From the publisher survey, however, the fast majority indicated using e-mail services to interact with readers.

The newspapers' websites analysis did not detect any customised news services, or clear classified adverts, however, five publishers (18.5%) of those responded to the publishers' survey, indicated that they provide customised news services, and over one third (37%) of respondents reported putting classifieds. The survey analysis revealed that only three newspapers (6.2%) claimed to provide audio and video files, from time to time, to support their news stories. Likewise only three newspapers offered free software to visitors. Yet analysis of the websites which are claimed by publishers to

offer free software, showed that what was offered were really links to popular free browsers' and plug-ins' websites such as Adob.com and Micrsoft.com.

6.1.8 Are There Printed Versions of These Publications? (Q9)

From the analysis of Arab online newspaper, it was obvious that these publications have been burgeoned from print newspapers. These Internet newspapers largely follow the print paradigm and use the same content. Most of them have no dedicated staff to run the electronic versions and rely instead on the print staff. This is not a purely Arabic phenomenon as most existing online newspapers on the World Wide Web derive from their printed cousins. The distinct character of the print and the e-newspapers has not formed yet. While paper has been replaced in the online environment, with a computer screen and ink has been substituted with bytes and pixels, the content remains much the same.

Table 23: Services offered in Arab newspapers websites

Services		Frequency	Percent
Archives	1-2 days archive	18	66.7
	3-6 days archive	9	33.3
	Total	27	100
Customised news	Yes	5	18.5
	No	22	81.5
	Total	27	100
Classified advertising	Yes	10	37
	No	17	63
	Total	27	100
Interactive communication	Email	26	96.3
	Chat Room	1	3.7
	Total	27	100
Video/audio/files	Yes	3	11.1
	No	24	88.9
	Total	27	100
Free software	Yes	3	11.1
	No	24	88.9
	Total	27	100

Importantly, in April 15 (2000) a new Media Corporation, owned by the former editor of *al-Shraq al-Awsat* (the leading Pan-Arab daily), announced a very ambitious plan to launch the first ever Arab(ic) electronic newspaper in the full sense of the word. The project promoter and co-partner Othman Al-Omaier stated in an interview with *al-Hayat* (14 April, 2000 issue no 13547), that the new e-newspaper *Elaaf* will be launched some time on October 2000, and will be offered free of charge to all users of the Internet. The new independent newspaper's budget according to its founder will be around $15 million administrated and financed by a joint-stock company based in London.

6.2 Editors Interviews

6.2.1 Introduction

In addition to the publishers' survey (supplemental) interviews were carried out with six Arab editors and online journalists. The main objective in conducting these interviews was to gain practical insights about Arab online newspapers and to better the understanding of Internet-based publishing from the perspectives of those who are involved in online publishing. This small sample of journalists and editors interviewed was due to the fact that the position and even the concept of 'online journalist' was absent in almost all Arab newspapers contacted. Although it was difficult to ascertain *statistical* value with such a small sample size, yet these interviews provided important *descriptive* explanations, as the people interviewed are important in the context of their influence in what is still a fairly small world - the world of Arab e- newspapers. Also this is a qualitative supplement to the survey of publishers/editors, designed to provide a greater depth of insights on points covered more broadly in the survey.

6.2.2 Participants' Profile

Four of the interviewees were from Saudi Arabia and the remaining two were online journalists and supervisors in two London-based newspapers (see Table 24). All of the interviewees had reasonable experience with online newspapers and were interviewed with the set of questions found in Appendix I.

Of particular interest was the extent to which Arab online newspapers take advantage of the Web, and how they define and pursue markets at a certain level (local, regional, national or global). Attention was also given to the perceived market relationship between an online newspaper and its print counterpart, the nature of competition in the

online market, and various revenue models with which they have experimented. Specifically, the subjects covered included: profitability, print and e-newspaper relations, the Internet, obstacles facing e-newspaper, future strategies and staffing issues.

6.2.3 Profitability

The two main revenue sources for online newspapers are subscription fees and advertisements. Yet, in the Arab Internet world all these sources are poorly developed. Further, all participants in these interviews indicated that they do not make any profit from their online edition. This was evident given the absence of advertising and users reluctance to pay subscription fees. Only two Arab online newspapers (*al-Sharq Al-awsat* and *al-Nahar*) levy fees from those who wish to read their full content. Thus far, imposing fees had been completely unsuccessful in generating revenue because subscriber numbers were very small according to Mohmmad Alagha of *al-Sharq Al-awsat*. The project proceeded however, because the newspaper's management seemed to be deceived by the "large number of visitors and those registered with us that persuaded us to go ahead for the subscription plan".

Table 24: Interview participants' profile

Newspaper	Location	Person interviewed	Position
al-Riyadh	Saudi Arabia	Turki Alsidiri	Editor-in-chief
		Nasir Alsirami	Online Journalist – Internet Section Maintainer
al-Jazirah	Saudi Arabia	Abdulaziz Almansour	Deputy editor –in-chief
		Abdulateef Alateeq	Data Centre and Internet Unit Manager
al-Hayat	London	Dr. Emad Bacheir	Data Centre Manger
al-Sharq al-Awsat	London	Mohammad Alagha	Online Edition Editor

As the only one amongst the interviewees who had experience with paid services difficulties, Alagha ascribed readers unwillingness to pay fees to two main elements: first, the fact that most Internet services are free especially in the field of news and information, and secondly, the high cost of Internet subscription in most Arab countries that is too expensive for the majority of low income readers.

From a marketing perspective, the *al-Sharq Al-awsat* experience with subscription was a failure. Although the paper tried new plans by providing news summaries for free, with fees applied only to those who wished to read the full content, even this new experiment was not encouraging. This, in part, may explain the *al-Jazirah* decision not to levy charge "at least in the near future". The paper's deputy editor in-chief, Alamansour, justified this decision "because of reports about difficulties some Arab newspapers face in attracting readers to their paid services despite the wide acceptance of their printed editions". In addition to that "we don't observe any negative impact upon the sales of our printed version". But *al-Jazirah* took another important step in terms of benefiting from the online world. The newspaper entered the market as an ISP. Alateeq, the paper's Internet Unit Manager, nevertheless, expressed some worries that seemed to emerge as a result of this new activity: " I am afraid unless we get more qualified staff, this move could affect the production and the daily schedule to update and upload the newspaper's files to the Internet".

Despite the *al-Sharq Al-awsat* experience in pricing and collecting fees, its online editor admitted that it is difficult to apply only one framework for levying and collecting subscription fees. Because "the Internet is the most flexible medium so, there should be some flexibility" in relation to pricing. The Data Centre Manger of *al-*

Hayat, Bachier, agreed with this point, and suggested that this issue needs a very careful and in-depth studies based on ordinary consumer needs.

Although it is too early for *al-Riyadh* newspaper the newest player on the Internet (launched in March 1999) to make or even think of making a profit, the paper's editor in-chief, Alsidiri, stated that they have to be online because 'we have to'. He sees the picture in the context of technology " if we do not accept the change we will be changed" referring to the general hesitation in accepting new media applications in Saudi Arabia. But the delay in putting *al-Riyadh* on the Internet does not reflect this zealous attitude of change acceptance expressed by its editor. Yet, his only one online journalist, Alsirami, tried to defend their delay as the market was not clear and according to him this delay has its virtues. "This delay has given us some advantages, we started from the point many newspapers struggled to reach over years" argued Alsirami.

Despite the weak market for readers and advertisers, no single Arab online newspaper conducted marketing studies to assess the market and direct the development of business strategies for the future. For most newspapers, the decision to go online seems to have no market grounds. In the case of *al-Jazirah* newspaper, for instance, the idea of the electronic edition is "neither derived from organized administrative plan based on a field study of the market nor expressing the wish of the newspaper owners" according to its deputy of the editor-in-chief Almansour. The idea even faced objections from some shareholders who expressed their concerns about the sales of the newspaper.

Interestingly, the newspapers' main objective was to" register our presence" on the Net before other local newspapers do so. This private newspaper however, has had one other objective, according to Almansour, and that is "to reach our [Saudi] students abroad as a service by the newspaper, emerging from a national motive but not for any commercial gain".

Unlike *al-Jazirah*'s main motive to be online, the editor in-chief of its rival *al-Riyadh* expressed a different perspective " we should not be driven by the idea of precedence, otherwise we shall commit mistake and lose our primary targets". Alsidairi was convinced that there is no way to generate revenue in the near future but "our electronic edition should contribute at least to the promotion of the printed edition". Emphasizing these realistic views, the *Al-Riyadh* editor-in-chief continued " as no hope for us to generate revenue, we as a minimum, hope to contribute to Arab electronic publishing industry, and of course our newspaper is now within the reach of those who look for it worldwide". This shows that making profit or finding new ways of increasing revenue has not been the primary objective of most of the early adopters of online publishing.

As it has been already demonstrated, advertising that could be the significant source of revenue for online newspapers is still largely absent in Arab online publishing. Bachier of *Al-Hayat* the leading Arab daily newspaper, stated that "so far, advertising on the e-newspaper remains vague". Part of the problem is the advertiser:" we don't receive any advertising orders for the electronic edition; advertisers concentrate on our printed newspaper" reported Bachier. *Al-Jazirah* faces the same problem, but instead of waiting for the advertisers to approach them, the newspaper took the initiative and offered its big advertisers a free- of-charge advertisement in the electronic edition in

the hope that this might attract paid sponsorship. But even this positive move from the paper was ineffective. According to Alateeq "to be honest they [advertisers] don't ask for or show interest in the online edition when ordering adverts campaigns".

6.2.4 Newspapers Old and New

All interviewees agreed that the e-newspaper may impact on print journalism in the future, but will not replace the traditional morning newspaper. For the e- newspaper to be a visible medium " it may take generations to create its loyal audience" (Alagha of *al-Sharq al-Awsat*). Reading the print newspaper is an enjoyable experience without any technical complications. The e-newspaper might affect the share of printed newspapers today, but the impact will not be significant. According to Alagha, e- newspapers may attract readers from the new generation who have not formed reading habits and may be less willing to buy a printed copy. Bachier agreed to this point and drew attention also to another' major threat' to the industry that is represented by cross-national satellite channels.

Likewise Alsidairi stressed that the "great challenge to us is this tens of news channels, that provide timely news coverage, I'd like to say clearly that it is impossible for the printed daily newspapers or even the electronic ones to match satellite channels". Almansour believed that the print newspaper will survive as there will still be problems from the high level of computer illiteracy, and the cost of Internet connection which is not yet in the reach of every one in the Arab World. Almansour, thought that there could be some reduction in the sales of the printed newspaper, but that they will not disappear from the market in the foreseeable future.

Hence for the purpose of confronting the new challenges (specifically Internet and satellite channels), newspapers must reconsider the concept of their daily content. According to Alsidairi, journalists will need to rethink their concept of the profession. "We should not be inanimate [sic] of what is going around us sticking with what we have learned about what journalism should be ". Alsidairi even went further and stressed that there is a need for a critical revision of the profession, as "new technology requires new thoughts and new strategies and many journalistic theories and schools need to be replaced or at least to be considerably revised ".

Although new media offer new, effective and inexpensive ways of information dissemination to Arab publishers, content is the main weak point of most Arab newspapers (electronic or print). Alagha pointed to the content as the only way to attract and keep reader's loyalty and advised newspapers to concentrate on a 'competitive and good content'. Bachier looked to the content from an interesting angle "the Internet compelled us to enter new tough competitiveness. We are not alone in the field any more". He cited Reuters and the BBC that provide timely online Arabic news and stated that "it would be quite difficult for Arab newspapers to compete with such huge corporations. You only survive and compete by providing the best and the best only of your content".

Almansour believed that the issue is not one of new medium's expulsion of an old one or of what content should be online. He argued that the "problem facing us is that there is no single market study that could help us plan our strategies in the field of Internet publishing. Yes everybody is on the Internet but unfortunately no one knows where are we heading and who reads us". Alsidairi expressed more gloomy views about the future of newspapers in terms of news delivery, but emphasised publishers' need to

review the nature of the content they provide. He warned of the aggressive nature of Internet news market. "It is meaningless to think of competing the Internet and satellite channels with your local newspapers in terms of news coverage" pessimistically stated Alsidairi.

6.2.5 The Internet

When asked whether they thought that the Internet (will) affects print journalism, participants had different views, but largely agreed on the role of the Internet as a new means of mass communication that requires more attention from researchers and newspapers industry. Because of the Internet "we are debating now, new, and old journalism" argued Bachier. "Although the printed newspaper had succeeded in the past to contain the impact of radio and TV, the Internet is totally different". Bachier pointed to the fact that the Internet theoretically enables any one to be a newspaper publisher as cost distribution, and even government interference factors are no longer impenetrable obstacles for publishing.

Alagga exhibited similar views and described the Internet as an outstanding scientific and communication medium. He also drew attention to the long history the traditional newspaper has in the Arab World as a main source of news, compared with the Internet and e-newspapers. But when certain obstacles are eliminated in the Arab World and the Internet becomes an important component in the modern house "certainly it will affect traditional newspapers". Almansour stressed the importance of the Internet and expressed his dissatisfaction with the government's delay in introducing the Internet to the country because the Internet "has become the world's huge library and the world's most advanced communication medium". Alsidairi noted

that Internet publishing has challenged and will continue to challenge the printed press, but he preferred to look to the wider picture of the new technology which is "changing every aspect of our life and what can be considered new today shall become old tomorrow or the following day".

6.2.6 Obstacles

Unlike other nations' online newspapers, Arab e-newspapers have some unique obstacles that may hinder the spread and the full use of the Internet by Arab users and publishers. These problems include the computer algorithms and the lack of Arabic text solutions, the non-existence of a mass market when looking at the small number of Internet users in the Arab World, the cost of Internet connection, and education levels.

One of the main barriers before Arab e-newspapers is the lack of technical support for Arabic text readers (browsers) and the instability of Internet applications. This causes confusion when it comes to the choice of "the proper format and design to display our daily content"(Alagha). Similarly, Bachier noted that readers' most common complaints are about the way the text is displayed and the difficulties they experience in reading or downloading the newspaper. Nonetheless, Bachier observed that, in most cases, the problem could be attributed to the software the reader needs to better surf the web and view the e-newspaper.

Although Alagha emphasised the importance of the content to attract more readers and overcome the obstacles in hand, he also drew attention to other major obstacles that

face so-called e-commerce in the Arab World, such as illiteracy, low income and high cost of Internet connection that make "the talk about the Internet mere luxury".

Alsirami of *al-Riyadh* specified the main obstacle to e-newspapers growth as the slowness of Internet traffic in Saudi Arabia. " All Internet traffic goes through proxies which delay the flow of Internet communication, let alone reading a daily newspaper full of graphics". Yet, this may be, in apart, attributed to the fact that the launching of *al-Riyadh*'s online edition synchronized with the official introduction of the Internet to the Saudi public. "This made the newspaper's staff deal mostly with inexperienced readers' and gave no time for us to explore other obstacles" stated Alsirami.

6.2.7 Strategies

As it has been already demonstrated Arab online newspapers' main obstacles seem to have technical and practical aspects as well as concerns about the content of these publications. Clearly this mixture of complications will make any attempt to construct business strategies a difficult objective for most newspapers.

In order to investigate how Arab newspapers have tried to tackle such issues, interviewees were asked to specify their plans with regard to investing in online newspapers, and related software development and marketing research. It became obvious that Arab newspapers are largely unenthusiastic about taking costly initiatives to handle the development of the online market or to set in place effective business strategies. According to one interviewee:" Most of the plans that we are thinking of at the present time in relation to the e-newspaper are only general ideas that we discuss

only in our informal meetings". In the same context when ask for more support, there was a problem among online editors that they and their staffs were seen as second-class citizens. This observation was reported to occur among American online editors (Singer, 1998). As one interviewee noted " The subject of our electronic edition has not been taken seriously yet even by most of our colleagues in the newspaper... and the paper administration still doubtful about the whole issue".

From a different angle the online editor of *al-Sharq Al-awsat* noted that investing more money in the electronic site was a complex issue. "I have nothing to convince the publisher of any future revenue to justify any additional investments in the electronic edition". With regard to the text solution, the same interviewee revealed that his publisher had no plans to invest in the development of Arabic software and "I don't think there is any enthusiasm in the newspaper's management team". He believed that giant companies, such as Microsoft, and Sakhr (a leading Arabic IT company) could do such job quite effectively.

Elsewhere there was agreement that the available software from large companies offered a reasonable solution, but the main problem is not in the software, but in the way content should be displayed. Another interviewee observed:" It seems to me that they [software developers] forget that their programs are designed to present the content not just to show how brilliant the interface is". This interviewee further suggested that software developers should coordinate with content providers and listen to their recommendations.

In contrast to *al-Sharq Al-awsat, al-Hayat* voiced plans to invest in their electronic website to introduce comprehensive change and new services. Despite the unprofitable

market of Arab e-newspapers this paper's policy was to " take the lead in its electronic edition just as it is the leader in its printed edition". The paper's Data Centre Manager noted that in the race to attract more readers and minimise service obstacles "it is important to ask first: Is reaching a large audience for the time being of interest to the newspaper, or not? It is good to expand the readers' base". [But in so doing this may] "create technical difficulties that need more technical support in a commercially unavailing environment".

Al-Jazirah and *al-Riyadh* seemed to be content with what they had achieved as they both expressed only broad thoughts about future plans. The Internet Section maintainer of *al-Riyadh* indicated that there was some sort of unwritten plan that, within a year or so, all the publications of the corporation (Alyamamah Weekly, Riyadh Daily (English) and Riyadh Book) would be available online. It was also revealed that the newspaper's intention was to set-up a comprehensive City Guide that might attract visitors and advertisers accordingly. For *al-Jazirah* the main target in the near future was to improve their Internet service to attract more subscribers as well as to improve the format and the layout of the paper's website on the Internet.

6.2.8 Staffing

The publishers' survey analysis showed that the typical Arab online newspaper employs fewer than three people to run its website. Indeed, one-quarter (25.9%) of Arab publishers who participated in this survey reported to had no dedicated staff for their online newspaper. These online newspapers seemed to play a secondary role to

the print edition. This was confirmed by interviewees' responses when asked about online staffing policy. No newspaper had a clear policy in this respect.

One of the reasons for not appointing online journalists was that some newspapers were still experimenting with online production. The first priority was to build a market of loyal readers and advertisers to generate revenues to underwrite the cost of assigning online journalists to new electronic ventures. There was also a question about the skill needed for online journalism. One interviewee believed that the most important skills of the online journalist were to be able to deal with the Internet and its development, and to employ that ability for the benefit of his newspaper.

Al-Jazirah newspaper had no online journalists in the proper sense. Instead "technicians from the Computer Division of *al-Jazirah* who have no journalistic qualifications are handling the daily electronic content besides their routine work" were employed. Similar practice was reported at *al-Hayat* as the newspaper is converted automatically into PDF files and uploaded to the server, a process that takes one staff member no more than half an hour to put the full paper online".

Almansour of *al-Jazirah* lay the blame for the lack of online journalists on Arab universities and journalism schools because " they have not taken measures to prepare new journalists for new media". There was a demand for university institutes to rethink their curricula and help newspapers to get "those talented journalists". The interviewee admitted that " we ourselves at the industry have not been serious to have such journalist among us". *Al-Riyadh* newspaper also had no strategies for employing online journalists, a situation that would clearly need to change in the future.

6.3 Discussion

At this stage it is (technically) difficult to find accurate information about the readership of the Arab e-newspapers and thus measure the impact of the online publication upon the print ones. This is generally because there is no reliable method for measuring Internet users. A second factor maybe is that, among Arab publishers surveyed, there is a lack of research-supported knowledge about this issue. This was obvious from the interviews with the editors who indicated that they had no plans for marketing studies to assess the relations between their hard copy and electronic products.

Although, it is hard to gauge who is actually reading these (free) online publications, some methods used by Arab e-newspapers such as electronic (digital) counters, indicated that they are enjoying a very poor readership rate (see Table 25). Although, some of them showed relatively high numbers of hits on their websites, the digital counter is not sufficiently reliable as an accurate measure of website visitors for advertisers. This raises a question, as to whether current visitors will be willing to pay for access to electronic newspapers in the future.

On the content side, the publisher's survey found that all Arab e-newspapers depend completely on the contents of the printed copy and none of them put out original content on their Internet version. With regard to the amount of content the study revealed that most newspapers offered all of their printed content on the online version, while some of them just presented part of their printed edition (a selection of articles and news stories). Some newspapers tried to add some other online- related

services such as archive searching, classified advertising, free web-based e-mail accounts, Chat Rooms, Video/audio/files and free software.

Almost all the editors interviewed were convinced that e-newspaper will not replace the printed ones. Yet, many of them were still doubtful about the revenue potential of e-newspapers. Also it was evident from Arab editors who participated in the interviews, that the papers they worked for had not conducted any analysis of their online product, and that they had no clear plans to do so. In other words, many publishing houses do not appear to have taken serious measures to meet their (potential) market needs. Publishers seem to be content to sit and wait for their readers to come to them. The interviewees in Saudi Arabia, for instance, believed that there were enough financing resources available, but no plans to invest in the Internet.

Table 25: The approximate number of daily visitors to some Arab e-newspapers

Name of Newspaper	Country	No. of hits as of 31 / 5/2000	Date of first counting	Approx. hits* per day
Al-qabas	Kuwait	1883237	12/7/1997	5591
Al-Ayaam	Bahrain	4462209	1/1/1996	2771
Al-Sharq	Qatar	289465	1/10/99	1378
Al-ayyam	Palestine	378215	20/8/1999	1375
Azzman	London	345235	15 /9/1999	1353
Al-Gomhouria	Egypt	1488416	16/2/ 1997	1241
Al-Gumhuryah	Yemen	563388	09/10/98	995
An-Nahar	Lebanon	863019	1/1/ 1996	536

* The total number of hits was divided by the number of days since the counter started

In an environment of ever-increasing global competition the real issue for Arab e-newspaper publishers is increasing their audience. But first they must take into consideration that there are many competing online news sources. This fact has important implications for the type of online news services, established newspapers could most profitably offer. To date, most publishers see their electronic products as

a supplement for their print publications rather than as a *new* stand-alone product. Their heavy reliance on one source of revenue (local market) will put them in an extremely risky situation in the open marketplace of the Internet and given the wide acceptance of foreign media by Arab users.

To conclude, in the light of labour, printing, and distribution costs as well as the competition from giant media corporations and in the absence of clear future strategies, it will not be surprising to see many small Arab publishers in the near future go out of business. One solution could be the aggregation of local newspapers into groups giving them the ability and incentive to build a strong financial position and leverage their local monopolies. But for the efficient implementation and use of the Internet in publishing e-newspapers, a set of modern technical, operational, and management skills are indispensable. But first publishers must have a vision of their future and then commit the capital measures necessary for the functioning of their online products.

Chapter Seven: Readers General Internet Use

7.1 Introduction

This chapter is concerned with readers of Arab newspapers on the Internet. It reports findings from a survey of users of electronic Arab newspapers. This survey was conducted via an electronic questionnaire placed on the Net. It elicited a significant response. The data are presented in two parts. The current chapter examines descriptive data about the composition and Internet experience of survey respondents. It also considers users' baseline opinions about Arab e-newspapers. The relative absence of previous data on this particular market lends weight to the importance of these new data. Chapter 8 examines readership data in a more analytical sense by exploring relationships between user characteristics, user behaviour, and user attitudes.

An examination of readers of e-newspapers is a vitally important part of establishing the credentials of this new news medium. As we have already seen in the introductory sections of this thesis, e-newspapers have been a rapidly expanding phenomenon the world over. In the United States, for instance, there were more than 3,400 U.S. online newspapers and 2,000 non-US online-newspapers being produced by the end of the 20th century according to the American Journalism Review online database (ajr.org). As recently as 1990, there were only seven newspapers that were accessed mostly via bulletin board systems. In the Arab World, daily e-newspapers grew from a zero point in 1994 to 65 publications on the Internet in the year 2000.

In many instances, however, this growth has been technology driven. Since the technology exists to produce newspapers in this way, some publishers have decided that they need to jump on this communications bandwagon. There is also a view that Internet publishing is where the future lies and that it is necessary to establish a toe-hold in that market as early as possible. There remain doubts about the performance of Internet newspapers, however. As with many developments in communications technology in the past decade, the needs and interests of consumers are often not considered as fully as they should be.

Internet newspapers, in principle, are supposed to offer additional services beyond what traditional hard-copy newspapers can provide. Electronic newspapers can provide readers with greater amounts of information, access to news archives, and more up-to-date information. At present though, the jury is out on whether they have actually delivered on these promises to readers' satisfaction. Electronic newspaper publishers probably need to understand their markets much more fully than they do.

Before turning to a consideration of the nature of the readership for Arab e-newspapers – or indeed any other e-newspaper market, it may be worth reviewing some important trends in news consumption and perceived news values of news markets over the years. Newspapers became established as the primary news medium in the 19th century and remained prominent until well into the 20th century. Then along came radio and then television, and the position of newspapers changed. Between the mid-1950s and mid-1980s, television evolved as the primary news medium. On average, around two-thirds of people in modern industrialised societies claimed that

television is their main source of national and international news (IBA, 1985, Roper, 1983).

While television continued to move ahead of newspapers as the claimed source of 'most world news' during the 1990s, newspapers retained their customary prominence as the major source of local news (ITC, 1998). But by the end of the 1990s, television had caught up with newspapers as the claimed source of most local news (ITC, 1999). From the mid-1990s in Britain, electronic news text began to emerge as a nominated source of world and local news. Teletext information received via the television set was identified by small percentages of British television viewers as their primary news source (ITC, 1998, 1999, 2000).

To direct the development of Internet business such as e-newspapers in our case and to help Arab publishers understand the opportunities, online research is of vital importance. Understanding the demographics, attitudes and interests of Internet users and how they differ from one location to another is necessary to move the publishing industry forward. This study is an attempt to contribute to this subject. In this chapter special focus is given to identify users' demographic profile, Internet usage, including how much time is spent, preferred services, where people are accessing services, and their main reason for using the Web.

7.2 Sample Analysis

Readers of electronic Arab newspapers were surveyed online. An electronic questionnaire was placed on the web and its presence was advertised through several Internet-related channels (see Chapter 3). Within six months of initial questionnaire

placement, more than 1200 questionnaires had been completed and sent to the author's e-mail box. Following exclusion of duplicates (sometimes respondents clicked the 'SUBMIT' button twice) and incorrectly completed forms (some respondents answered two or three questions then pressed the submit button), 800 usable questionnaires remained.

This chapter will focus on largely descriptive statistics to provide a broad profile of Arab e-newspaper readership characteristics. Later, in Chapter 8, relationships between reported usage and attitudinal variables will be examined, using bivariate and multivariate statistics, through which an attempt was made to uncover factors that were most predictive of frequency of Arab e-newspaper reading and satisfaction with these electronic publications.

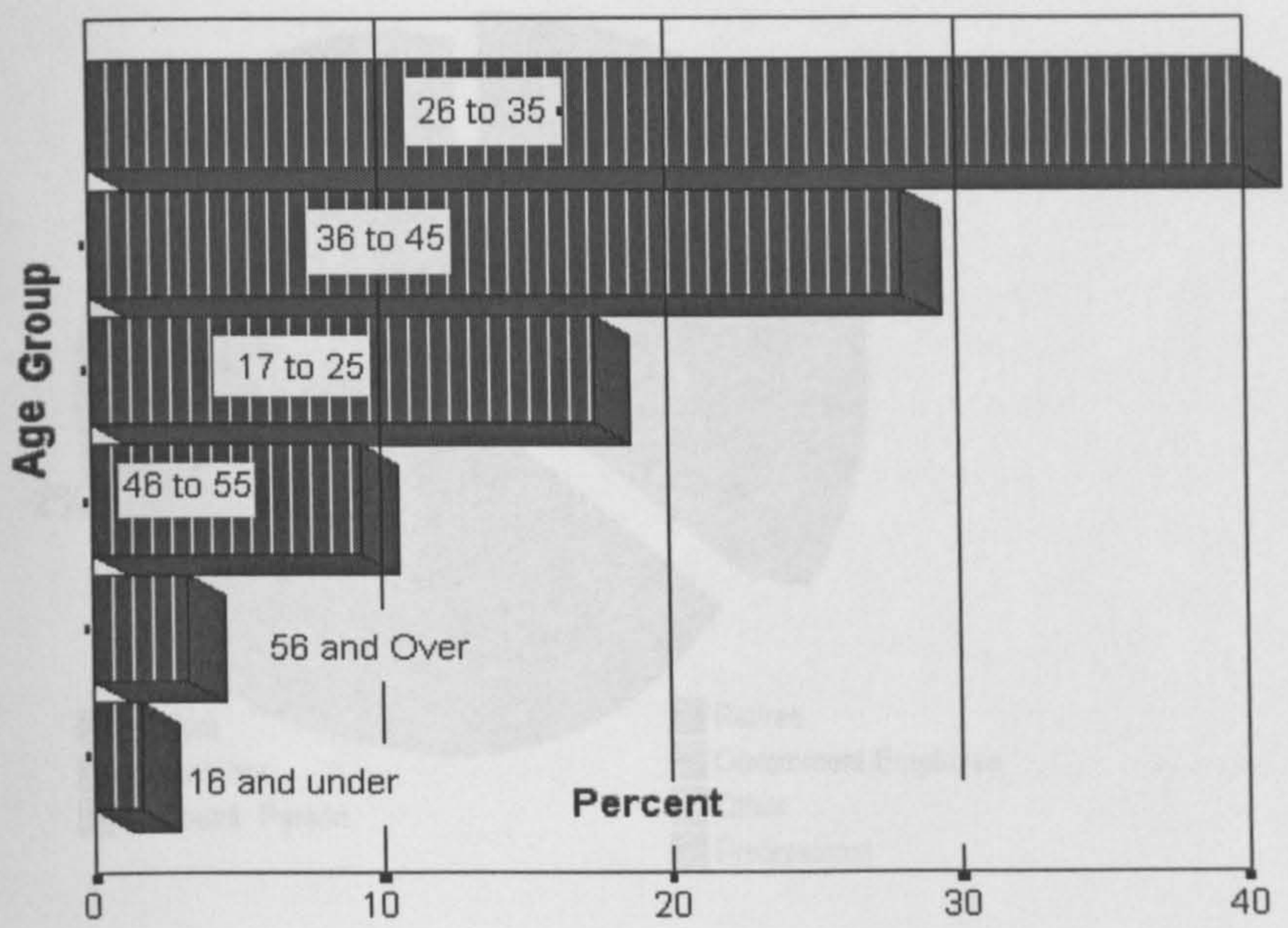
7.2.1 Demographics. What are the Characteristics of the Readers of Online Newspapers? (Q10)

The respondent base was initially analysed into its constituent demographic features. Survey participants were asked about their age, gender, nationality, occupation, country of residence, and education level. Descriptive statistics on these characteristics follow.

7.2.1.1 Age

Most respondents were aged 26 to 35 years (40%) or 36 to 45 years (28 %). The remainder fell into the 17 to 25 (17 %), 46 to 55 (9 %), 56 and over (3 %) and the 16 and under (2%) categories (see Figure 17).

Figure 17: Age groups of respondents



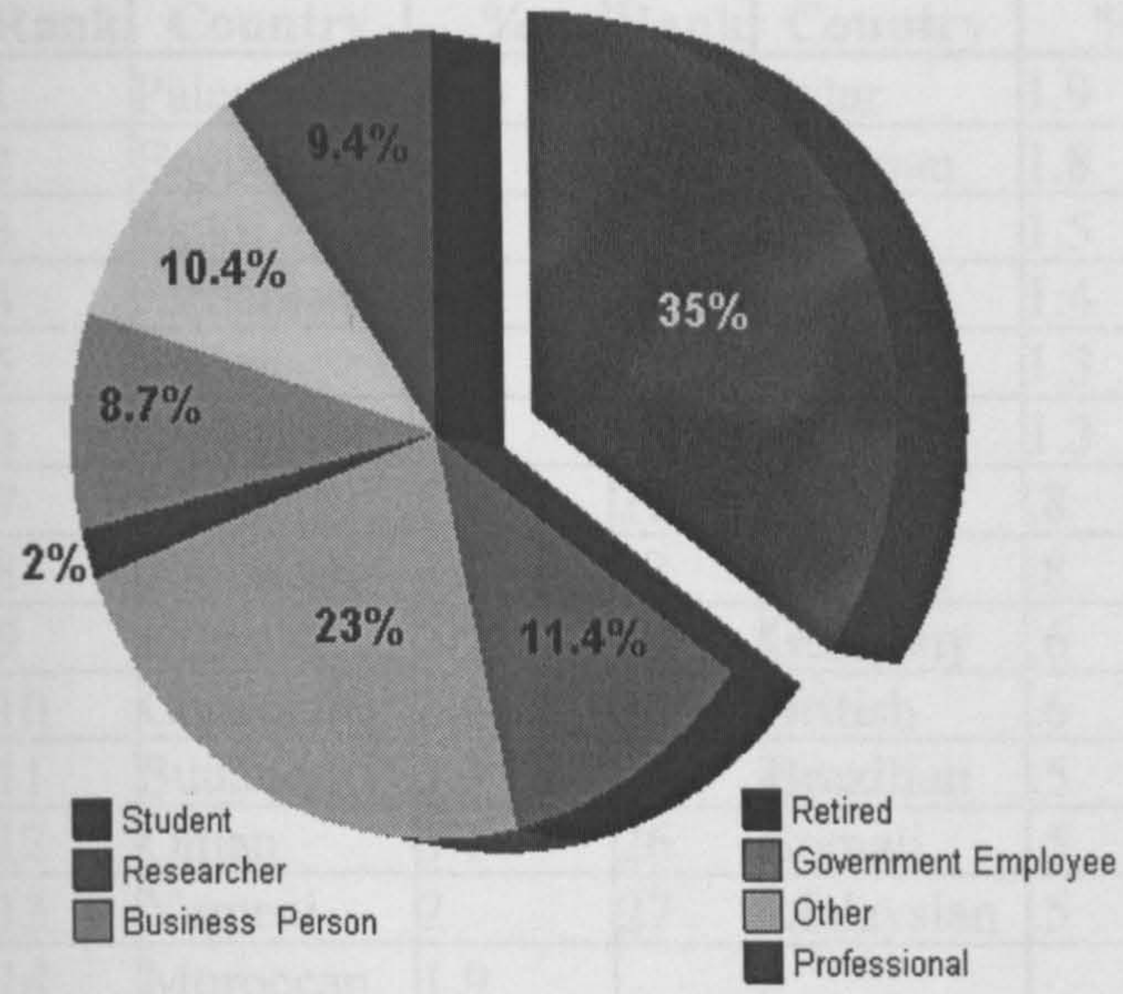
7.2.1.2 Gender

An overwhelming majority of respondents (91.1 %) were male, with only around one in twenty (5.1 %) identified as female. On the remaining questionnaires (3.8%), respondents had failed to identify their gender.

7.2.1.3 Occupation

By occupation, over one in three respondents (35%) were students, nearly one in four (23%) were business people, just over one in ten were researchers (11.4%) and nearly one in ten were in professional occupations (9.4%). The remainder were government employees (8.7%), retired (2%) or fell into a range of 'other' categories (10.4%) (see Figure 18).

Figure 18: Occupations of respondents



7.2.1.4 Nationality

An overwhelming majority of respondents indicated their nationality (97.5%). In all, 40 different nationalities were identified (see Table 26). The most frequently occurring nationalities were Palestinian (12.3%), Egyptian (9.8%) and Saudi Arabian (9.4%). Some respondents reported that they had more than one nationality, but for current purposes, only the first nationality reported by a respondent was selected.

7.2.1.5 Country

When asked to indicate where they presently lived, 45 different countries of domicile were mentioned. A majority of respondents, regardless of nationality, were resident in the United States (51.6%) at the time of replying to the questionnaire. The next two most frequently mentioned locations of residence were Canada (12.4%) and the United Kingdom (5.5%).

Table 26: Nationalities of respondents to the survey

Rank	Country	%	Rank	Country	%	Rank	Country	%
1	Palestinian	12.3	15	Qatar	1.9	28	Norway	.5
2	Egyptian	9.8	16	Algerian	1.8	29	Afghan	.5
3	Saudi	9.4	17	UAE	1.5	30	Eritrea	.5
4	Jordanian	7.8	18	Libyan	1.4	31	Kurdish	.5
5	Syrian	6.9	18	Tunisian	1.3	32	Australian	.4
6	Lebanese	5.9	20	Arab	1.3	33	Italian	.3
7	Iraq	5.6	21	Bahrain	.8	34	Mauritania	.3
8	American	4.8	22	Swedish	.8	35	New Zealand	.3
9	Kuwaiti	3.9	23	Germany	.6	36	Antigua	.3
10	Canadian	3.6	24	British	.6	37	Indonesian	.3
11	Sudanese	3.3	25	Brazilian	.5	38	Greek	.3
12	Oman	3.1	26	Somali	.5	39	Portugal	.3
13	Yemeni	2	27	Malaysian	.5	40	Croatian	.1
14	Moroccan	1.9						

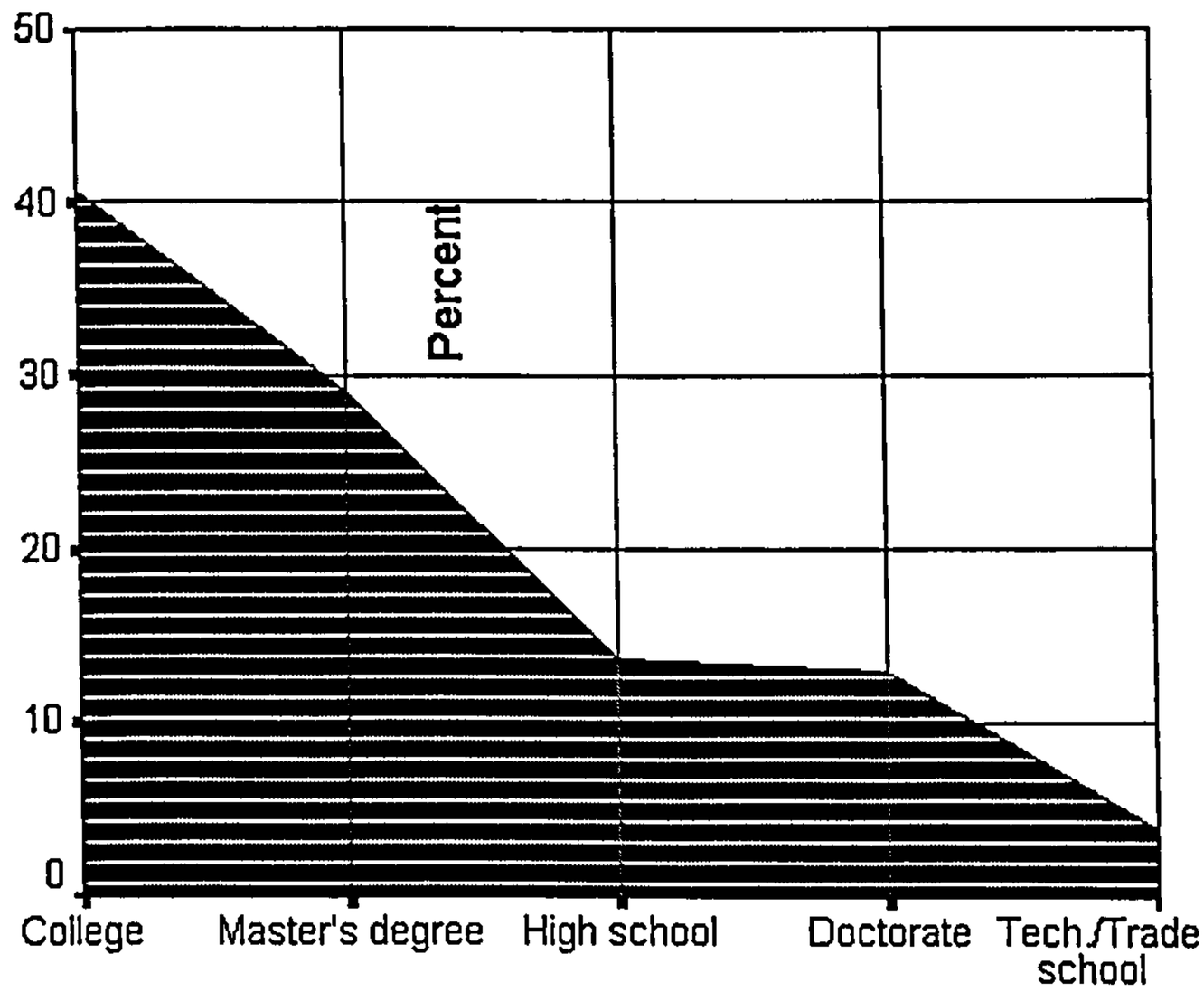
As Table 27 shows, only two Arab countries ranked amongst the top ten countries where participants reported they lived. United Arab Emirates came 5th with two per cent and Kuwait came the 7th with nearly two per cent (1.8%) each. The country where user lives question was asked to identify the distribution of Arab users worldwide and to determine if there were any significant variances in responses based on the respondent's location. In this section, as we have seen the results show considerable grouping of respondents in the United States, while respondents currently from the Arab world were in the minority.

The distribution of educational attainment shows that the most frequent category (40.6%) was people with university degrees (four years college), followed by Masters degrees (29.1%) and nearly 13 per cent reported holding doctorate degrees. A small proportion (1.1 %) failed to respond to this question (See Figure 19).

Table 27: Where do you live now?

Rank	Country	%	Rank	Country		Rank	Country	Percent
1	USA	51.6	16	France	.8	31	Jordan	.3
2	Canada	12.4	17	Greece	.8	32	Lebanon	.3
3	UK	5.5	18	Italy	.8	33	Morocco	.3
4	Australia	2.5	19	Norway	.8	34	Sudan	.3
5	UAE	2	20	Palestine	.8	35	S. Africa	.3
6	Malaysia	1.9	21	Qatar	.8	36	Austria	.3
7	Kuwait	1.8	22	Spain	.5	37	Antigua & Barbuda	.3
8	Sweden	1.8	23	Netherlands	.5	38	Cyprus	.3
9	Germany	1.6	24	Czech Republic	.5	39	Indonesia	.3
10	New Zealand	1.6	25	Ukraine	.5	40	Finland	.3
11	Saudi Arabia	1.5	26	Hungary	.5	41	Venezuela	.3
12	Oman	1.3	27	Algeria	.4	42	Switzerland	.3
13	Egypt	1.1	28	Denmark	.3	43	Philippines	.3
14	Bahrain	.8	29	Ireland	.3	44	Portugal	.3
15	Brazil	.8	30	Japan	.3	45	Croatia	.1

Figure 19: Level of education



7.2.2 Connectivity. What General Use Do E-newspaper Readers Make of the Internet? (Q11)

A series of questions were presented to respondents about their general use and experience with the Internet. These questions explored how long they had been using the Internet, the kind of equipment they used, the amount of time they spent on the Internet when using it, which Internet service provider they used, and the site from which they used the Internet.

7.2.2.1 Experience of the Internet

Initially, respondents were asked to report how long they have been using the Internet? They were supplied with a range of options from 'less than six months' to 'more than four years'. The majority of respondents reported using the Internet for more than a year (78.2%). Table 28 provides a summary of these results.

Table 28: How long have you been using the Internet?

Time Using Internet	Percent
Less than 6 months	7.3
6 months - less than a year	13
1 year - less than 2 years	21.9
2 years - less than 3 years	24.4
3 years - less than 4 years	17.8
4 years ++	14.1
Total	98.4

Respondents were also asked about the frequency of their Internet usage every week and the average amount of time they spent on the Internet per session. The great majority of respondents (71.4%) claimed to use the Internet every day. Most of the remaining respondents (27.1%) said they used the Internet at least once a week.

The survey reveals also that Sudanese Omani, Kuwaiti, Egyptian and Jordanian had more Internet experience (over three years) than any other nationality of the top 12 nationalities that participated in the survey. Table 29 summarises Internet experience for each nationality and shows Saudis and Lebanese to be the least experienced users amongst the top 12.

Nearly four in ten respondents said they spent between 1-2 hours on every Internet session (38.6 %). Around one in six (16.1%) reported Internet sessions averaging between two and five hours, and a few (6.4%) enjoyed Internet sessions of over five hours duration. Just over one in four (26.4%) claimed to spend between 30 minutes and one hour on an average Internet session. Other respondents (12.6%) tended to spend much shorter periods with the Internet. Of those (heavy users) spending much time online Egyptians came first (38.4%) followed by Lebanese, Kuwaiti, and Saudi in close percentages (see Table 30)

Table 29: Top 12 nationality of respondents * Internet experience crosstabulation

Nationality	Less than 6 months	6 months - less than a year	1 year - less than 2 years	2 years - less than 3 years	Experienced Users**		
					3 years - less than 4 years	4 years ++	Sub-total
Sudanese	15.4%	23.1%	7.7%	7.7%	7.7%	38.5%	46.2%
Omani	-	16%	8%	**32%**	**28%**	16%	44%
Kuwaiti	-	12.9%	12.9%	**32.3%**	**25.8%**	16.1%	41.9%
Egyptian	7.7%	7.7%	24.4%	21.8%	15.4%	23.1%	38.5%
Jordanian	3.3%	-	16.7%	**41.7%**	**26.7%**	11.7%	38.4%
Canadian	-	6.9%	13.8%	**44.8%**	13.8%	20.7%	34.5%
Palestinian	16.3%	13.3%	14.3%	23.5%	**20.4%**	12.2%	32.6%
Iraqi	10.5%	10.5%	21.1%	26.3%	**26.3%**	5.3%	31.6%
American	5.3%	10.5%	21.1%	**31.6%**	15.8%	15.8%	31.6%
Syrian	3.6%	18.2%	16.4%	**32.7%**	14.5%	14.5%	29%
Saudi	5.3%	21.3%	38.7%	14.7%	14.7%	5.3%	20%
Lebanese	8.9%	28.9%	22.2%	24.4%	11.1%	4.4%	15.5%

** Those who have used the Internet for three years or more.

Table 30: Top 12 nationality of respondents * Time spent per Internet session

Nationality	Less than 5 minutes	6-10 minutes	11-30 minutes	31- 60 minutes	1-2 hours	Heavy users**		
						2-5 hours	5 + hours	Sub-total
Egyptian	-	-	7.7%	25.6%	28.2%	26.9%	11.5%	38.4%
Lebanese	4.3%	2.1%	12.8%	10.6%	40.4%	25.5%	4.3%	29.8%
Kuwaiti	-	3.2%	6.5%	25.8%	35.5%	22.6%	6.5%	29.1%
Saudi	-	2.7%	8%	34.7%	26.7%	18.7%	9.3%	28%
Palestinian	-	-	9.2%	21.4%	43.9%	15.3%	10.2%	25.5%
Omani	-	-	8%	16%	52%	24%	-	24%
Jordanian	-	3.2%	16.1%	21%	37.1%	12.9%	9.7%	22.6%
Syrian	3.6%	-	9.1%	32.7%	38.2%	7.3%	9.1%	16.4%
Sudanese	-	-	23.1%	38.5%	23.1%	11.5%	3.8%	15.3%
Canadian	-	-		17.2%	69%	-	13.8%	13.8%
Iraq	-	-	8.9%	37.8%	42.2%	11.1%	-	11.1%
American	-	-	21.1%	26.3%	42.1%	5.3%	5.3%	10.6 %

**Those who use the Internet over 2 hours a day.

Although not quite consistent, Table 31 shows also that the more years of experience people had using the Internet, the more accesses they had and more hours they spent online.

Table 31: Internet experience and time spent online

Time on the Internet	Internet access every week			Time per Internet Session		
	Every day	4-6 days	Total	2-5 hours	5 hours+	Total
4 years ++	12.1%	1.5%	13.6%	3.6%	1.4%	5%
3 - less than 4 years	14.9%	2.4%	17.3%	2.2%	1%	3.2%
2 - less than 3 years	18.5%	4.2%	22.7%	3.7%	1%	4.7%
1 - less than 2 years	13.9%	5%	18.9%	3.2%	1%	4.2%
6 months - less than a year	6.9%	3.8%	10.7%	1.7%	0.4%	2.1%
Less than 6 months	4.8%	1%	5.8%	2.2%	0.8%	3%
Total	71.1%	18%	89.1%	16.4%	6.5%	22.9%

Table 32 shows amongst heavy users of the Internet, those aged 26-35 represented the largest group (36.5%), followed by those aged 36-45.

Table 32: Age group * Access the Internet every week Crosstabulation

Age group	Access the Internet every week				Heavy* users		
		Less often	About once a week	2-3 days	4-6 days	Every day	Sub-total
16 and under	%	-	-	-	0.3%	1.4%	1.7%
17 to 25	%	0.50%	0.90%	1.30%	3%	11.8%	15%
26 to 35	%	-	-	3.30%	7.8%	**28.7%**	36.5%
36 to 45	%	0.80%	0.50%	2.70%	3.6%	20.7%	24.3%
46 to 55	%	-	-	0.50%	1.7%	7.2%	8.9%
56 and over	%	-	-	0.30%	1.5%	1.5%	3%

* Those who use the Internet for more than 4 days a week.

7.2.2.2 Internet Equipment

A series of questions were asked about the Internet-related equipment possessed by respondents. These questions enquired about Internet users' current operating system, type of browser used, their Internet service provider and also the location at which they generally used the Internet. These questions provided background information about the nature of Arab e-newspaper readers' wider Internet experience.

Microsoft-Windows was, not surprisingly, the dominant operating system in its six versions. Windows English versions (3.XX, 95, NT) accounted for 71.8 per cent, and Windows Arabic versions (3.XX, 95, NT) for 16.2 per cent of the operating systems mentioned. Most respondents reported using English language-supported browsers (72.4%). The most frequently mentioned were Netscape (41.4%) and Internet explorer (31.3%). Arabic enabled browsers were used only by 10.8 per cent (Internet Explorer: 6%; Netscape with SINDBAD: 4.3%; Tango (Alis): 0.5%), and around one in seven respondents (13.3%) reported that they did not know the name of their browser.

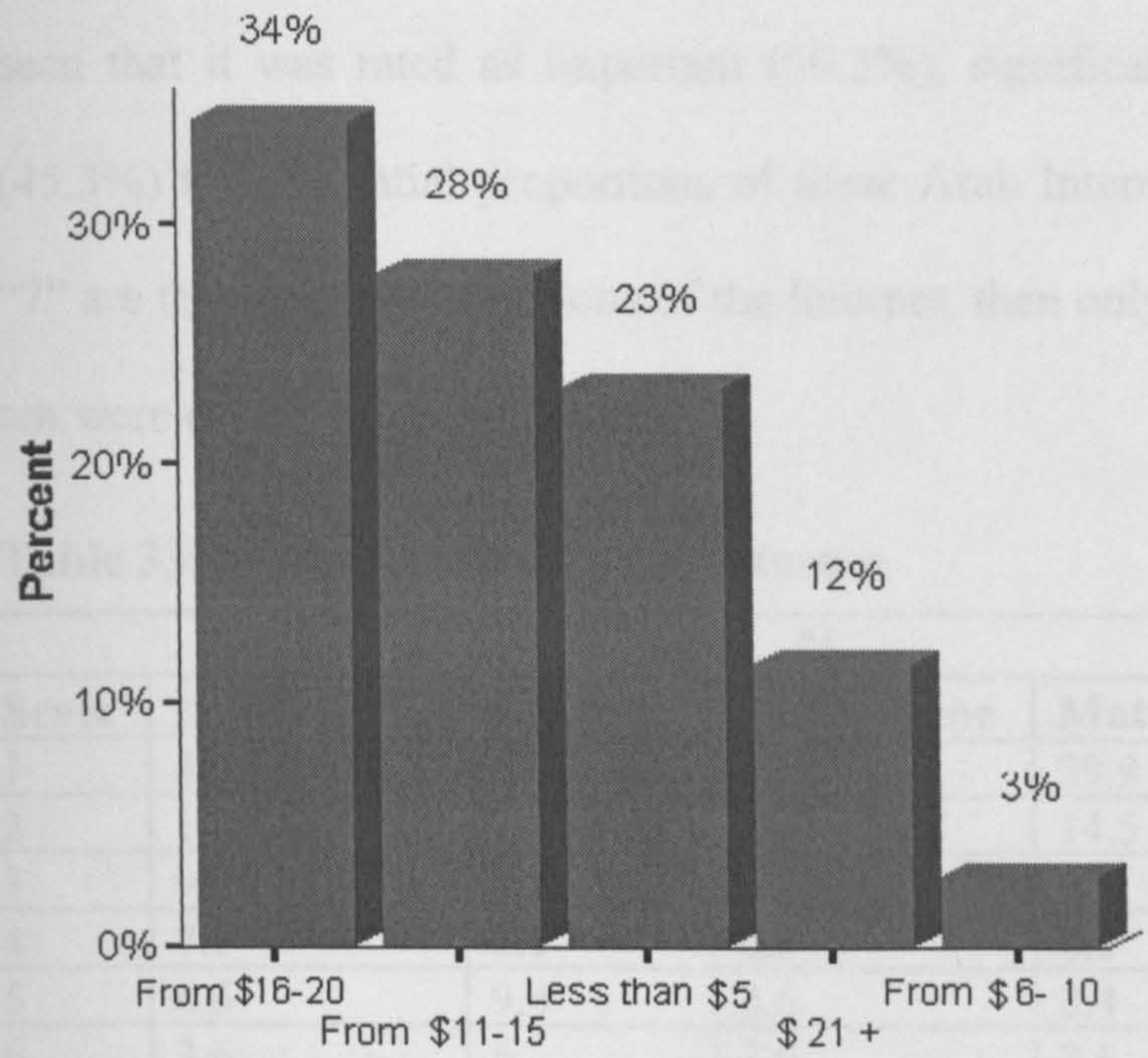
Respondents were asked to specify their *Internet Service Provider* from three main categories of ISP: (1) commercial (local) Internet service provider; (2) educational institution and (3) government office. A further 'other' option was provided to catch

any ISPs not covered by the first three categories. A slim majority of respondents (51%) reportedly using a local commercial ISP as their sole access to the Internet, while one in four (24.8%) claimed to access the Internet via an educational institution. Only a small minority (3.3%) reported accessing the Internet via a government office only. Around one in eight respondents (12.8%) nominated the 'other' category, and around one in twenty respondents (4.4%) claimed to use a mixture of two or more of the above Internet access points.

Linked to the question about their Internet service provider was the question of where Arab users of the Internet usually logged on. The majority of respondents (63.8%) reportedly mainly accessed the Web from "home". The second most often mentioned site of main Internet usage was at school/university (19.3%), with a work location being the third most likely location (14.6%). Further questioning probed whether respondents were reliant solely on their nominated 'main' point of Internet access or whether they had other places where they could use the Internet. Nearly three in ten respondents (29.5%) said that their main Internet access point was their only access point. For others, school or university (23%), work (21.4%) and home (17.3%) were the most popularly named secondary points.

Respondents were asked to report their monthly cost for Internet connection. The purpose of this question was to determine if there is any correlation between the results with other variables such as their willingness to pay for online newspapers and the most common problem reported by readers. Figure 20 shows that 34 per cent reported paying $16-20 and 28 per cent said they paid $11-15.

Figure 20: Money spent on Internet services every month



7.2.3 What are the Attitudes of Arab Users Towards the Internet as a Source of News and Information? (Q 12)

It has already been established that the Internet was used more than anything else for news. Just how significant a source of information the Internet represented to Arab users was examined further. Survey respondents' attitudes towards the Internet were measured along five rating scales in terms of how important it was, whether it was of no concern to them, whether it meant a lot to them, whether it mattered to them, and in terms of how significant it was to them. Each rating was given along a seven-point scale on which "1" represented the highest or most positive rating and "7" represented the lowest or most negative rating. The results are summarised in Table 33.

If ratings of "1" or "2" are taken as strong endorsements of the Internet, then it can be seen that it was rated as important (59.5%), significant (48.4%) and meaning a lot (45.3%) to substantial proportions of these Arab Internet users. If ratings of "6" and "7" are taken as firm rejections of the Internet, then only around one in seven to one in ten were clearly negative towards it.

Table 33: Attitudes towards the Internet

	%				
Scale	**Importance**	**Concern**	**Mean to me**	**Matter to me**	**Significant**
1	45.1	23.9	32.8	29.9	33.5
2	14.4	7	12.5	14.5	14.9
3	9.1	7.9	10.6	9.5	9.4
4	7.1	6.1	6.8	6.5	5.4
5	4.6	9.4	3.6	3.4	4.6
6	3.6	6	3.9	3.6	3.6
7	9.5	10.4	6.8	6.1	5.9

It is interesting to note how Internet sources ratings break down in terms of the top 12 respondent nationalities. Those holding nationalities of Oman, Egypt, Syria, Canadian and Jordan ranked the Internet as important to them, to a relatively similar extent. Kuwaitis, on the other hand, were most likely to rank the Internet in the most negative terms. Table 34 shows different nationalities' ratings of the importance of the Internet.

Another observation to emerge was that in relation to gender/level of education, differences among women's and men's opinions in their rating of Internet sources were small. Table 35 details the relationship of gender/level of education and the evaluation of Internet sources importance.

Table 34: Top 12 Nationality and their rating of Internet sources importance

Nationality	Important to me (+) ---------- (-)of no important to me						
	1	2	3	4	5	6	7
Omani	68%	8%	16%	-	-	-	8%
Egyptian	62.9%	12.9%	7.1%	11.4%	-	2.9%	2.9%
Syrian	60.8%	17.6%	3.9%	3.9%	5.9%	-	7.8%
Canadian	59.3%	-	22.2%	18.5%	-	-	-
Jordanian	56.9%	25.9%	-	-	-	3.4%	13.8%
American	50%	22.2%	11.1%	5.6%	-	-	11.1%
Saudi	48%	16%	12%	9.3%	6.7%	-	8%
Palestinian	47.9%	14.9%	7.4%	4.3%	6.4%	-	19.1%
Iraq	46.7%	13.3%	4.4%	4.4%	13.3%	4.4%	13.3%
Lebanese	38.5%	17.9%	10.3%	7.7%	10.3%	5.1%	10.3%
Kuwaiti	34.5%	24.1%	13.8%	6.9%	-	-	20.7%
Sudanese	27.3%	36.4%	-	9.1%	9.1%	9.1%	9.1%

Table 35: Importance of Internet sources according to gender and level of education

Gender	Importance	High school	College	Master's degree	Doctorate	Tech./Trade school
Male	1	13.6%	35.4%	31.9%	18.6%	0.6%
	2	12.1%	34.3%	39.4%	13.1%	1%
	3	16.9%	43.1%	21.5%	12.3%	6.2%
	4	12%	44%	32%	4%	8%
	5	5.7%	51.4%	28.6%	8.6%	5.7%
	6	16%	40%	16%		28%
	7	7.7%	55.4%	20%	10.8%	6.2%
	Total	12.7%	39.5%	30.1%	14.2%	3.5%
Female	1	36.4%	45.5%	-	18.2%	-
	2	50%	25%	-	-	25%
	3	-	83.3%	16.7%	-	-
	4	-	-	-	-	-
	5	-	-	-	-	-
	7	25%	50%	25%	-	-
	Total	27%	54.1%	8.1%	5.4%	5.4%

7.2.3.1 Main Use Of The Internet

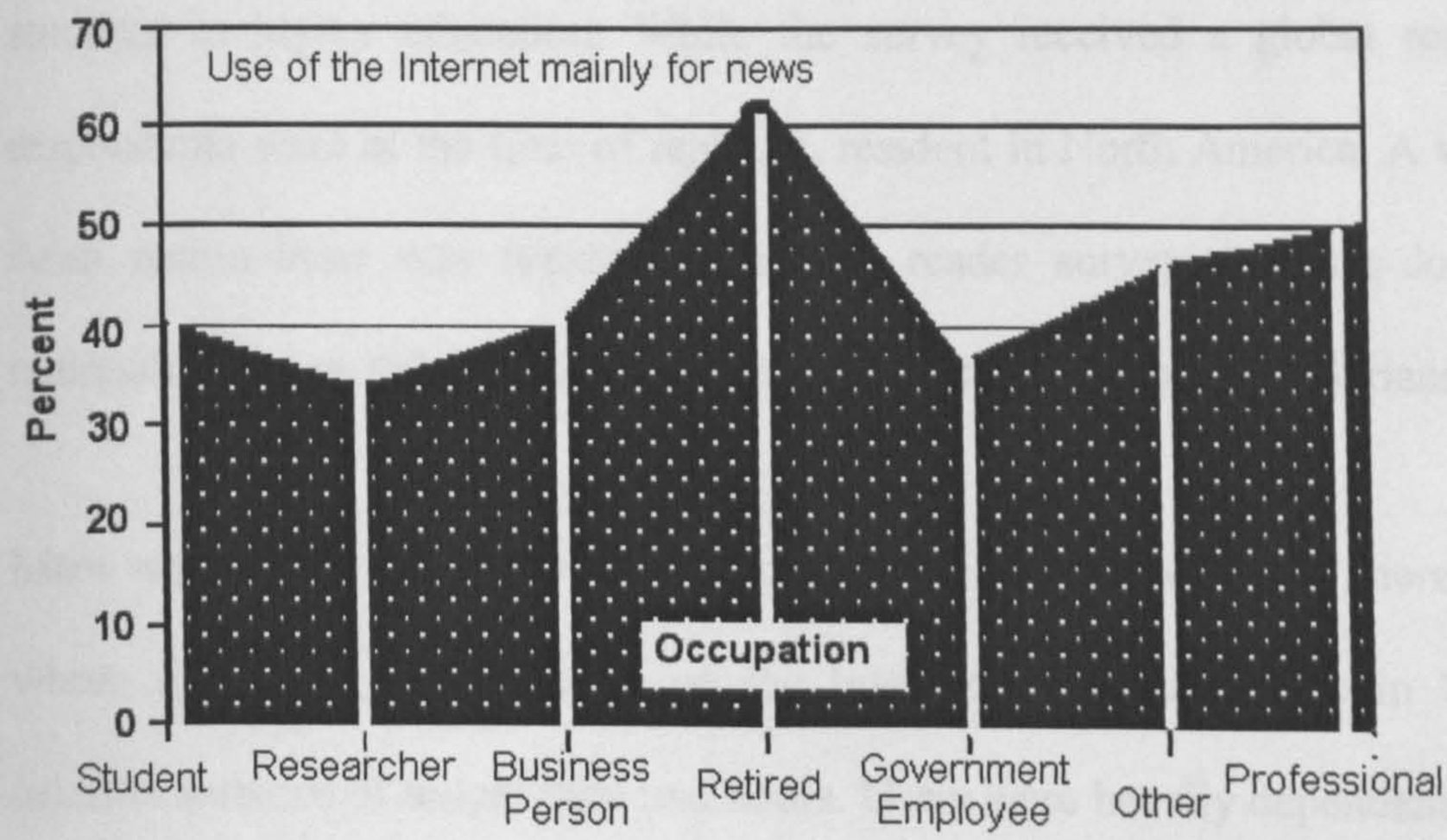
When respondents were asked to report their main use of the Internet, the analysis indicated that news seeking is the most popular Internet utility among Arab users (41.1%). Table 36 shows that research and educational purposes took sequentially, second (18%) and third place (17%) in popularity among survey participants.

Table 36: Main use of the Internet

Use	Percent
News	41.1
Research	17.9
Education	16.8
Pleasure	14.9
Work	8.1

Figure 21 shows the occupational distribution of respondents who indicated high reliance on the Internet to obtain news. Retired people scored the highest (62.5%) percentage of those who use the Internet mainly for news. Researchers and government employees indicated less interest in Internet news resources. This finding confirms trends observed elsewhere. For example, according to a research report on older Americans by the American Association of Retired Persons the fastest growing age segment of online buyers are those who are 65 and over, at 16 per cent (AARP, 1999) and according to the findings of another research nearly 78 per cent of US seniors who have Internet access have made an online purchase (Greenfield Online, 1999).

Figure 21: Main use of the Internet according to occupation



7.3 Discussion

This chapter has explored the general characteristics of users of Arab electronic newspapers. The e-newspaper production in the Arab World has grown dramatically since the mid-1990s, but so far, little research has been carried out to understand the nature of the Internet in relations to these publications.

As the findings reported in Chapter Six show, the publishers and editors of Arab e-newspapers hold a belief that the future of newspaper publishing lies in the Internet. This belief has encouraged them to launch web-based publications. Yet, they exhibit scant knowledge of the Internet and have appeared unwilling to invest resources into improving their understanding of Internet users. The current survey serves to plug that gap to some extent.

Survey responses revealed Arab e-newspaper readers to be predominantly male, young to middle-aged adults, many of whom are business or professional people, or (largely) students in higher education. While the survey received a global response, most respondents were at the time of replying, resident in North America. A wide range of Arab nationalities was represented in the reader survey, but the dominant Arab nationalities were Palestinians, Egyptians, Saudis, Jordanians, and Syrians.

Most respondents were fairly or very experienced Internet users, more than half of whom spends at least an hour on the Internet per session. One in four averaged Internet sessions of longer than two hours. Users were heavily dependant on Microsoft windows software and widely used the Internet in English. The unavailability of

reliable Arab-language software was one major reason behind this trend. This, undoubtedly will represent a barrier to Arab e-newspapers market establishment in the future. For most respondents, however, the Internet was an important information resource.

This study found that the characteristics of Arab e-newspapers' readers were similar, in many ways, to those found by other studies with regards to Internet users characteristics like age, occupation and level of education. The current survey found that the typical (Arab) user of the Internet is a young male, with at least a college degree who accesses the Web everyday. Most studies have shown that young people are the most enthusiastic users of the newest media and online services. In the Arab World, DIT's (Dabbagh Information Technology) Arab users survey (1999) reported similar outcome to these findings. The study found that Arab users are young, more educated, and far more likely to be both professional and male. It also found that users between the age of 21 and 35 constituted the largest age group accounting for 70 per cent whilst user between the 36 and 45 accounted nearly 16 per cent, and those above 45 years were only 4.5 per cent. DIT found that Arab users level of education was very high as about 82 % were holders of a university degree (bachelor, masters or doctorate). The DIT study showed also more than 70 per cent of Arab users stated that they use the Internet everyday. Other studies reported that it is not only online surfers who are typically younger, but also the principal consumers of online news, and to be better educated, and are more likely to be male (Nielsen Media Research, 1996; Pew Research Centre, 1996; GVU, 1997, 1998).

Clearly, the reader's survey indicates that the Web is a key news tool for Arab emigrants who formed the majority of respondents to the survey. Arab citizens all over the world today can continue to receive up-to-date news and information from 'home' on a plethora of new information media. The Internet alone offers hundreds of information sources through which emigrants can maintain contact with their roots. This is supported by what Kamerer and Bressers (1998) see as key difference between print and online news, when hey state that the Internet offers the ability to link communities of like-minded people who may not be geographically related (see also Boczkowski, 1999 p.108).

The greatest response to this survey came from Arab (migrants) who reside in the USA and Canada. This is not surprising since the Internet became widely established in America before anywhere else and nearly half of the Internet population are from America. Furthermore, according to the Arab American Institute report of 1999, three million people in America have roots in the Arab World (AAI, 1997). Canada that came next to USA in its supply of survey respondents, hosts close to two hundred thousand (188,430) Arabs, according to the 1996 Canadian population census (Statistics Canada, 1996).

Palestinians exhibited the highest rate (14%) of respondents amongst Arab nations. Their commitment to the Internet may reflect their historical situation. The occupation of their homeland and loss of distinctive national status may drive them to seek to use any information sources to keep in touch with other compatriots.

The finding that most Internet users are young poses a problem for Arab newspapers who must consider how to meet the needs of the vast majority of those relatively young consumers (immigrants and citizens) who have indicated that they turn to Internet mainly for news. Lapham (1995) suggested that today's young people often prefer more sophisticated media to the daily ritual of the morning newspaper. However, taking into consideration the typical character of Internet users groups, the respondents to this survey seem to have a good spread of age, nationality, occupation, country of living and education background. Hence, it may be unnecessary to become pre-occupied with the tastes of the young, given that other consumers of the Internet are also growing in significant numbers.

The top three reasons for using the Web are news, research, and education, which makes sense given the high number of students and professionals amongst respondents. The fourth reason is pleasure, and the use of the Internet for work has been ranked last. This can likely be attributed to the fact that the Internet business (e. commerce) is still evolving in the Arab World. Eqbal Alyousuf, a UAE IT expert, told the Arab International Telecommunications Conference (AITEC 99) in Beirut that the weak telecommunications and Internet infrastructure in the region and the high cost of connecting to the Internet and of managing websites remain major impediments slowing down e-commerce penetration. Merchants and businesses here are also still unaware of the impact e-commerce can have on their business, states Alyousuf (Hameed, 1999).

Chapter Eight: Arab Online Newspapers and Their Readers

8.1 Introduction

Having established the nature of the electronic Arab news marketplace through an analysis of Arab news websites and interviews and surveys with Arab media professionals involved with online newspaper publication, the current chapter turns attention to the users of these news services. As we have established, the Internet is emerging as a major news provider in the Arab world. A number of competing news services are already available.

While the main focus of this study is the use of e-newspapers on the Internet, these news media face competition for Arab consumers as news providers on the Internet from other services supplied by broadcasters and news agencies from within and outside the Arab world. General Internet usage within the Arab world remains the privilege of a limited few who are in a position, professionally and economically, to gain access to this new medium. While there is every reason to expect this consumer market to grow in the future, the findings presented in the previous chapter indicated that the electronic news market is dominated by overseas students and travelling businessmen (and few women) who turn to the Internet as a channel through which they can obtain news from home in their own language while living temporarily thousands of miles away.

From general Internet usage, the current chapter narrows the focus of the research to cast the spotlight on consumption of e-newspapers on the Internet. The availability of online Arab newspapers has grown rapidly within the space of a few years. As the

research with Arab newspaper publishers and editors has indicated, the establishment of an electronic news business is regarded as an essential development for the future.

While these early experiments on the Internet have yet to prove profitable, there is a fairly unambiguous recognition of the importance of the Internet to their future business enterprises. Arab newspaper publishers have acknowledged that failure to take early tentative steps towards building an Internet publication may mean that they will be left behind by others who do. What became equally clear from the investigation undertaken with these news media professionals, as part of this project, was that the Arab news media still have some way to go before they evolve into successful dot.com businesses. Although, this observation applies to electronic publishing in other parts of the world as well as the Arab world (Mensing, 1998; Peng *et al*, 1999).

Readers' opinions about e-newspapers are vital aspects of the future success of such news publishing enterprises. There is a need for newspaper publishers to re-think their business strategies when operating on the Internet because the nature of the relationship between media product and media consumer is different in the context of the Internet, as compared with, say, a hard copy newspaper. The principal economic reasons for this change of approach are linked to the conditioning of Internet users to expect a lot of the web-based information they access to be supplied free of charge.

Another set of factors is associated with the changes to traditional news consumption habits that are facilitated by the new communications technologies of the Internet. The Internet, as a medium, has been labelled as "nonlinear" (Paul, 1995; Friedland &

Webb, 1996), although this is probably only partly true. This means that information can be provided and consumed in a non-sequential fashion by readers. With a hard copy newspaper, finite information is prepared so that a reader consumes by starting at the top of the page and reading down. With an e-newspaper, the reader may be able to switch from the story half-way through to pursue more detailed information on a point that is archived elsewhere. Thus, there are additional complexities in the writing and presentation of news stories on the Internet (Fredin, 1997; Meyer, 1999).

These evolutionary changes to news publishing on the Internet also invoke a different kind of response from readers. News consumers are encouraged by the Internet to become interactive consumers who are also more demanding of the news provider. News consumers are empowered by electronic publishing, when it is done properly, introducing a new form of "prosumerism" in which content producers cede power to the consumers to control the way news is received (Dennis, 1996; Khoo & Gopal, 1996).

The new and emerging concept of "interactive journalism" requires new skills and a new approach on the part of news producers and news consumers if both are to reap benefits from web-based activity. Increasingly, communication on the web is not a one-way process such as that associated with the older established media of newspapers, radio and television. The Internet opens up possibilities for sender-receiver interactions and even for receiver-receiver interactions related to what the sender has transmitted (see Morris & Ogan, 1996).

Newspaper publishers therefore need to be not just aware of these developments, but also to understand the full extent of their implications for their news businesses.

Simple transference of the hard copy version of the newspaper onto a website may serve the initial purpose of attaining a presence on the Internet, but is a far cry from the kind of news service of which the Internet is capable and which increasingly experienced Internet users come to expect.

In this chapter then, we turn to the subject of Arab online newspaper readership. Under this heading, questions were asked of respondents to the online survey of Arab newspaper readers about their online newspaper reading behaviour, their reasons for using Internet newspapers, and their perceptions and attitudes concerning these electronic publications. Questions probed for negative as well as positive opinions.

In reporting these results, the chapter begins by presenting some descriptive statistics about online newspaper readership and opinions. It then examines relationships between reader profiles and online newspaper use and opinions. Finally, it presents an analysis that was designed to find out what were the principal predictors of overall frequency of use of Arab Internet newspapers and overall satisfaction with them. The findings are then considered in relation to other literature on the subject and the views of Arab online newspaper publishers and editors

8.2 What is the Frequency of Reading E-Newspapers and what are the Most Readable Newspapers? (Q13)

8.2.1 Frequency of Reading Internet Newspapers

News was the most nominated reason among the respondents of the Arab readers' survey for using the Internet. How significant a part of this usage were e-newspapers?

When asked how often they read Arab newspapers on the Internet, over one in two respondents (54.6%) claimed to read an e-newspaper "every day". More than one in three (35.8%) said they read an e-newspaper at least once or twice a week or even most days of the week. A small proportion (2.1%) said they read these newspapers only at weekends, while a few (4.8%) reported having no regular pattern to their use of Internet newspapers.

8.2.2 Electronic and Printed Arab Daily Newspaper Readership

Survey respondents were asked to indicate their regular hard copy newspaper readership in addition to their use of e-newspapers. While this study was concerned primarily with readership of Internet newspapers, it was also relevant to ascertain which printed newspapers respondents read most often. Indeed, many of the Arab newspapers nominated by respondents had begun to move across to the Internet. The results summarised in Table 37 below show the top 12 electronic and printed newspapers nominated by survey respondents.

The table shows that the most read e-newspapers coincided very closely with the most read printed newspapers. Thus, the Internet versions of the most popular printed Arab daily newspapers have so far proven to be the most accessed e-newspapers in the Arab World. At the time of the survey, however, the electronic versions were not read to the extent that the printed versions were.

Table 37: Newspapers read most often

E-newspapers	N	%	Printed newspapers	N	%
Alhayat (UK)	85	10.6	Alhayaat (UK)	127	15.9
Alkhaleej (UAE)	48	6.0	Alkhaleej (UAE)	66	8.3
Alra'I (Jordan)	33	4.1	Alra'I (Jordan)	52	6.5
Alsafeer (Lebanon)	26	3.3	Alsafeer (Lebanon)	35	4.4
Alayyam (Bahrain)	23	2.9	Alittihad (UAE)	32	4.0
Alittihad (UAE)	20	2.5	Alwatan (Kuwait)	28	3.5
Alquds (Palestine)	18	2.3	Alayyam (Bahrain)	27	3.4
Alwatan (Kuwait)	15	1.9	Alquds (Palestine)	24	3.0
Aldustoor (Jordan)	15	1.9	Alahram (Egypt)	21	2.6
Alqabas (Kuwait)	12	1.5	Alqabas (Kuwait)	20	2.5
Alijazirah (Saudi Arabia)	12	1.5	Alayyam (Palestine)	19	2.4
Alayyam (Palestine)	12	1.5	Algomhuria/Aldustoor	18	2.3

When asked to specify which online newspaper readers read on a regular basis, 733 responses (91.6%) were collected. Nearly four in ten (38%) reported no specific online newspaper for reading on a regular basis. *Al-Hayat* the London based Arabic daily was selected by 10.6 per cent who reported it to be their favourite newspaper they read in regularly followed by *al-Khaleej* (UAE, 6.0%), *al-Ra'i* (Jordan, 4.1%) and *al-Safeer* (Lebanon, 3.3%). Sixty-seven respondents (8.4%) failed to report an online newspaper they read regularly.

Why al-Hayat ?

In view of the apparent popularity of al-Hayat, it is worth examining in more detail the roots of the significance of this newspaper. Al-Hayat is widely regarded to be the most credible Arabic daily newspaper (Kalb and Socolovsky, 1999). The newspaper can be characterised by its secular Pan-Arab focus that has contributed to its reputation for analysis of good quality and objective reporting. Yet this reputation has caused a lot of trouble to the paper. In January 1998, a spate of letter bombs was sent to

al-Hayat offices in London, New York and Riyadh. Some observers said the attacks were a coordinated terror campaign by some radical groups. The newspaper's struggle to pass through Arab censors is another daily issue facing this (popular) newspaper. According to the its former editor, Jihad Alkhazen, al-Hayat was banned in certain Arab countries sixty times in 1994, thirty five times in 1995 and twenty times in 1996 and 1997 (Khazen, 1999 p.87). The paper's circulation figures, however, did not exceed two hundred thousand copy a day (see Table 38).

Table 38: Circulation of *al-Hayat* newspaper (1999)

Rank	Country	No. of copies	Rank	Country	No. of copies
1	Saudi Arabia	100,200	9	Other	6,500
2	Europe	16,200	10	Morocco	6,000
3	Other (World)	9,850	11	Kuwait	4,750
4	Egypt	9,500	12	Bahrain	4,250
5	Lebanon	8,750	13	Qatar	2,500
6	USA	8,200	14	Oman	2,250
7	UAE	7,870	15	Tunisia	1,200
8	Yemen	7,800			
Total		195,820			

Source : Alhayat Newspaper. London

8.2.3 Most Important Thing about Arab Internet Newspaper

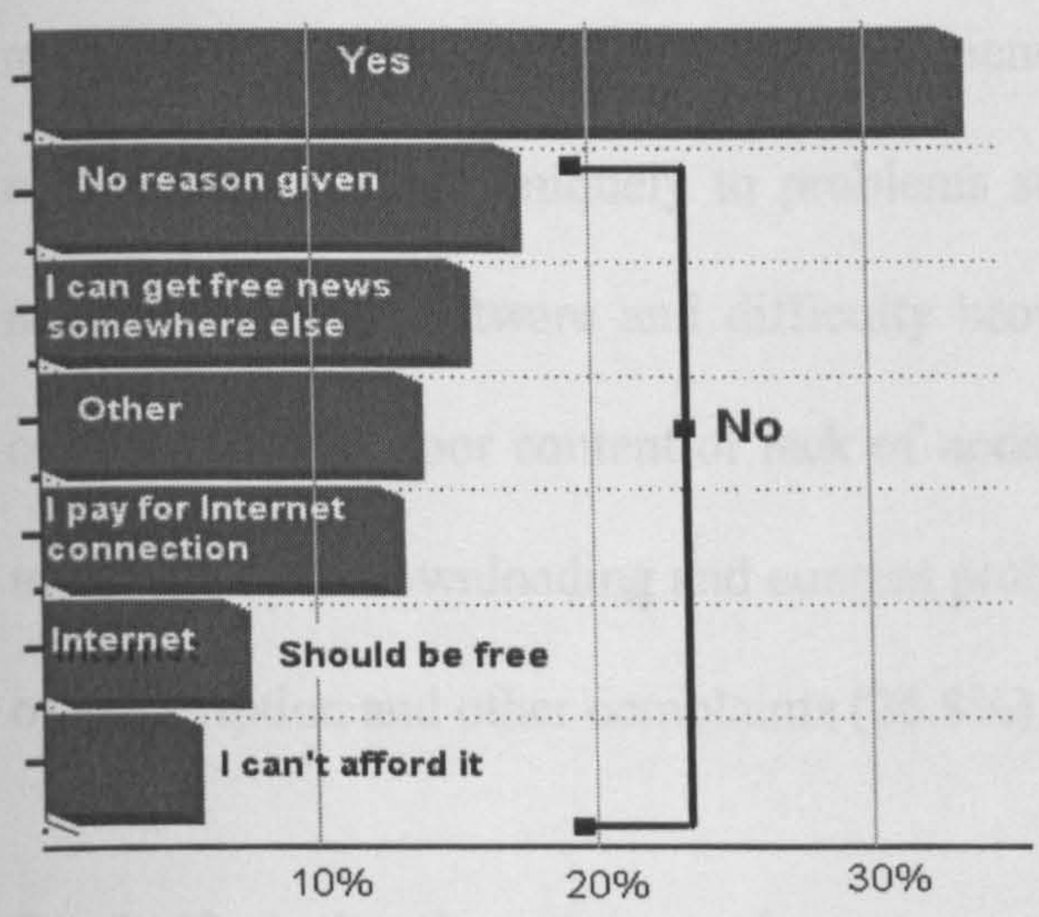
When asked what was important to them in reading a particular e-newspaper, respondents most often referred to the fact that it was available when they wanted to read it (36.1%) and that it was free (26.6%). For other respondents, e-newspapers served as substitutes for printed versions of those publications that were not available where they currently lived (17.3%). One in ten respondents (10.1%) simply preferred to read an online newspaper.

8.3 Willingness to Pay for Reading Online Newspapers

When asked about their willingness to pay the cost of reading their favourite e-newspaper, more than six in ten respondents (63%) reported that they were not willing to pay fees for reading online newspapers.

As it can be observed in Figure 22 respondents' unwillingness to pay may stem from their ability to access a wide range of free news sites on the Internet as reported by 14 per cent. An additional factor could be that because many users were already paying a service provider for general Internet access, they may have been less willing to pay again for a news service.

Figure 22: Willingness to pay fees



Although the survey did not specifically ask readers about their personal experiences in obtaining news from other sources prior to the Internet, some interesting observations emerged that could be added to the tendency of some users to pay for reading online newspaper. For example, one respondent lived in a remote town in Canada and cited his struggle ten years ago to catch Friday prayers and return home

with a bundle of 'last week' newspapers from the Arab world. " I used to pay for some of them where in some cases Arab embassies deliver them freely in front of the doors of the Mosque. Now.. I usually read three newspapers a day on the Web, in the time of my choice, and I am ready to pay if asked to".

8.3.1 Most Common Problems Experienced with Online Arab Newspapers (Q14)

In order to examine and understand users' evaluation of e-newspapers further, respondents were asked about the most common problems they have confronted when reading Arab dailies on the Internet. As Table 39 shows, more than one in seven respondents (15.9%) said they had experienced no problems. However, many more respondents referred uniquely to problems such as slow downloading, including the need for special software and difficulty browsing (38.6%) and problems relating to content, such as poor content or lack of updating (18.7%). Other respondents referred to a mixture of downloading and content problems or either of these together with cost of subscription and other complaints (26.8%).

To clarify further the opinions of e-newspaper readers about practical accessibility and product quality issues, Arab online newspapers were rated along three five-point scales for navigating, downloading and updating of content. The results are summarised in Table 40 below.

Table 39: Most common problems experienced with Arab online newspapers

Common Problems	%
Downloading (slow, needs special software, difficult to brows	38.6
Content problems (poor content, not updated, one sided view)	18.7
No problem	15.9
Other	9.2
Content +Downloading	7.4
Some are not free	7.0
Downloading +other	2.0
Content + Not free	.7
Downloading +Not free +other	.4

Table 40: Evaluation of service quality of Arab e-newspapers

Rank	Navigating		Downloading		Updating	
	N	%	N	%	N	%
Excellent	153	19.3	37	4.7	97	12.7
Good	361	45.5	138	17.7	314	41.2
Fair	224	28.2	283	36.3	249	32.6
Poor	46	5.8	247	31.7	87	11.4
Very Poor	10	1.3	74	9.5	16	2.1

From these results, it is clear that e-newspapers in the Arab World score reasonably well for ease of navigation, with a majority of respondents (64.8%) rating them good or excellent, and for updating of news content (53.9% saying good or excellent), but do less well on the downloading measure. In the latter case, respondents rating e-newspapers poor/very poor on this measure (41.2%) outnumbered those rating them good or excellent (22.4%).

8.4 *Readers' Satisfaction and Evaluation of E-Newspapers (Q15)*

8.4.1 What Readers Like Most and Least about Internet Newspapers?

The demographic statistics presented in Chapter 6 helped to assess whether the sample is representative of the population of Arab users of the Internet. Not surprising that good share (35%) of respondents were students. This was found elsewhere (especially in the 1997, 1998 studies the time of this survey) as students make up obvious percentages of the Internet population (DIT, 1998, see also NUA.COM for individual countries demographics).

In this survey respondents were asked to indicate what they liked most about online newspapers and then what they liked least about them. The most liked things mentioned were their availability (25.0%), their variety (19.4%), their ability to keep readers in touch with home news (15.9%), and their provision of free news (13.5%). A little over one in four respondents (26.1%) gave a mixture of the foregoing reasons and other reasons for liking online Arab dailies.

The most frequently mentioned disliked qualities of online newspapers were slow downloading of e-newspapers (29.1%), limited news (20.5%), absence of freedom (15.6%), and having to pay fees (11.6%). Around one in four respondents (23.2%) gave a mixture of the above reasons and other reasons.

8.4.2 Overall Satisfaction in Reading Arab Dailies on the Internet

Respondents were asked to select answers from a five-point scale (*very satisfied, somewhat satisfied, neither satisfied or dissatisfied, somewhat dissatisfied, and very dissatisfied*) in order to examine readers' overall satisfaction with reading

e-newspapers. In general, readers of Arab e-newspapers seemed to be pleased with these publications. Most respondents (74.2%) were very satisfied (26.1%) or somewhat satisfied (48.1%) with online Arab daily newspapers. Fewer than one in ten (9.3%) were dissatisfied. Around one in six (16.5%) held no firm opinions about online newspapers one way or the other.

8.5 Correlates of Online Newspaper Consumption and Satisfaction

The foregoing descriptive analyses have provided a broad profile of the nature of Arab online newspaper consumption and of satisfaction with the services their publications supply. It is clear from these findings that there was some variance in frequency of consumption of these newspapers among their users and also in the level of satisfaction experienced. There were also variations in more specific opinions about these electronic publications.

The question arises as to whether specific problems or opinions associated with online newspapers or with more general Internet experiences are differentially related to how often users read online newspapers and with their degree of satisfaction with the news service they provide. A series of Pearson correlations were computed between scalar measures of Internet usage, opinions about the Internet, and opinions about electronic Arab newspapers and general usage and satisfaction measures. The results are summarised in Table 41.

Reported frequency of reading online Arab newspapers was significantly correlated with just two other variables: claimed frequency of accessing the Internet ($r = .22$, $p < 0.001$) and rating for navigating Arab newspapers on the Internet ($r = .17$, $p < 0.001$).

Thus, greater frequency of general Internet use and ease of navigation around Arab newspapers were the two variables most closely associated with overall frequency of online Arab newspaper consumption.

Overall satisfaction with online Arab newspapers was significantly correlated with frequency of accessing the Internet each week ($r = .11$, $p < 0.01$), ease of navigating online Arab newspapers ($r = .36$, $p < 0.001$), rating of downloading Arab online newspapers ($r = .15$, $p < 0.001$), and rating of updating of online Arab newspapers ($r = .35$, $p < 0.001$). Thus, more frequent general Internet use and, more powerfully, positive perceptions of the navigational, downloading and updating qualities of online Arab newspapers were the factors most closely associated with overall satisfaction with these publications.

Table 41: Correlations of e-newspapers vs. general usage and satisfaction

		How often do you read Internet newspapers?	Overall how Satisfied are you in reading Arab dailies on the Internet?
Access the Internet every week	Pearson Correlation	0.218**	0.105**
How would you rate [Navigating] Arab Newspapers on the Internet?	Pearson Correlation	0.169**	0.357**
How would you rate [Downloading] Arab Newspapers on the Internet?	Pearson Correlation	0-.013	0-.147**
How would you rate [Updating] Arab Newspapers on the Internet?	Pearson Correlation	0.009	0.345**
I use the Internet mainly for	Pearson Correlation	0-.137**	0.061
Internet Sources matters to me	Pearson Correlation	0-.082*	0.003

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

8.6 Predictors of Overall Use and Satisfaction

Further analyses were computed to explore the main predictors of general frequency of use of Arab online newspapers and overall satisfaction with the news services they provide. The descriptive statistics provided some indications of the profile of online Arab newspaper reading and of readers' opinions, they did not show whether there are particularly critical points in the nature of opinion about e-newspapers that underpin overall satisfaction with them among their users.

Bivariate correlations provided further insights into where specific relationships existed between general usage and overall satisfaction and other more specific aspects of readership behaviour and opinion. However, even these analyses do not convincingly indicate whether some factors are more significant than others, when all are placed alongside one another, in predicting readers' overall views. To examine this issue more closely, two multiple regression analyses were computed with frequency of reading Internet newspapers and overall satisfaction with these newspapers entered as criterion variables.

Predictor variables entered into a stepwise multiple regression analysis were age and gender; length of time respondent had been using the Internet, frequency with which Internet is used, and length of average Internet session; evaluations of the Internet (personal importance of Internet, concern about Internet, how much Internet means and matters to respondent, and overall significance of Internet to respondent); ratings of electronic Arab newspapers in terms of quality of navigation, ease of downloading, and quality of updating of copy; and finally how much money was spent on using the Internet. Each of the two dependent variables was also entered as a predictor variable with the other dependent variable.

The results of these analyses are shown in Table 42 and Table 43. In each case, a stepwise regression model was used, with pair-wise deletion of cases where data were missing.

8.7 Frequency Of Reading Electronic Arab Newspapers

Eight significant predictor variables emerged for frequency of reading of electronic Arab newspapers. The age factor indicated that older respondents were the more frequent readers of these newspapers. More frequent reading of these e-newspapers was also predicted by more frequent general accessing of the Internet, the significance of the Internet to the respondent, giving electronic Arab newspapers a high rating for navigation and updating of copy, and by overall satisfaction with these newspapers.

The overall regression model was statistically significant (F= 7.76; df = 8, 521; p<.0001). However, the Adjusted R square indicated that the model accounted for only nine per cent of the variance in the criterion variables. Clearly, frequency of reading electronic Arab newspapers is influenced by many other factors in addition to those considered in this analysis.

Table 42: Criterion variable: Frequency of reading electronic Arab newspapers

	Beta	T	Signif.
Age	-.12	-2.76	.006
Frequency of Internet access	.15	3.61	.001
Concern about Internet	.10	2.22	.02
Whether Internet matters	-.27	-3.48	.001
Significance of Internet	.21	2.73	.007
Rating for navigation	.17	3.44	.001
Rating for copy updating	-.12	-2.45	.01
Satisfaction with Arab e-papers	.10	2.22	.02

R Square = .11
Adjusted R square = .09
F = 7.76; df = 8, 521; p<.0001

8.8 Satisfaction with Electronic Arab Newspapers

This analysis revealed four significant predictor variables. The regression model was statistically significant (F=31.02; df=4.525; p<.0001), but the Adjusted R Square indicated that only 18 per cent of the variance in the dependent variable was explained by the predictor variables entered into the current analysis.

The significant predictors were gender, frequency of accessing the Internet, ease of navigation and updating of electronic Arab newspapers. Thus, satisfaction with these newspapers was higher amongst male respondents and linked to more frequent use of the Internet. Most of all, however, reader satisfaction was driven by being able to find one's way around the newspaper on the Internet and by the regularity with which its copy was updated. It is important to note, that reported frequency of reading these newspapers was not a significant predictor of satisfaction with them.

Table 43: Criterion variable: Satisfaction with electronic Arab newspapers

	Beta	T	Signif.
Gender	.12	3.16	.002
Frequency of Internet access	.09	2.18	.03
Rating for navigation	.26	5.77	.001
Rating for updating	.23	5.09	.001

R Square = .19
Adjusted R Square = .18
F = 31.02; df = 4,525; p<.0001

8.9 *Discussion*

Despite the fact that that the Internet is not yet widely available to the vast majority of Arab households, e-newspapers seem to have the potential to fulfil users' need of reliable, varied and free news resources. Likewise this new medium is seen among Arab users to improve their overall satisfaction and acceptance of the Internet and its unlimited media choice. This may explain why one of the most appealing Internet services driving Arab users adoption is (free) news provision on the Internet. The relatively high rate of e-newspapers readership frequency revealed in this study also gives an indication that online newspaper could be an option, not an alternative for some readers.

As we have seen in Chapter 7, respondents were interested at first in news then research and education followed by pleasure and work. This also appears to reflect, in part, the users' demographics, primarily the male, student, migrant who is somehow satisfied with the Internet because it enables him to stay in touch with home.

Notwithstanding, in order to attract (the majority of) people who appear to be more interested in news who also happen to be heavy users of the Web, it should be noted that they are not traditionally willing to pay (even) for reading their favourite e-newspapers. The explanations to this observation seem to be both economical (hardships) and cultural (freeness of the Web). In view of this, it is important to understand what users expect from e-newspapers and which users may be prepared to pay and which users expect news for free.

On the satisfaction side also, acerbic comments about some newspapers' government ties were often mentioned in some respondents' open-ended answers. Thus, any discussion of users' overall satisfaction with an e-newspaper and its potential for enhancing the dissemination of news and information must consider the environment through which a certain newspaper (print or electronic) performs its daily business. While Arab e-newspapers may be seen on the one hand, as an information godsend, on the other hand they attract detrimental reactions from readers because of their close ties with government. In order to combat this image, publishers should strive to reinforce the view that e-newspapers are news driven and separate themselves from the government line. Nonetheless, readers' comments may have some justification, as a browse through most newspapers contents reveals that most information is in some way government derived.

An overriding factor at this time is that most newspapers in the Arab world are involved in a struggle for survival. Part of the problem lies in the consequences of the wave of privatisations and the general tendency to political 'transparency' that have led most governments in the region to cut (secret) press subsidies and to yield influence to market forces.

Furthermore, the young generation who form a significant part of the population seem to be more concerned about their future in conditions of economical hardships where in most countries a considerable segment of the inhabitants are under the poverty line. In addition, the (increasing) availability of better media choices from Pan-Arab media and foreign news resources (such as BBC, Reuters) have succeeded in turning Arab elites and educated people away from their local press.

Despite the growing influence of the Internet as a news source, there are technical problems that work to impede the quality of its news provision. Many respondents indicated dissatisfaction and frustration with the slowness of downloading newspapers' Websites. The fact is that, in the case of online newspapers, the costs for any additional improvements are not recovered and profits are not expected even in the near future. Yet, it is also clear that Arab newspapers have not done enough work in this area. It is too early yet to tell how they can participate in the development of Arabic software and Arabic text solutions. Hopefully, with the wide spread of the Internet and the expected demand for Arabic content in the region, there will be more money and facilities for programmers to develop Arabic software that can help users to make full use of the Web and accelerate browsing of Arabic Websites. In this respect also, more energy needs to be put into attracting educational institutions and government bodies to facilitate Internet connections in a region where most of population cannot afford to buy reception equipment or pay subscription fees to a service provider. National policies are needed to publicise the Internet more widely in the rural areas and areas where certain communities could benefit from the Internet.

Chapter Nine: Discussion and Conclusions

9.1 Discussion

The purpose of this research was to investigate aspects of the production, format and consumption of Arab online newspapers. This study began with an analysis of the status of the Arab electronic news market. This was found to be a continually evolving phenomenon. During the course of the investigation the numbers of Arab online newspapers nearly doubled. The electronic news service available to Arab Internet users, however, was found to extend beyond online versions of established hard copy newspapers (see Chapter 5). Specialist Internet-only news sources were found that were supplied either by broadcast organisations from within and outside the Arab world or by brand new news suppliers. Information that can be considered 'news' in broad terms is also regularly posted by government agencies and non-government organisations in the Arab world.

The analysis of the electronic news market also included surveys of news publishers, editors and journalists, and readers. Publishers of online Arab newspapers participated in an Internet survey of their perceptions of their online businesses and editors and journalists provided further insights in a number of in-depth interviews. A large sample of Arab readers of e-newspapers world-wide provided information on their patterns of online news usage and their opinions about the good and bad qualities of these news services.

In all, 48 Arab online newspaper sites were visited and assessed, together with web-based news and information sites of nine other news organisations not associated with Arab newspapers, and 16 news agency sites. A further 13 websites with news information were found in the Arab world supplied by Arab radio stations and 14 further sites supplied by Arab television stations. The publishers of the 48 online Arab newspapers were approached to participate in an online survey, and 27 of these eventually replied. The data from these responses were further supplemented by interviews with six Arab editors and journalists associated with online newspapers.

In surveying readers, an online survey was posted on the Internet and obtained 1200 responses of which 800 supplied complete and valid sets of responses for further analysis. These online newspaper readers were a self-selected sample representing 45 countries and 40 nationalities. The great majority of these respondents reported using the Internet virtually everyday and mainly for news.

This chapter presents a general discussion of the issues that have been investigated throughout the study. At the outset, it was stated that the study would pose three sets of questions relating to the status of Arab online newspaper publishing, the business significance of such electronic publishing, and the nature and views of the readership.

The answers to these questions need to be considered in the wider context of the evolution of the Internet as a news medium. Research beyond the Arab world has indicated that although the 1990s witnessed the rapidly increased presence of established newspapers on the Internet (see Elderkin, 1996; Riley *et al.*, 1998; William & Nicholas, 1999), many newspaper businesses had not given much thought to the

best strategy to adopt in this new environment. 'Presence' seems to be everything; (see Sheppard, 1997; Riley *et al.*, 1998). The reasoning behind this movement is that the Internet is regarded as where the future of the news business will mostly lie. It is therefore seen as important to establish a presence in this environment as quickly as possible, even though it may not be making any money for the news organisation in question. This attitude was found to prevail within the Arab world as well, among news publishers and editors whose newspapers had created their own websites.

The Internet, however, offers much more than another site to present a hard copy newspaper. Indeed, to fully capitalise on the benefits electronic publishing can have for both news publishers and their consumers, it is essential to recognise that Internet publishing is not the same as traditional publishing. Internet publishing can provide greater amounts of information to readers and significantly greater flexibility in the way news is both provided and consumed (see Kwan,1996; Elderkin,1996). For news providers, news content on the Internet can be more readily updated. For news consumers, Internet publishing can (potentially) offer access to considerably more information than hard copy newspapers. News archives can be established that lie behind the current news and to which consumers can turn if they wish to find out more detailed background to specific stories. Another feature of electronic publishing – and a key attraction of the Internet – is its potential for interactivity. Readers should be able to interact with their favourite news publication more readily than they can with a hard copy newspaper. Readers' letters can be posted more swiftly and readers may even be given opportunities to contact editors and journalists directly via e-mail links. News chat rooms can be created in which readers may swap ideas and opinions with other readers.

All of these possibilities open up new horizons for news publishers and their editors, correspondents and reporters. They could also represent significant enhancements on current news services for readers. To make all this work effectively, however, changes will be needed in the way news services operate. To begin with, Internet users expect much of the information they find on the World Wide Web to be available free of charge. This point will probably also apply to e-newspapers. Next, to provide a richer news service, the way the news is structured will have to be thought through carefully. Users must be able to access news archives and even the current 'newspaper' with ease. Finally, news professionals must consider the degree to which they are prepared to go interactive in a 'live' sense. What resources will be needed to supply this full range of Internet services? (see Hutton, 1997; William & Nicholas, 1999).

This chapter examines these issues in the wider context of evolving Internet 'culture' and considers what kinds of services are most likely to appeal to the Internet user. This discussion will cover the current trends in website design, where a balance must be struck between attractiveness of design and ease of access and usefulness of content. The survey of readers provided insights into the factors that are most significant in relation to their satisfaction or dissatisfaction with online newspapers. It considers these points in relation to the current electronic news services offered by Arab newspapers and the comments made by the publishers and editors of these publications.

The chapter closes by reaching some broad conclusions from the research that are tempered by caveats stemming from the limitations of the study. Recommendations are offered for further research in the field.

9.1.1 Online Newspapers

One of the most important observations this study revealed is the major shift of existing Arab printed products to be online in one form or another on the Internet and the wide acceptance of this new medium. Taking into account the social, economic and political environment, this trend is of considerable importance as it corresponds with trends in many parts of the world. In December 1995, there were only four Arab newspapers with a website. In January 1998, there were nearly 35 and when the readers' survey started (in April 1998) there were 43. By the end of 1999, there were 51 Arab daily e-newspapers. When the author last counted (march 2000) the number has exceeded 65 online daily newspapers that appear in three languages, Arabic, English and French.

Some *daily* e-newspapers are satisfied simply to have online presence, and tend not to be very concerned about updating their content on a regular daily basis. The overall assessment, nonetheless, of these e-newspapers suggests that newer newspapers demonstrated a better sophistication and a tendency to utilize the latest techniques in website design. Some older publications, either due to lack of interest in the unprofitable market of the Internet, or for which Internet publishing has not arrived yet to the top of the agenda, appeared far less apt to make use of latest Internet technology.

Clearly some of these older newspapers that went online in 1995 and 1996 still lack clear vision about what is the best design and ideal content that may attract more readers. Every now and then they change the design or limit or increase the size of the

content without any clear guidance. This pattern was also found by Gubman and Greer (1997) who indicated that the start date of an online news service appears to make no difference in how good sites are meeting media critics' ideal.

While smaller newspapers appeared to have more realistic views than some larger publications, they both lack clear visions about their future role and they tend to rely upon their print product both for their online content and to finance their Web presence. Turki Alsidairi editor in-chief of the Saudi daily *Al-Riyadh,* commented on this issue, that "in order to compete in the future stories must have a local angle and national newspapers need to focus more on their small local communities (personal communication, February 15, 1998).

9.1.2 Think Globally, Act Locally

Although the Internet cliché, 'act locally, think globally' means nothing but to add more confusion to many content providers, it maybe helpful in indicating what content should be put online. In other words, the challenge publishers face now is how better to use this *global* medium to market *local* products (news) to *global* and *local* audiences.

Based on current findings, we can largely divide readers of Arab e-newspapers into two main groups: Locals (inside the Arab World) who want to know more about their communities, and migrants (outside the Arab world) who still wish to receive local information from their homelands. Both groups can be considered as important markets.

Obviously, Arab e-newspapers are advised to focus more in localised news rather than global news that can be found in a competing news websites. Support for this view can be found in a study conducted by Thomas Dahlin for *The Editor & Publisher*. His study showed more than 50 per cent of Web users do not go to their local newspaper sites for national or international news. The research that polled 53,000 Internet users from 75 newspaper sites of differing sizes, showed that local news is the most popular item, with 72 per cent going to Web pages for local news (cited by Strupp, 1999).

Kamerer and Bressers (1998) investigated US online newspapers content and obtained similar results. They found that online newspapers are typically most likely to emphasize local news coverage. For Arab publishers this perspective of localising content is important due to the fact that most readers want to read news about their communities, whether residents or migrants.

The current study indicated that local readers of online newspapers from the Arab World represented only a small proportion of the sample. This is, in part, due to the fact that the Internet had not been introduced (at the time of the study) officially and actively, in many Arab countries of high population such as Algeria (29.3 m) Iraq (21.8 m), Sudan (27.7m), Saudi Arabia (20.1 m), Syria (14.9m), and was effectively absent altogether in some Arab countries, such as Yemen (16.1m), Somalia (8.7m), Libya (5.2 m), Mauritania (2.5m), Djibouti (636.000), and Comoros (518.000).

Nevertheless, from the study findings it was obvious also that more practical strategies need to be developed that could specify the mechanisms to motivate more Internet users from inside the Arab World to read online newspapers. More field studies are

needed to know more about who the readers are, where they live and work, how to reach them and what are their preferences?

9.1.3 Content vs. Design

The results of this study present interesting considerations for website developers as well as for newspaper publishers. For Arab Web developers or media outlets considering presenting Arabic text in Gif format or PDF files, or even for those who may think that more graphics add more enhancements or decreases readers' interest, these findings have several implications.

A first implication is that the heavy use of graphics and animation may reduce the reader's ability to download quickly the information presented. This agrees with existing recommendations on Web design that advise the use of low -level and simple visual illustrations. Although these enhancements may improve the appearance of the (*medium*) site, it also may hinder greatly the flow of the *message* to be conveyed. In this respect some Arab publishers seemed to overlook the importance of e-newspaper interface that should follow what designers call the **'KISS'** rule (Keep It Simple, Stupid). This basically means that an Internet website should be so simple that no computer experience is needed to read it. Although for Arab developers, the main challenge is to display Arabic text, website developers operating in English have emphasised complexity when simplicity will do, especially for news websites (McAdams, 1994; Jackson & Paul, 1998).

A second implication is that the use of PDF to re-present the print copy electronically in full may not increase the reader's overall satisfaction with the newspaper's website

by itself. While these findings do not suggest that the use of scanned files (PDF and GIF format) to present the content of the e-newspaper, may decrease readership, it may in some cases give comfort to the large segment of Arab immigrants and students abroad to read these publications without the need of Arabic enabled software or Arabic operating systems.

It is important to keep in mind, however, that the use of PDF or GIF formats (to overcome Arabic text difficulties) is inevitable if a newspaper wishes to reach a wider audience without Arabic text complexity. In this respect, the frequency analysis indicated a higher response to newspapers that appear in both PDF (*al-Hayat*) and Gif format (*al-Kaleej & al-Ra'i*) not in HTML. A surprise is that although the Arabic text (format) newspaper is supposed to be better rated in terms of reader's choice, it actually appears to make no difference. While this difference was not shown to be statistically significant to reader's choice or satisfaction, it is possible that a future study may lead to different conclusions.

A third implication, and perhaps the most important for newspapers publishers, is that readers' interest in the content of an e-newspaper may not be significantly affected by its format. What is suggested by the findings, supported by readers' comments, is that good quality and balanced content is still the most important factor determining a reader's choice of a particular newspaper, whether it appears in a scanned file or Arabic coded HTML. Hence, it is unwise for a newspaper editor to consider using the latest Web design technology, presuming this will increase the interest in his e-newspaper, while paying no attention to the quality of the content and the type of (well-educated) audience of the Internet he is dealing with. As Edward Sugimoto, the

Editor of Hawaii's Web & Internet News Magazine, put it" Although design is very important in giving the visitors to your online presence a more eye-friendly experience, if you don't have the content, your visitors will likely never come back again" (Sugimoto, 1998).

The analysis of newspaper websites revealed that most of them presented their electronic site in the same optical format as their printed-paper. This can be interpreted as a sign of a high degree of vagueness among Arab newspapers. They seem to misapprehend this new dynamic medium in a competitive environment and stick instead with old traditions of the print journalism paradigm. By doing so, their (young) readers may defect to a more sophisticated news services. But the real danger is "if newspapers continue to think they are in the newsprint business and fail to realize they are in the information business" (industry analyst, Vin Crosbie as cited by Stone, 1999).

Yet, this trend was also found elsewhere. Neuberger *et al.* (1998) found that German online newspapers retain the name of the printed version, use a similar layout, similar contents etc. Similarly Gubman and Greer (1997) reported that US online newspapers appear to be making few changes from the print standard of linear storytelling. In sum, apparently and logically, format alone does not determine a reader's choice; other factors need to be considered. In some cases, Arab reader preferences could be attributable to the type of computer and software being used. As an instance, the slowest methods to post Arabic text online i.e. PDF and GIF format, would better suit most users in that it enables reading Arabic newspapers without the need of special Arabic software. Ultimately, though, readers expect good quality content that is easy to access and interact with.

9.1.4 Readers' Evaluation of E-newspapers

The present study attempts to give the opportunity to explore some reasons behind why and how Arab readers evaluate e-newspapers. Although respondents revealed a high level of interest in reading Arab newspapers online, many complained of long delays in relation to accessing and downloading information, and were also concerned about limited content in some cases. These problems can be attributed to the heavy use of graphic files to load Arabic text, and to the fact that many publications did not have a dedicated online staff and were therefore not updating content frequently.

The overall satisfaction with these publications may also have been affected by the fact that no Arab e-newspaper produced original content for its online edition. This contrasts with what Singer *at el.* (1998) found in his study of US e-newspapers which indicated that about half of the American publishers surveyed said that their online staff did create unique materials for the online editions. The current Arab publisher's survey, however, showed that one-quarter (25.9%) of newspapers had no dedicated staff for their online edition and more than four in ten (44.4%) newspapers assigned only from 1-3 staff members for the electronic version. The shortage of dedicated online staff is not unique to Arab e-newspapers. Neuberger *et al.* (1998) studied German online newspapers and found that in approximately one-third of the cases (37%) the online version was produced by editorial staff who all also worked for the print version. It was obvious that Arab journalists are required to double up by running the online publication as well as continuing with their usual work on the print editions. According to Alexander (1997), this is one of the most difficult aspects of online

publishing. Newspapers have a lot to learn about how to launch the (electronic) venture while continuing to put out a traditional newspaper.

Singer *at el.* (1998) found that the larger the paper, the more likely it is to staff its two products (online and print) independently. It is not easy to define which is a big or a small Arab newspaper, however, due to the absence of reliable national circulation figures. *Al-Ahram* of Egypt, *al-Shraq Al-awsat* and *al-Hayat* are the biggest names in Arab newspapers industry but offer no evidence to support Singer *at el*'s observation. Neither the size nor the number of online staff in these publications seems to have had noticeable impact on the production of their electronic edition or on their readers' level of satisfaction.

Part of respondents' dissatisfaction with online newspapers derived from difficulties in reading Arabic on the Internet. This problem can be attributed to the fact that most users used operating systems and browsers that do not support Arabic. They mostly used English software either because they were unaware of the existence of Arabic enabled software or due to the lack of technical support for such software. Many Internet users have difficulty finding and installing Arabic software on public computers (universities, Internet cafes) outside the Arab World, where many Arab e-newspapers readers may access the Internet from.

Consistent with this study, Forrester Research Inc (an Internet research firm) survey (1999), found four main factors drive visitors to return to their favourite websites: high-quality content (75%), ease of use (66%), quick to download (58%) and frequent updating of content (54%). Yet, the data analysis and the readers' comments here

indicated that more effort is needed to improve all these important components of online publishing in the Arab World. A great deal of technical work is needed in Arabic text solutions to make full use of Internet applications. In particular, some readers indicated that text format would be the best format for newspapers. If publishers work jointly to develop free Arabic plug-ins to be attached to existing Internet browsers this would enable Arabic text to be viewable regardless of language of the user's computer operating system.

Although it was difficult to decide exactly the extent to which these factors influence a reader's satisfaction with an online newspaper, readers' evaluation of e-newspapers may have also been influenced by the wide range of news sources offered by the Web. Arab readers were able to read about Arab issues from different perspectives. These sources were available at any given time, offered variety of content and format, were free of charge most of the time, and kept Arab expatriates (who form the vast majority of respondents) in touch with home news.

The study tried to find what are the most readable newspapers. Responses indicated that readers' favourite newspapers were those which offered quality content and enjoyed some degree of (government) independence as well as providing comprehensive content. The amount and type of content of the three most preferred newspapers (*al-Hayat*, *al-Kaleej* and *al-Ra'i*) varied greatly. Nevertheless, these newspapers have the following in common: specific sections for Arab-related news, efficient journalistic reporting and analysis, archive access for back issues. These first three choices can be seen also to have more nationalistic concerns and tend to offer a greater focus within technology and sports.

Meanwhile the findings of this study suggested that, while most Arab e-newspapers were updating their content everyday, no newspaper attempted to take advantage of the immediacy nature of the medium that allows all news stories to be updated around the clock.

9.1.5 Revenue

Advertising is, and will continue to be, a primary revenue source for electronic publishing (Minsing, 1998). According to Kamerer and Bressers (1998) there are various sources from which online newspapers could generate revenue including banner and classified advertising, subscriptions, transaction fees paid to sites when readers make purchases, sponsorships with advertisers, paid access to archives, Internet access services, website hosting and Web design services. But in the case of Arab online newspapers these alternatives are still a long way from being utilised in full. Furthermore, Arab users are unwilling to pay subscription fees.

Concerning subscription fees, elsewhere, prior studies typically found that users of the Internet tend not to pay for reading Internet news websites. One could argue that this could be explained by the fact that the Internet does not provide a reader with a touchable product in the same way that a hard copy newspaper does. Yet, the expectation on the part of users that the Internet provides largely free content is an important factor behind this trend. For instance a Georgia Tech University study found that two-thirds of Web surfers, citing the cost of computers and Internet access, are not willing to pay for access to materials on the Web (GVU, 1997). In alike manner, Berkman found that "users aren't likely to pay for content, even news they consider

valuable, if free content can be accessed elsewhere"(as cited by McMillan, S., 1998). A study by Weir (1998) also showed that people are rather reluctant to pay for reading an e-newspaper. Mensing found a similar trend and attributed it to the dominant opinion of the current nature of the Internet that demanded that information be offered for free (see also Lyle & McLeod, 1993; Oppenheimer, 1996).

With regard to payment policies, the websites analysis found that Arab e-newspapers could be grouped under Angevine *et al.'s* (1996) three categories: (1) completely free access to the newspaper, (2) free access with prior registration and (3) access for a charge. This study found that an overwhelming majority of Arab e-newspapers offer unrestricted free access with only two e-newspapers making subscription charges. Free access with user prior registration (including username and password) is not widely used, however. This indicates that Arab newspapers may be missing an important source of information about their readers, preferences, habits, and their distribution worldwide.

The pricing of online newspapers poses difficulties for Arab publishers and is certainly one of the big issues in Internet e-businesses. Free service, however, would not generate the revenues necessary to defray development costs and will not help in motivating publishers to invest more money in Internet publishing. So far, no Arab publisher can clearly state how and when he is going beyond offering free content in websites that is also free of adverts and not making any profit yet. Although there have been varied pricing strategies adopted by content providers elsewhere, Varian (1995) noted that many traditional pricing practices failed to provide clear guidance on how digital information goods should be priced. Given this state of uncertainty, the

common advice is that subscription fees should not be totally rejected but should be economical enough not to deter potential readers until publications can build up the advertising revenue to pay for their cost.

Alternatively, e-newspapers can charge fees for access to specific services such as the newspaper's archive. Even then, subscription charges probably need to be modest. As this study found, some users of the Internet believe that all Internet information should be free and will often avoid e-newspaper that charge them for reading its content.

The fact is that most Arab publishers are still thinking of doing market studies to assess their presence on the Web, and have not yet moved past that position to consider more practical initiatives. The fact is that not every newspaper can continue to publish online editions at a loss, drawing financial support from their print resources.

9.1.6 Impact Of Electronic Version

Although it is still early to decisively identify the online newspaper's impact on the Arab print newspapers, the majority of Arab publishers (59.3%) indicated a positive impact of the online site on the print product. This view is largely based on speculation or intention and not on systematic market studies.

Indeed, the Arab publishers interviewed here did not have specific plans to investigate formally the impact of their online edition on the print copy. At the time of this research many Arab publishers simply wanted an online presence. This trend is not only the tune of Arab newspapers. Jackson and Paul (1998) reported that only 40 per cent of the American online newspaper publishers indicated their site was guided by a

clear mission statement. The researchers noted that that the majority of US newspapers do not have a clear vision to guide new media development. The current analysis shows that most Arab newspapers tend to limit the content of their Web edition assuming wrongly that this policy may drive the reader to buy the print copy.

9.1.7 Services

The study reveals that only few Arab newspapers make full use of the Internet by offering additional services with their websites. With the exception of archive services, the most popular services provided by western online newspapers, were almost absent or only poorly developed by Arab e-newspapers websites. This includes customized news delivery, classified advertising, interactive communication (instant chatting facilities) and news stories supported with video or audio files. Below is an examination of the performance of each service.

9.1.7.1 Archive

Over three quarters (79.3%) of Arab e-newspapers provided archive services ranging from one to two days archive to full searchable archives (16.7%). A similar pattern was noted by Gubman and Greer (1997) in America. They found that 69.9 per cent of US e-newspapers surveyed contained archives of news content.

However, the only working service that has been offered by most Arab e-newspapers is seven days back issues (archive), while the use of full searchable archive services by some newspapers has proven unsuccessful at most sites. This is, in part, due to the lack of technical support and programming weaknesses. The online world is changing all the time making it difficult for unprofitable newspapers to keep pace with these

advances. For online newspapers to survive, they need to adopt new programming technology and evolving browser capability, and make sure that the kind of service they provide is popular amongst the Internet population.

9.1.7.2 Customized News

One of the most unique aspects of the e-newspaper is its ability to be customized to suit the interests of each reader. However, no Arab e-newspaper offered customised news services for its readers. Even in the US, only 9.6 per cent of the well-established online newspapers allow readers to create a customized news profile (Gubman & Greer, 1997).

9.1.7.3 Interactivity

Clearly, the Internet has brought hopes as an interactive medium that could help to extend communication options between newspaper and reader into a more dynamic relationship (Schultz, 1999). The interactive nature of the Internet has still not been fully realised. Arab newspapers seemed to ignore this facility, as only one newspaper provided a chat room, and neither the newspaper nor the chat room gained any popularity amongst Arab readers. Chat room services were also found to be unusable in US news websites as ninety-two out of 100 online newspapers offered no synchronous chat at all (Schultz, 1999). Further Dibean (1999) found very few newspaper sites used chat rooms (2.3%).

9.1.7.4 E-mail

Publishing e-mail addresses of reporters is only of value if the reporters actually reply to queries from readers (Kamerer & Bressers, 1998). This study found e-mail addresses were provided virtually by all Arab newspapers, but a complaint that was repeatedly reported by readers was that very few editors replied to their messages. In agreement with this analysis, Newhagen, Cordes, and Levy (1995) revealed that editors did not even look at e-mails from their readers, although they had encouraged people explicitly to send comments. Schultz (1999) found also that almost every newspaper he studied provided at least one general e-mail address. Further, Dibean (1999) found in his examination of U.S. daily newspapers usage of Internet technologies, that the majority (59.8%) of online newspapers he studied provided electronic mail addresses.

Some critics have argued that newspapers are not taking advantage of such special features of the World Wide Web as interactivity, hypertext, and multimedia (Cochran, 1995). Yet, Eric K. Meyer the managing partner of the NewsLink online research (newslink.org) refuted the claim that readers want interaction with information providers and regarded this as one of 10 myths about online publishing. What readers really want is to be able to consume the information interactively and to gain some control over how the information is received (Meyer, 1999).

9.1.7.5 Other Services

Although Arab publishers indicated offering other additional services the analysis of their websites found that most of these services were not available either because they had been discontinued or never offered in the first place. This applies to the statements

made about the usage of multimedia (video and audio files) by three respondents. Elsewhere audio and video services were found to be rarely used; for example few American newspapers offered such services (audio 12.1%, video files 10.6%) (Schultz, 1999).

Although 37 per cent of Arab e-newspapers surveyed reported offering classifieds, the analysis shows most of these adverts were of crude design, outdated and in some cases led to broken links.

9.1.8 Future

This time in the history of Arab media is critical due to dramatic political and technological changes. The crux of the matter lies, of course, with the new media that has grown rapidly in the late twentieth century. Direct state control of media is diminishing in many Arab countries due largely to market imperatives, Pan-Arab media, and global influences from satellite channels and the Internet. While use of the Internet by other nations has increased significantly in the last few years, however, Arab citizens still use the Internet less than many nations. Low Internet use by Arabs not only gives them less access to information and services available online, but also can have negative economic consequences.

As new technology reshapes most elements in the current media structure, it without any doubt offers Arab publishers a new opportunity for worldwide distribution of their newspapers. At the same time, publishing Arabic content on the Internet involves many complex issues socially, technically, and economically. And still major obstacles face the spread of new technology in the Arab World such as weak infrastructures, high illiteracy rates and the economic hardships in most countries.

Despite these issues, Arab newspapers have speeded up their online initiatives. A key factor to bear in mind, however, is that the majority of Arab population has access only to cheap state-owned media. Given the low literacy rates, the very limited reach of newspapers and the readership profile, the role of new media has been seen very weak in terms of information dissemination. If we take Egypt as an example that has had Internet services far longer (since 1993) than most Arab countries, it yielded a low response in the readers' survey compared to its big number of inhabitants (60.3 million). According to a recent (1999) report published by the World Bank, however, 51.9 per cent of the population in Egypt live below under poverty line, and the country has high rate of illiteracy. Recently Foley (2000) summarised the whole issue and stated that "the cost of PCs, and even telephones, is prohibitive for many Arab families. Illiteracy rates are also quite high in the region and those who can read and write are faced with a dearth of content and software in Arabic". Only with a little luck and a lot of e. commerce, the Internet may yet transform the Middle East for the better.

Leaving aside theses hardships, it was found that most Arab users are heavy users of the Net and are daily readers of online. This finding shows signs of a promising future for online newspapers publishing in the Arab World in terms of potential consumer interest.

Arab publishers are required to promote their online activity actively amongst Arab readers and advertisers and provide technical support to new readers. Ultimately, although it is impossible to forecast the future pattern of the Arab online newspapers market, it is certain that readers of this new medium will grow rapidly. Whether news websites will rely on subscription fees or on adverting revenue or may be both they may eventually take their position as a new sophisticated method of news delivery.

9.2 Conclusions

With the spread of the Internet in the region, many Arab publishers and governments' media bodies have begun to include websites and other new media means in their outreach programs (see Alterman, 1998, Alsheri, 1997). Thus, the objective of this study was to provide a preliminary assessment of how Arab online newspapers have begun to change the way Arab readers and publishers deal with information and news. The upshot of this thesis was based mainly on the literature review, the results of the reader (main) survey, publisher's survey findings and the analysis of Arab online newspapers.

Nevertheless, from the literature reviewed, one can see that no clear picture exists to guide research that involves Internet application and to explain the communicative nature of the medium itself as a new medium (see Jankowski & Hansen, 1996; Filder, 1997). At this point in time, effort should be made to examine the process of how people use the Internet (see Morris& Ogan, 1996; Singer, 1998). What has taken traditional media several decades to accomplish, the Internet has matched in less than a decade.

Clearly, this phenomenon has its social, cultural and economic dimensions, each of which provides interesting areas for further research. If this can be done, researchers will have better understanding and therefore encouraged to work to develop a new framework and theoretical approach to guide Internet research to new horizons. As McLuhan stated "The medium is the message. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments." (McLuhan & Fiore, 1967, p .26).

This dissertation has sought to explore the general condition of Arab e-newspapers in order to examine the challenges and potential of this new medium. As with any study that utilizes research methods that focus on technology-related issues, it is simply not possible to capture or convey all the dynamic change that is present in complex Internet applications (see Weir, 1998; Shoemaker,1994).

Further, the complexity of studying Internet services like e-newspapers lies in the fact that many elements must be considered: the technological level which involves computers (hardware and software), the service offered, the nature of the communication channel, and the human level which involves people and their use of this new medium to consume news services. Nevertheless, this study have attempted to go beyond a description of the Internet and e-newspapers, and explore some aspects of what readers do, need and how they evaluate this new method of news delivery.

The history of e-newspapers in general and the Arab newspapers presence on the Internet is remarkably short. In just under 10 years, the number of newspapers on the Net have grown dramatically. During this time there has been much debate about the best ways to present electronic publications on the Internet. In the Arabic publishing arena, such discussion has extended to the type and the amount of information (content) as well as the format of the Arabic text that online publications should consider.

As multilingual operating systems technology advance such as the promising Windows2000, and Arabic enabled browsers such as Sindbad and Microsoft Explorer,

Arabic text viewing may grow in popularity, and more Arab publishers may begin to take Internet publishing more seriously.

Besides the impact of high illiteracy rates, low economic level, and old infrastructure, the study has indicated an important relationship between the educational level of Arab users and use of the Internet. This may give the impression that the Internet, as an advanced technology dominated by the English language, requires a sufficient level of education to be usable. This may prevent the majority of Arabs from making full use of its services. Hence, Arab policy makers must consider all these factors. Investors, meanwhile are advised to produce more Arabic content and Arabic services to the meet the needs of the potential market of Arab users who are less fortunate in their education level.

The findings of this study supports, to an extent, the stereotype of the typical Internet user as a young, male, probably a college student, who accesses the Internet everyday (seeNielsen Media Research, 1996; Pew Research Centre, 1996; GVU, 1997, 1998). Arab online newspapers therefore need to present content not only of appeal to this market, but also to attract readers from other sections of the population.

Although many Arab publishers are still doubtful about the revenue potential of e-newspapers, it is critical for them to take into consideration that new media represent important tools, that complement, rather than threaten, traditional methods of news delivery. The increasing costs of newsprint, the relatively small circulation size of many Arab newspapers, and the deviation of the younger generations from reading newspapers, as well as the wide dispersion of Arab readers, make most Arab

newspapers ideal for electronic versions delivered online. The dilemma for publishers, however, is how best to approach a business model that will allow the online newspaper to grow and even flourish. Unfortunately this is no easy mission.

Certainly the Internet has presented Arab newspaper publishers with fresh hope to reach new markets. However, the Web has created new challenges for publishers as well. Although the Net offers a fairly accessible platform for news delivery, it has its downside: technically, it is not (very) easy to use, needs specific hardware and software, and is slow and cumbersome in most cases.

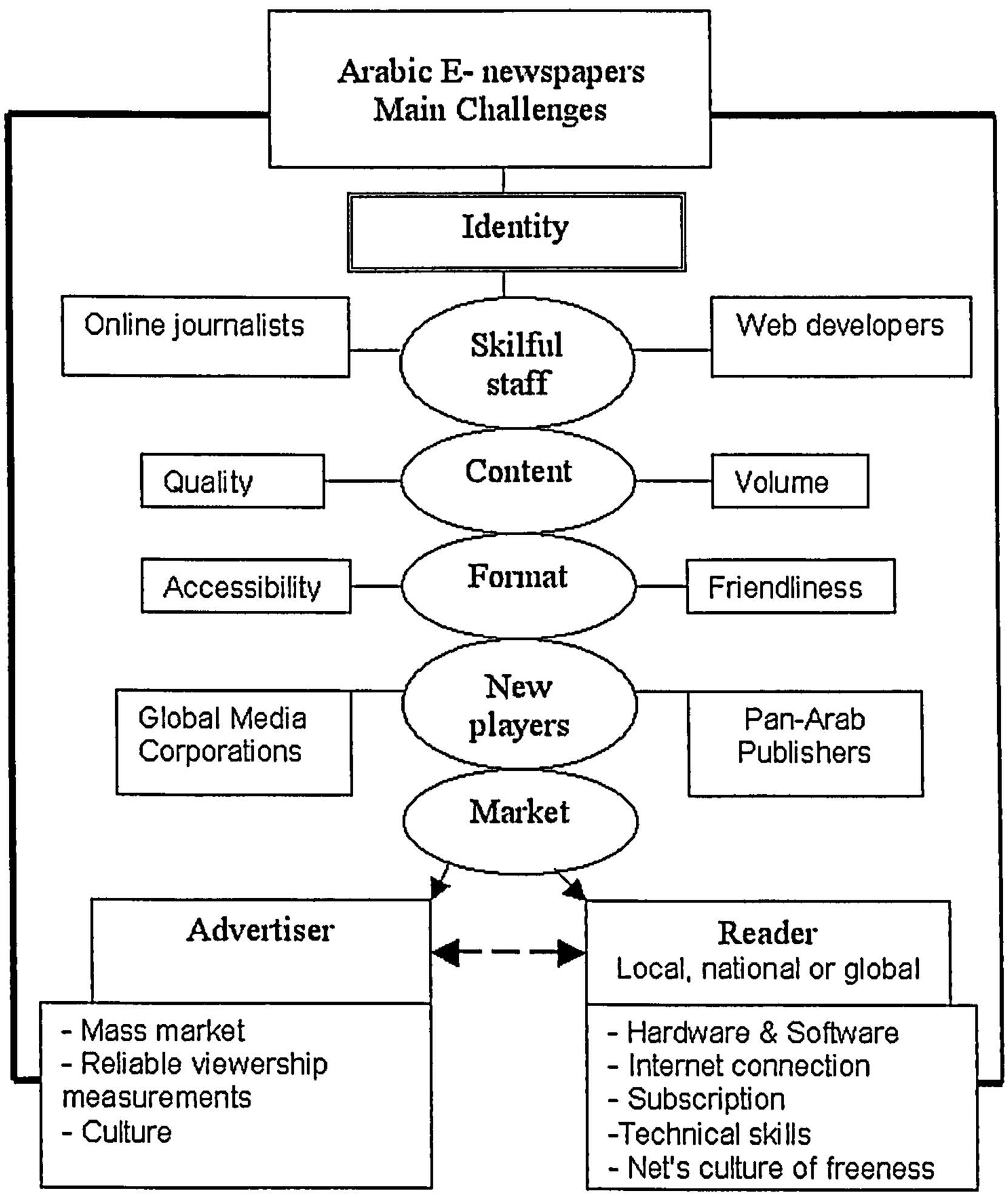
Practically, for Arab publishers the business environment is becoming increasingly competitive and complex. They are confused about when and how to make money online, with no clear strategies, a weak market and above all customers (readers) who are reluctant to pay for what they read. In addition, Arab online dailies are competing for the same small slice in the same small market. Yet, in the rush to the Internet, it is important not to lose sight of the need to incorporate Internet facilities within a well-planned future strategy based on research and market analysis.

This study has tried to provide some insight into the state of Arab online newspapers, their readers' needs and how Arab publishers can better improve their Internet participation. This work has highlighted the extent to which Arab e-newspapers face a critical task in wining new readers.

In order to diagnose the whole issue and to investigate Arab e-newspapers' main challenges, one must first articulate the basic components that make a successful e-newspaper. In the case of Arabic online newspapers and this may apply to similar

cases as illustrated in Figure 23, there are a number of challenges that need to be addressed. First, there is the issue of 'identity' this new product faces. Is an e-newspaper a *new* medium or just an extension (supplement, complement) of an *old* one or is it simply a new delivery method? Does it have the vital elements to survive in the longer-term or is it just a short-term fad? Can print and electronic news(paper)s live side by side, for how long, and which will survive eventually?

Figure 23: Main challenges to Arab e-newspapers



Second, it was clear from Arab publishers responses, interviews that most Arab e-newspapers lack skilful (IT) staff both for performing reasonable online journalistic duties and for developing and presenting an appealing online product in terms of content and design.

Third, although Arab e-newspapers may have market demand as long as they remain free of charge, readers complaints of poor, limited or unbalanced content, if not acted upon will eventually push them to look for better alternative.

Fourth, formatting Arabic text is still the most challenging task and it was evident that publishers have not taken any serious measures to tackle this problem. Instead, they are completely dependent on what Microsoft and other software manufacturers offer. In this respect, many serious difficulties are facing readers of Arabic e-newspapers. Most newspapers also seem to undervalue or ignore the importance of the accessibility element and the use of dynamic friendly interfaces in attracting users.

Fifth, if publishers fail to deal with the above issues readers may turn to other web news sources, of which there are plenty to supply their news diet.

Advertisers and readers alike have countless choices on the Internet. In the case of Arab users, however, economical factors are crucial. In any pricing policy, publishers need to take into consideration what the market can afford and also what the competitor is offering. Further, young people who seem to be less interested in reading newspapers, represent the largest group of potential users in most Arab countries, with some 50 per cent of the total population (of the Arab World) aged under 20 (IPPF, 1998).

This study revealed new findings about the attitudes and behaviour of Arab users of the Internet, that should have relevance for Arab publishers wishing to conduct their businesses on the Internet. Although the outcomes may seem to indicate that a number of technical and economic barriers need to be reduced there is undoubted potential for e-news in the Arab World.

9.3 Limitations

The primary limitation to this study is that it is largely frozen in time. It focuses for the most part on the last three years of the passing (20th) century, and thus is limited in its investigation of long-term trends shaping e-newspapers readership and Arab readers attitude towards them.

Since the study also focused on the available Arabic (language) applications, the findings may have limited applications to other e-newspaper experiments such as those that appear in languages of Latin origin. In this respect also, the findings do not reflect the impact of the new browsers introduced later in 1999, such as Microsoft's multi-language browser (Internet Explorer version 5) which will revolutionise the way people read Internet content. It will be the job of future researchers to examine the impact of such software and other new applications and compare newspapers formats and readers' satisfaction trends with this study.

The time limitation also means that this study reflects many of the circumstances (Internet spread, illiteracy rates, governments policies etc.) surrounding Arab e-newspapers as they were in the 1997-2000 period and may not provide an adequate account of some of the dilemmas facing other nations practices with e-newspapers.

In spite of its limitations, the current study provides an in-depth examination of the circumstances shaping readership and acceptance of e-newspapers. As such, it provides researchers with an opportunity to ask questions about related issues in smaller or larger magnitude which could help to develop new methods of examining levels of readers' satisfaction and industry plans. Additionally, it offers a profile of the wide range of literature published in recent years covering aspects of e-publishing and may well prove valuable to publishers who wish to obtain a global perspective about the different circumstances facing Arab e-newspapers.

9.4 Suggestions for Further Research

While there may be a significant amount of research available on classic media, there is a paucity of literature particularly in relation to modern communication technologies. A great deal of further research is necessary first, on the communicative nature of the Internet to provide a solid understanding of the rapidly changing environment of new media. More and more people will come to rely on the Internet as a basis for communication, information, shopping and education. There is a need for more research that will provide us with a better understanding of this phenomenon and predict the trends and outcomes of future advances. In the Arab World, further research, both quantitative and qualitative, should take place to investigate the publishing of Arab newspapers on the Internet. This research would record Arab newspapers practices, assess the nature of the output, and any developing issues that relate to reader satisfaction.

Research on Internet usage as an emerging form of communication is still developing. Most of what can be found is merely commercial, descriptive and/or practical and comes from the marketing professionals and software and hardware developers. But when it come to audiences, most Internet major studies conducted through the Internet during 1995-1997, were very much concerned with the problem of demographic profiling of the market.

Yet even at the demographic level in the Arab World there is a lack of reliable information about Web users that would help advertisers and marketers intending to promote or use this new medium. This study looked at three significant factors associated with Arab e-newspapers: the readers of these publications, the publishers and the e-newspapers' websites. Extended studies could focus on either one of these aspects. I hope the topic of this dissertation would inspire Arab researchers particularly to undertake further research and fill some gaps left by this research for obvious reasons.

The current research did reveal some problems with Internet research methodology and future research may want to refine the survey and the data collection methods used in this study. Pre-testing indicated that users could complete the survey in 3-8 minutes, but it appears that some users took longer. Future research may wish to conduct multiple shorter surveys that address separate issues (e.g., demographics, connectivity, attitude, readership). This research focused primarily on the readers of Arab e-newspapers. Further research could, for example, examine Arab e-publishing market trends and what role has the current structure of Arab online newspapers been playing in determining future publishing strategies?

Another component of this dissertation needing much more exploration is the entire sphere of Arab newspaper industry strategies toward e-newspapers. What are the advantages and disadvantages of this very low cost production and distribution of 'free of censorship newspapers'? Who gains and who loses when the newspapers industry competes with itself, with newer Net players, and the open marketplace of the Internet?

Another area for research could be to examine the economic aspects of the Internet for the publishing business. A related topic, but inside the realm of Arab e-newspapers as a primary research focus, is that of e-newspapers pricing mechanisms and the costs of reading them.

An additional topic deserving more research is online staffing. To what extent has it become an accepted practice by the newspaper industry that dedicated staff are needed to produce online editions? How has the academic arena in the Arab World responded to this need? Has it made a change in media curricula to meet such needs? How is this related to the need for dedicated staff?

Finally, it is believed that in the years ahead, many changes may occur at the Internet domain which will fundamentally change audience behaviour and alter the way media operate. It would be interesting to conduct this same study three or four years in the future to see what changes in readers' opinions and publishing practices have occurred. Are they the same types of readers (background, education level gender, etc.)? How does their attitude differ from that of people surveyed in this research?

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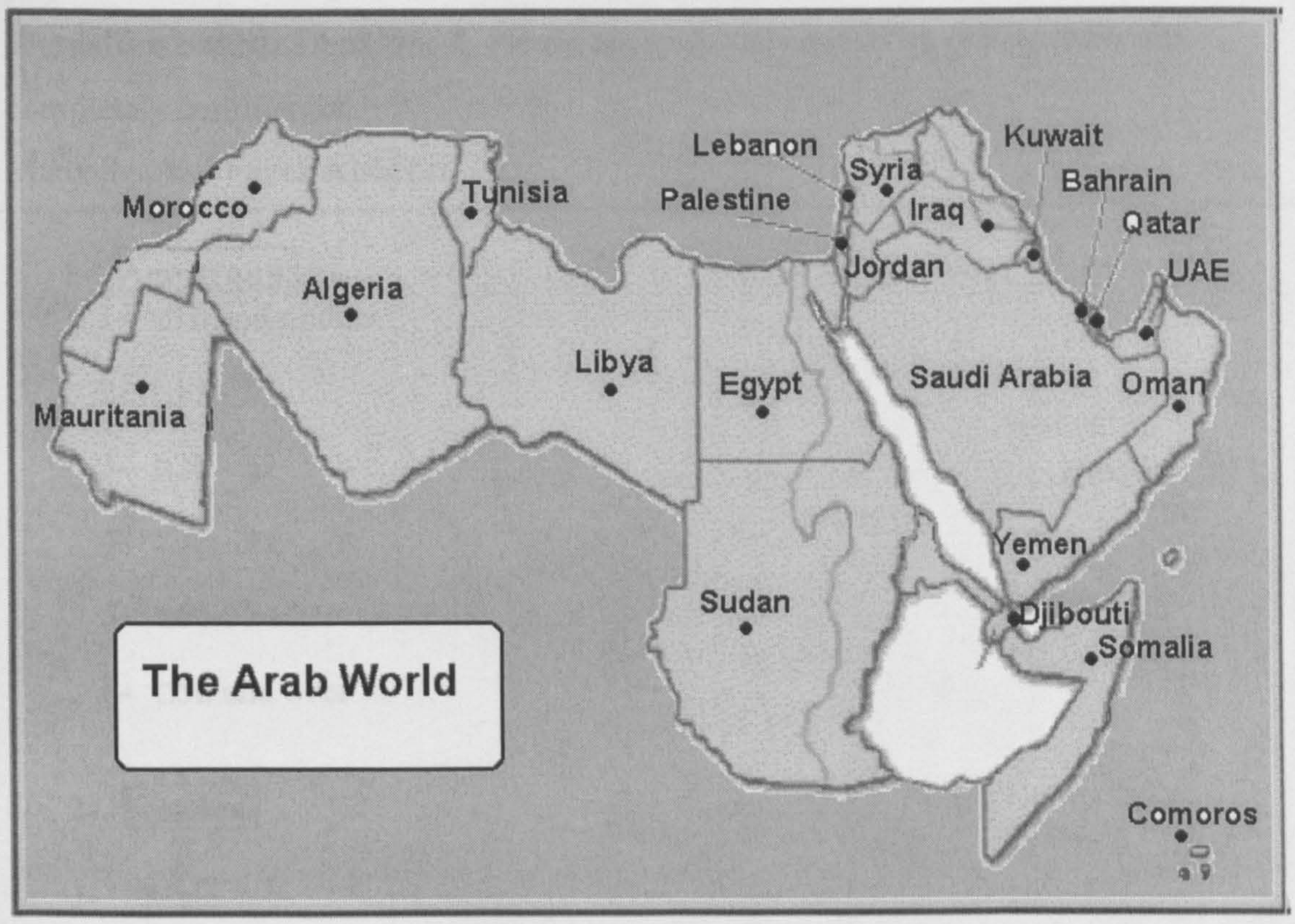
Appendices

Appendix A: Arab World Political Map



Appendix B: Arab Readers Online Survey Form

This survey is designed to investigate the readership of the Arab daily newspapers on the Internet. It represents part of my Ph.D. project at the University of Sheffield. This project is under the supervision of Professor Barrie Gunter Director of Research at the Journalism Studies Department. Please reply to every question. All answers are completely confidential.

Many thanks / Fayez Alshehri

1- Age group:

1- □16 and under

2- □17 - 25

3- □26 - 35

4- □36 - 45

5- □46-55

6- □56 and over

2- Gender:

1- □Male

2- □Female

3- Nationality: (*Please select from the list*) - - - - - - - - - - - - - - - - - - -

4- Occupation:

1- □ Student

2- □ Researcher

3- □Business Person

4- □Retired

5- □Government Employee

6- □Other (*Please specify*) - - - - - - - - - - -

5- Where do you live now?

Please select one:

□Argentina	□Algeria	□Australia	□Austria	□Bahrain
□Belgium	□Brazil	□Bulgaria	□Canada	□Chile
□China	□Czech	□Denmark	□Egypt	□Estonia
□Finland	□France	□Georgia	□Germany	□Greece
□Hong Kong	□Hungary	□Iceland	□India	□Iraq
□Ireland	□Italy	□Japan	□Jordan	□Korea
□Kuwait	□Latvia	□Lebanon	□Lithuania	□Libya
□Malta	□Malaysia	□Mauritania	□Morocco	□Netherlands
□Norway	□Oman	□Palestine	□Poland	□Portugal
□Qatar	□Romania	□Russia	□Saudi Arabia	□Singapore
□South Africa	□Spain	□Sudan	□Sweden	□Switzerland
□Syria	□Taiwan	□Tunisia	□Turkey	□UAE
□Ukraine	□UK	□USA	□Yemen	□ Other (.....)

6- What is the highest level of education you have completed?

1- □High school

2- □College four years degree

3- □Master's degree

4- □Doctorate

5- □Technical or trade school

7- How long have you been using the Internet?

1- □Less than 6 months

2- □6 months - 1 year

3- □1 - 2 years

4- □2 - 3 years

5- □3 - 4 years

6- □More than 4 years

8- What is your current Operating System?

□Don't Know	□Windows 3.x or Windows 95 (English)
□Windows 3.x or Windows 95 (Arabic)	□Windows NT (English)
□Windows NT (Arabic)	□Macintosh (Arabic)
□Macintosh (English)	□Other e.g. MSDOS, Win95, UNIX, etc.

9- Browser Used:

□Don't Know	□ Tango (Alis) Arabic Browser
□Netscape (Navigator or Communicator)	□SINDBAD with Netscape Browser
□Arabic Internet Explorer	□English Internet Explorer
□Mosaic	□Other e.g. Netscape, MS Explorer, etc.

10- How often do you access the Internet every week?

1- □ Every day	2-□ 4-6 days a week	3- □ 2-3 days a week
4- □ About once a week	5- □ Less often	

11- Average time per Internet session:

1- □ Less than 5 minutes	2- □6-10 minutes	3- □11-30 minutes	4- v31- 60 minutes
5- □1-2 hours	6- □12-5 hours	7- □5 + hours	

12- Who provides you with Internet Service? [check all that apply]

1- □ A Commercial Internet service provider	2-□ An educational institution
3- □ Government Office	4-□ Other On the weekends

13- Where do you mainly access the Web?

1- □ A computer at work	2-□ A computer at school/university
3- □ A computer at home	4-□ Internet Cafe (or similar)

14- Are there any other places you access the Web from?

1- □ none	2-□ A computer at work	3- □ A computer at school/university
4-□ A computer at home	5-□ Internet Cafe (or similar)	

15- For me Internet sources are: (please check appropriate numbers)

1-Important	□1 □2 □3 □4 □5 □6 □7	unimportant
2- of no concern to me	□1 □2 □3 □4 □5 □6 □7	of concern to me
3-means a lot to me	□1 □2 □3 □4 □5 □6 □7	means nothing to me
4-matters to me	□1 □2 □3 □4 □5 □6 □7	does not matter
5-significant	□1 □2 □3 □4 □5 □6 □7	insignificant

- **How would you rate Arab newspapers on the Internet in terms of:**

16 •Navigating in General:

□Excellent	□Good	□Fair	□Poor	□Very Poor

17 •Downloading Time:

□Excellent	□Good	□Fair	□Poor	□Very Poor

18• Content Updating:

□Excellent	□Good	□Fair	□Poor	□Very Poor

19- I use the Internet mainly for:

1- □Work

2- □Pleasure

3- □Research

4- □Education

5- □Other

20- Which printed Arab daily newspaper do you read most often? *Please type in one:*.....

21- What are the most common problems you have confronted when reading Arab dailies on the Internet? *Please type in any problems you have experienced:*

.....

.....

22- Which of the following online newspapers you read on a Regular basis:
[check all that apply]

□Alsharq Alawsat	□Alnahar (Lebanon)	□ Al-Hayat Al-Jadeeda
□Alhayat (London)	□AlIttihad (UAE)	□ Daily Star (Libanon)
□Alqabas (Kuwait)	□ Alwatan (Kuwait)	□ Khaleej Times (UAE)
□Kul Alarab (London)	□ Alayam (Bahrain)	□ Gulf News (UAE)
□Al Quds (Palestine)	□ Albayan (UAE)	□ Al-Khaleej (UAE)
□Alrayah (Qatar)	□ Al-Gomhuria (Egypt)	□ Al-Sabah (Tunisia)
□Alwtatn (Qatar)	□Al Dustoor (Jordan)	□ Al-Sahafah (Tunisia)
□Aljazirah (KSA)	□ Al Ra'i (Jordan)	□ Al-Ayyam (Palestine)
□Almadinah (KSA)	□ Gulf Times (Qatar)	□ Arab News KSA
□Al Safeer (Lebanon)	□ Alsharq (Qatar)	□ Al-Shaaab (Egypt)
□Al Anwar (Lebanon)	□ Al-Masaeyah KSA	□ Other (specify) [.....]

23- Is there one online Arab newspaper you read more often than any others?

1- No - - - -

2- Yes (If "**Yes**" please type in the Name of the Newspaper) - - - - - - - - - - - - - - -

24- How often do you read Internet newspapers?

1- □Everyday	2- □Most of the weekdays	3- □Once or twice a week
4- □On the weekends	5- □No regular time	

25- The most important thing for me in reading a Particular Arab Internet newspaper(s) is:

1- □It is free	2- □Always available when I want to read it
3- □I can't get its printed copy where I live	4- □Its printed copy is not permitted in my country
5- □I prefer to read online newspapers	6- □Other

26- Overall how satisfied are you in reading Arab dailies on the Internet?

O Very Satisfied	O Somewhat Satisfied
O Neither Satisfied or Dissatisfied	O Somewhat Dissatisfied
O Very Dissatisfied	

27- How much money do you spend on Internet services every month?

1- □Less than 5 $	2- □From 6- 10 $	3- □From 11-15 $
4- □From 16-20 $	5- □21$ +	

28- Would you be willing to pay a fee to cover the cost of reading your favourite online newspaper?

1- O Yes
2- O No (If "No" please type in why?) ----------

29- What do you like most about the Internet newspapers?

30- What do you like least about the Internet newspapers?

31- If you know an Arab daily newspaper on the Internet that you think I should include in my study, please type the URL here http://www----------

32- Your E-mail:

Please make sure that you completed all the questions:

Submit form Clear form and start over

Thank you for participating in this survey.

Note: If you do not have a forms capable browser, or if you would like further information about the survey, please e-mail Fayez Alshehri.

Appendix C: Countries of Visitors to The 'Arab Media Guide' website

Countries of visitors' to the Arab Media Guide Site from August 1998- September 1999

Country	Number of Hits	Country	Number of Hits
1. Network/ISP (USA)	26503	46. Indonesia	45
2. USA Commercil	٢١١٣٨	47. US Government (USA)	31
3. Saudi Arabia	14642	48. Argentina	28
4. Canada	6283	49. Hungary	28
5. United Kingdom	4405	50. Nigeria	28
6. USA Educational	4311	51. Iceland	26
7. United Arab Emirates	3952	52. Venezuela	24
8. Sweden	3610	53. Poland	24
9. Australia	1750	54. Bosnia-Herzegovina	24
10. Germany	1651	55. Spain	19
11. Israel	1501	56. Romania	17
12. Netherlands	1487	57. Slovak Republic	12
13. Austria	1251	58. Philippines	12
14. Norway	1726	59. Zambia	12
15. Finland	990	60. Taiwan	11
16. Denmark	754	61. Cyprus	10
17. Bahrain	609	62. Brunei Darussalam	10
18. Japan	602	63. Pakistan	10
19. France	478	64. Old style Arpanet	10
20. Malaysia	459	65. Bulgaria	9
21. New Zealand	396	66. Morocco	8
22. Qatar	485	67. Niue	7
23. Oman	435	68. Thailand	6
24. Non-Profit Organizations	292	69. Kazakhstan	6
25. United States (USA)	288	70. India	5
26. Brazil	270	71. Mexico	4
27. Belgium	240	72. Bolivia	4
28. Jordan	173	73. Dominican Republic	2
29. Ukraine	643	74. Macedonia	2
30. Switzerland	141	75. Slovenia	2
31. USA Military (USA)	135	76. Maldives	2
32. Yemen	123	77. Former USSR	2
33. Singapore	116	78. Zimbabwe	2
34. Russian Federation	114	79. Trinidad and Tobago	1
35. Kuwait	114	80. Mauritius	1
36. South Africa	112	81. Chile	1
37. Colombia	111	82. Iran	1
38. Egypt	211	83. Sri Lanka	1
39. Greece	72	84. Uzbekistan	1
40. Ireland	71	85. Costa Rica	1
41. Italy	69	86. Guinea Bissau	1
42. Lebanon	68	87. Portugal	1
43. Moldavia	62	88. Croatia	1
44. Turkey	59	89. Nepal	1
45. Czech Republic	52		
Total No of Vistors	١٠,٣٤٠٧		

Produced by © XOOM.com 1999 (www.xoom.com)

Appendix D: Publishers' Online Survey (Hard Copy)

This survey is designed to investigate the characteristics of the Arab daily newspapers on the Internet. It represents part of my Ph.D. project at the University of Sheffield. The project is under the supervision of Professor Barrie Gunter Director of Research at the Journalism Studies Department. Please reply to every question.
Many thanks Fayez Alshehri

When did your newspaper first put up a website?
- Month [Click Here to select]

- ☐ January
- ☐ February
- ☐ March
- ☐ April
- ☐ May
- ☐ June
- ☐ July
- ☐ August
- ☐ September
- ☐ October
- ☐ November
- ☐ December

Year [Click Here to select]

- ☐ 1991
- ☐ 1992
- ☐ 1993
- ☐ 1994
- ☐ 1995
- ☐ 1996
- ☐ 1997
- ☐ 1998
- ☐ 1999

URL of your newspaper:
http:/www. ----------

Do you have printed copy of the Newspaper?

- ◻ No
- ◻ Yes. If **Yes**, how would you rate the impact of your website on the print newspaper?

[Click here to select]

- ◻ Increases interest in our print copy
- ◻ Decreases interest in our print copy
- ◻ Not clear
- ◻ Other please specify

Do you estimate your number of daily visitors to you online newspaper?

- ◻ No
- ◻ Yes. If **Yes**, how?

Do you charge subscription fees for access your newspaper site?
○Yes. - If Yes, how often do subscribers pay
[Click here to select]:

Monthly

Quarterly

- ◻ Every six months
- ◻ Annually
- ◻ Other Please specify ----------

○No. If No, do you intend to levy subscription fees in the coming 12-24 months?

Yes

No

Do visitors have to register before reading your newspaper?

Yes

No

What contents your website include:

- ☐ All of our print content
- ☐ Much of our print content
- ☐ Limited ion of our printed content
- ☐ Breaking news only
- ☐ Headlines only
- ☐ Original content for our Internet version
- ☐ Other please specify

What additional services do you offer your visitors? ***Please check that apply***

- ☐ Searchable archives
- ☐ Customized news delivery
- ☐ Classified advertising
- ☐ Interactive communication
- ☐ Video/audio/files
- ☐ Free software
- ☐ Other (please specify) --------

How many staff members work ONLY on the Internet edition?

- ☐ None
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ 16-18
- ☐ 19 - 21
- ☐ 22- 24
- ☐ 25-27
- ☐ 28-30

Would you like to add any comment?

Your E-mail:

Please make sure that you completed all the questions:

Submit form | Clear form and start over

Thank you for participating in this survey.

Note: If you do not have a forms capable browser, or if you would like further information about the survey, please e-mail Fayez Alshehri.

Appendix E: Arab Electronic Newspaper Part I.

Arab(ic) Internet Newspapers (Participants in the Survey).

Newspaper	Country / City	Language	URL
Alayam	Bahrain	Arabic	http://www.alayam.com/
Alahram	Egypt	Arabic	http://www.ahram.org.eg/
Addustour	Jordan	Arabic	http://www.arabia.com/Addustour/
Alra'i	Jordan	Arabic	http://www.accessme.com/Al-Ra'i
Jordan Times	Jordan	English	http://www.accessme.com/JordanTimes/
Al-Riyadh	Saudi Arabia	Arabic	http://www.alriyadh-np.com/
Aljazirah	Saudi Arabia	Arabic	http://www.al-jazirah.com/
Alqabas	Kuwait	Arabic	http://www.moc.kw/alqabas/
Alwatan	Kuwait	Arabic	http://www.alwatan.com.kw/
Alnahar	Lebanon	Arabic	http://www.annahar.com.lb/
Alsafier	Lebanon	Arabic	http://www.assafir.com/
The Daily Star	Lebanon	English	http://www.dailystar.com.lb/
Alarab	London	Arabic	http://www.alarab.co.uk/
Asharqalawsat	London	Arabic	http://www.asharqalawsat.com/
Azzaman	London	Arabic	http://www.azzaman.com/
Alhayat	London	Arabic	http://www.alhayat.com/
Alanbaa	Morocco	Arabic	http://www.mincom.gov.ma/
Alwatan	Oman	Arabic	http://www.watanom.com/
Alquds	Palestine	Arabic	http://www.alquds.com/
Alayyam	Palestine	Arabic	http://www.al-ayyam.com/
Alrayah	Qatar	Arabic	http://www.raya.com/
Alsharq	Qatar	Arabic	http://www.al-sharq.com/
Alrayalaam	Sudan	Arabic	http://www.rayaam.net/index.htm
Tashreen	Syria	Arabic	http://www.teshreen.com/
Alkhaleej	UAE	Arabic	http://www.alkhaleej.co.ae/
Alittihad	UAE	Arabic	http://www.alittihad.co.ae/
Gulf Times	Qatar	English	http://www.gulf-times.com/

Appendix F: Arab Electronic Newspaper Part II.

Arab(ic) Internet Newspapers (Non-participants in the survey)

Newspaper	Country / City	Language	URL
Elkhabar	Algeria	Arabic	http://www.elkhabar.com/
Elshaab	Algeria	Arabic	http://www.ech-chaab.com/
Alyoum	Algeria	Arabic	http://www.el-youm.com/
Bahrain Tribune	Bahrain	English	http://www.bahraintribune.com/
Alalam Alyoum	Egypt	Arabic	http://www.alalamalyoum.com/
Alwafd	Egypt	Arabic	http://www.alwafd.com/
Algomhuria	Egypt	Arabic	http://www.tahrir.net/
Almessa	Egypt	Arabic	http://www.tahrir.net/
Almassy'ah	Saudi Arabia	Arabic	http://www.al-jazirah.com/
Alanwar	Lebanon	Arabic	http://www.alanwar.com.lb/
Alquds Alarabi	London	Arabic	http://www.alquds.co.uk/
Oman Daily	Oman	Arabic	http://www.omandaily.com/
Oman Observer	Oman	English	http://www.omanobserver.com/
Alwatan	Qatar	Arabic	http://www.al-watan.com/
Thawrah	Syria	Arabic	http://www.thawra.com/
Baa'th	Syria	Arabic	http://albaath.com/
Albayan	UAE	Arabic	http://www.albayan.co.ae/
Gulf News	UAE	Arabic	http://www.gulf-news.com/
Khaleej Times	UAE	English	http://www.khaleejtimes.com/
Algumhuryah	Yemen	Arabic	http://www.y.net.ye/al-gumhuryah/
Althawrah	Yemen	Arabic	http://www.althawra.gov.ye/

Appendix G: Publishers' Comments

- *Ad-dustour* (Jordan).

"We still try to make our site more effective".

- *Alrai* (Jordan)

"I would like to thank you for your interest in our online edition".

- *Alsharq* (Qatar)

"Most of our online readers are resident outside the Arab World where we don't distribute our print copy, and even in some other Arab countries, so the Internet didn't have an impact on our printed newspaper, instead it gave a wider publicity for our newspaper".

- *Al-Raya* (Qatar)

"We are going to renovate our site very soon".

- *Alarab* (London)

"Nobody works solely on the Internet site, so we do the best we can with the limited resources we have as an independent newspaper.

- *Alhayat* (london)

"A PDF copy of every print page is automatically created and sent to the site. There is no human intervention in providing the PDF pages apart from about half an hour spent on providing the page' names rather than the pages' numbers.

- *As-Safir* (Lebanon)

"I suppose it was easier and faster than you expected to get the survey filled".

Appendix H: Newspaper's website Analysis Form

Date:...../.... / 1999

1. Newspaper's Name ---------- 2. Location ----------

3. URL: http:// ---------- 4. First Internet issue ---/---/199

5-Language	1 Arabic 2 English 3 Arabic & English 4 Other			
6-Arabic text format:	1 Text only 2 Text Image only 3 Text & text image 4 Portable Document Format PDF 5 Other			
7-Fees	No 1	Method of access		
		Pre-registration 1	Instant access 2	
	Yes 2	Notes		
	1 Monthly			
	2 Quarterly			
	3 Every six months			
	4 Annually			
	5 Other			
8-Advertisements	No 1	Yes 2	How	
9-Other services	Yes 1	No 2		
	1.Searchable archive	Notes		
	2.Customized news delivery			
	3.Classified advertising			
	4. Interactive communication			
	5.Video/audio/files			
	6. Free software			
	7. Other			
10-Is there a printed copy?	No 1	Yes 2		
Notes				

Appendix I: Editors' Interviews: Question Guide

Arab E-newspapers Research Project

E-newspaper

1. Do you make money (profit) from your online newspaper? How? --------
   ---

   ---
2. Do you think online newspaper will replace the printed newspapers? -----
   ---

   ---
3. What do you think Arabic e-newspaper should look like? ----------
   ---

   ---
4. Do you have planes to invest more in your online version? ----------
   ---

   ---
5. Is there any adverts market for your online newspaper? How? Where? --
   ---

   ---
6. Do you assign special staff for publishing the WWW newspaper? --------
   ---

   ---
7. What qualifications do you think online journalist should have? ----------
   ---

---

8. In what way(s) does your WWW paper differ from the print version? ---
---

WWW

1. Do you know what is the most common technical problem facing the reader of your newspaper? How do you react? ----------
---

---

2. Do you think the Internet (will) affects print journalism? How? ----------
---

---

3. Do you have any plans to invest in developing software to improve the way reader reads your Internet edition or the way your paper looks? How? ----------
---

---

4. How do you look to the WWW as distribution channel of news? ----------
---

---

5. What do you think the most issues that might prevent Arab online newspapers from reaching more audience? ----------
---

Reader

1. What do you do to attract more people to read the online version? ----------
---

---

2. Are there any marketing studies, how do you measure your audience? ----------
---

---

3. Why readers tend not to pay for reading online news, how to change such attitude? ----------
---

---

4. What is the best way [mechanism] to collect the subscription fees? ----------
---

---

5. Do you think that readers might taken away from you to another online newspapers? ----------
---

Appendix J: Software and Plug-ins

- **RealPlayer:** http://www.realaudio.com/products/player/

RealPlayer is a live and on-demand RealAudio and RealVideo player which functions without download delays. It is provided by RealNetworks, Inc. and is available for Macintosh, Unix, and Windows 3.1/95/NT as both a plug-in and helper application. To test your RealPlayer plug-in, visit any of the sites listed in their showcase. The plug-in is compatible with many popular browsers. For a complete listing visit the RealPlayer system requirements page.

- **QuickTime:** http://www.apple.com/quicktime/

QuickTime, a product of Apple, Inc., is capable of delivering multimedia such as movies, audio, MIDI soundtracks, 3D animation, and virtual reality. It is available to Macintosh and Windows 3.x/95/NT. The QuickTime package contains a plug-in and helper applications. The QuickTime Plug-in allows QuickTime and QuickTime VR content to be viewed directly within a browser. The MoviePlayer and PictureViewer, helper applications, allow all QuickTime multimedia to be played (file creation and editing can be completed with QuickTime Pro).

- **Shockwave:** http://www.macromedia.com/shockwave/

The Shockwave plug-in, provided by Macromedia, Inc., allows multimedia files created using Macromedia's Director, Authorware, and Flash to be viewed directly in your web browser. The plug-in is compatible with Netscape Navigator 2.0 or later and Internet Explorer 3.0 or later on Macintosh and Windows 3.1/95/NT platforms. The Macromedia site also provides detailed information about Shockwave, including a section called Shockzone where users can view Shockwave in action.

- **VivoActive Player:** http://www.vivo.com/products/playfree/vaplayer.html

VivoActive Player delivers on-demand video and audio from any website offering VivoActive content. This product, provided by Vivo Software, Inc., is available for Netscape Navigator and Microsoft Internet Explorer browsers on Power Macintosh

and Windows 3.x/95/NT platforms. Learn more about the VivoActive Player and test its capabilities at the Vivo Software website.

- **Adobe Acrobat Reader:** http://www.adobe.com/prodindex/acrobat/

Acrobat Reader allows you to access PDF files on the web. It is provided by Adobe Systems, Inc. and is available for Macintosh, Unix, and Windows 3.x/95/NT.

- ActiveMovie: This plug-in is included in Internet Explorer and plays multimedia files.

- Cosmo Player: A VRML viewer available to Windows 3.1 / 95 / NT or UNIX (IRIX) versions of Netscape, created by Silicon Graphics, the company that makes graphics effects for movies like Jurassic Park. A newer version is available from Cosmo Software.

- Netscape Media Player: Plays WAV, MIDI, Sun .au, and Macintosh .aiff sounds files. It also plays Netscape packetized audio files, though this author has never encountered them.

- Java: A Java interpreter allows the browser to display java applets, applications that have a variety of uses. Most java applets are used for menus and Times Square news tickers. They also have the potential for delivering educational applications over the Internet. The disadvantage to Java is they load slowly compared to other web media. The advantage to java is one program for all platforms, culminating in the motto that java allows one to "write once, run everywhere." The realization is not there yet, giving the popular alternative motto "write once, debug everywhere."

Sources:

http://www.columbia.edu/itc/itc/webdev/archive/browsers.html
Source: http://scout.cs.wisc.edu/index.html

Appendix K: Samples of Some Online Newspapers Banners Rates

Al-sharq al -Awsat online banners Rate

1- Advert is placed on any page*	
2 cm x 2.1 cm	1000 US Dollars
5 x 2.1 cm	1500 US Dollars
10 x 2.1 cm	2000 US Dollars
Full page plus a link	5000 US Dollars
2- Advert is placed on index page:	
2 cm x 2.1 cm	1500 US Dollars
5 cm x 2.1 cm	2000 US Dollars
10 cm x 2.1 cm	2500 US Dollars
Full page plus a link	5500 US Dollars

Source: *al-Sharq Al-awsat* website

- Prices per month

Banners Advertising Rates at *al-Anwar.*

Cost Per Thousand Random Page Views: $35

Sections	CPM
Page One	$45
Lebanese News	$40
Arab news	$35
World News	$33
Buisness News	$40
Technology News	$40
Art&Entertainment News	$29
Health&Science News	$29
Sport News	$29
Special Features	$30
Editorials	$40
Cartoons	$29
People	$29
Crossword Puzzles	$25
Updated News	$45

CPM(Cost per thousand impressions)

Advertising rates on *al-Nahar* Internet Edition

Page (Section)	Html files	Price / Month	No. of Pages	No. of Banners	Daily Weekly Monthly
Homepage	annaharonline.com	$500	1	8	D
Front Page	front.htm	$350	2 & more	2	D
Political	mahalsya.htm	$350	14 & more	3	D
Economic	eco.htm	$200	10 & more	3	D
Int'l & Arab News	arabalam.htm	$250	12 & more	3	D
Cases	kadaya.htm	$100	5 & more	3	D
Justice	kadar.htm	$100	6 & more	3	D
Forum	nadwa.htm	$100	1 & more	3	D
Reports	tahkik.htm	$100	1 & more	3	D
Editorials	edito.htm	$250	15 & more	3	D
Municipalities	baldat.htm	$250	5 & more	3	D
Ecological	beaa.htm	$100	4 & more	3	D
Agenda	mofakara.htm	$100	1 & more	3	D
Cultural	edu.htm	$100	6 & more	3	D
Student	mjm.htm	$100	12 & more	3	D
Obituaries	wafiat.htm	$200	1	3	D
Sport News	spo.htm	$100	12 & more	3	D
Last Page	end.htm	$250	3 & more	3	D
Sport Supplement	riyada.htm	$250	6 & more	2	W
Cultural Supplement	cults.htm	$250	10 & more	2	W
Internet Supplement	inter.htm	$250	6 & more	2	W
Directory Supplement	dalil.html	$250	10 & more	2	W
Youth Supplement	chabab.html	$250	10 & more	2	W
Arab & World Supplement	arabal.html	$100	16 & more	2	M
Monde Diplomatique	lemond.html	$100	16 & more	2	M
Annahar (Pdf)	annahar.com.lb	$500	1	3	D
Direction	pdfed2.html	$250	1	2	D
Cartoons	cart1-2-3.html	$250	3	2	D
Subscribers' Table (Fv)	page42.html	$100	1	2	D
Subscribers' Table (Iod)	page52.html	$50	1	2	D
Archives	archi2.html	$50	1	2	D
Subscription	form2.html	$50	1	2	D
Opinion	opinion2.html	$50	1	2	D
Annahar Audionet	annahar.inco.com.lb	$200	1	3	D
Classified	ind2.html	$150	1	2	D