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Multiple Mirrors of the Arab Digital Gap

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Abstract

This paper discusses the digital divide in the Arab region. It studies the digital divide on double dimensions: the access and the usage. The access gap measures the “have” and “have-not” the Internet whereas the usage gap measures the quality of audience use of the Internet. A comparison with the leading global websites sets a benchmark of usage quality.

Introduction

This paper discusses the social introduction of the internet in the Arab countries and stresses that despite the increasingly growing internet penetration rates in the Arab region, there's still a digital gap among Arab countries and between Arab countries and leading countries globally in terms of internet coverage and usage.

This presentation highlights the multidimensional aspects of the digital gap and supposes that a digital gap exists among Arab countries in terms of connectivity and in terms of audience's usage of the web. First, the paper introduces a short description of the Arab world, followed by an overview of the literature related to the digital gap and to the internet situation in the Arab countries. Then, it discusses the internet in the Arab countries from an audience perspective and a user's perspective. This leads to a thesis about a usage gap warning situation in the Arab region where the Arab usage pattern of the web is limitative and not "evolutionary".

The Arab media have been strongly criticized, especially when content is involved. For instance, the 2003 Arab Human Development Report (UNDP) has noted the weak role the media network plays in motivating societies to acquire knowledge,

"For example, it is obvious that meaningful, educative and knowledge- oriented programs are often absent from the Arab satellite channels. Rather the Arab media content is laden with sleazy, worthless and mostly sensational forms of amusement that have grave negative effects on the perception and values of Arab audiences" (*Arab Media in the Information Age*, 2006, p.4-5).

The World Wide Web offers as an alternative to traditional media. It combines audio, video, text and other interactive features allowing interactivity as well as production possibility on the web. Not only the users have an endless choice of websites to visit and to interact with other users, they also have the power to generate content and to transform the classic chain producer-message-consumer to a new one where the consumers are now producers. Knowing the media role that the internet embraces, one wonders if the Arabic internet has transformed this unsatisfactory quality of media and has provided the

Arab audience with alternative ways to get quality media with worthy content that can have positive effects.

1- Arab Countries in Context

Arab countries are spread throughout two continents Africa and Asia, but they have in common geographic roots as well as cultural roots. The classic Arabic is the official language. It is understood and used in writing by all Arabs. However, the spoken language is different from one country to another and from one region to another. All Arab countries have Islam as a dominant religion with some incongruity in Egypt or in the Levantine, in particular Lebanon where Christianity is the religion of almost 40% of the population.

Arab countries are known to have a common “culture”. The concept of culture being so wide, it would be imprudent to agree to this statement. However, with the globalization phenomena, cultural industries in the Arab region took advantage of the free flow of information and communication, and cultural products were made available among the region; this was commercially and culturally possible because of the shared common language understood by Arabs and also because of the development of satellite television that contributed to the enlargement of the Arab cultural market. However, the Arab countries have significant differentials. The economic wealth for instance varies significantly. Except some oil-revenue based countries, specifically Gulf countries, most of the Arab countries lack natural resources, have water problems, or are heavily indebted. This economic situation has often an impact on how well computerized a country is. The Information and Communication technologies (ICT) penetration and the connectivity rates among the Arab countries reflect the economic wealth of these countries. This explains in part why the ICT penetration and connectivity vary significantly among Arab countries. Some Gulf countries enjoy higher penetration rates of the Internet than other Arab countries; the poorest Arab countries have the lowest penetration rates.

In addition to the economic situation, El-Baz (2007) found that Arab region suffers from a “knowledge deficit” except few oil-revenue based countries, namely, UAE, Qatar and Bahrain. The knowledge deficit is reflected in two aspects: the lack of knowledge acquisition and generation (ex. low number of book translations or lack of production of literary or artistic literature, innovation, etc.) and science and technology deficit. This is translated in an insignificant budget spent on scientific research, for instance Arab countries spend less than 0.02% of the Gross Domestic Product on scientific research compared to developed countries that spend up to 5% of their GDP on scientific research.

One might think this deficit handicaps healthy media production and is in part responsible of the media status, engendering unsatisfactory media content, whether state-owned or private-commercial media. The audience choice is thus limited and set up with inadequate Arab media choice, engendering their turning and moving towards hegemonic media whether healthier or not. However, the audience, if not happy with the first option of Arab media, can take advantage of the internet and more specifically the World Wide Web. The web is a developed form of media that offers an alternative to a limited choice of media, giving the audience, in occurrence the users, an endless choice of content healthy and unhealthy. The question is would the audience in the Arab countries take advantage of it? Would they want to benefit from what the web offers in terms of interactivity, user generated content possibility, knowledge, education and learning and participation in the public space? Is the audience attracted by the healthy media options available online and lacking offline? Answers to these questions will illustrate Arab audiences’ use of new media and patterns of their adoption of the web.

2- The Digital Divide in review

With the Network society, a sizable amount of literature stressed out the nodal model of communication upon which points of liaison exist between transmitters and receivers of the communication. The Network or information society assumes people being connected to take

advantage of this electronic revolution. But internet connectivity is not accessible to each and every one. Connectivity is limited to places where infrastructure allows it and where technology is made available. The unequal availability of technology is known as digital divide. This inequality is multidimensional; it affects access, but also quality of access. For instance, the availability of broadband/high speed internet shapes and affects the surfing experience. These are non personal or external factors, usually related to government wealth and economic situation, but also to politics and government position in regard to ICT such as, government policy on expanding the technology, government policy on the internet regulation, etc. Other inequalities observed affecting the online society are related to demographics of users (language, race, gender, age, income, education level, etc.), but also their technological experience, such as computer and technological skills, ownership of personal computer, etc. In this sense, Rice and Haythornthwaite (2006, p.93) wrote "Access is the major public policy area for those who see the Internet as a universal service and a significant influence on political and economic equity (...) The usual term for this is differential access to and use of the Internet according to gender, income, race and location is 'the digital divide'".

Norris (2003, p.4) considered three dimensions of digital divide, "The global divide refers to the divergence in Internet access between industrialized and developing countries; the social divide refers to the gap between information rich and poor in each nation and the democratic divide refers to the difference between those who do, and do not, use the digital resources to engage, mobilize, and participate in public life". Jan Van Dijk (2006) found two causes to unequal access: First is the distribution of resources (material, mental, social, cultural) and second the technological characteristics of the medium itself (computers enable applications like information, education, work, entertainment, etc. but also categorize two kinds of applications advanced for work, education, etc. or simply entertainment focused. In addition to this, cost, user-friendliness and complexity are characteristics decreasing equality of access). Paul Di Maggio and Coral Celeste (as cited in Mossberger et al. 2008, p.

15) found that education is a “deep” indicator of internet use; their argument about the “deepening” of Internet use relies on two points; first the educational “attainment”, second educational use. According to Di Maggio and Celeste (as cited in Mossberger et al. 2008, p. 15), the more people spend time online, the more “involved” they’d be in non-entertainment activities and this have no relation with other variables like race, ethnicity or income. Second the authors stressed that, “education, years online and youth are significantly associated with using the Internet to enhance human capital (visit school related sites, work, health, finance or science) or social capital (visit government related sites, or news or politics)”.

The Arab world and the digital divide

The digital gap is not new to the Arab countries. In fact, the Arab world

[S]uffers from being on the low end of the digital divide (...) among the factors cited were the lack of human and economic IT resources, illiteracy and computer illiteracy, the lack of funds for It research and development, the lack of solid telecommunication infrastructures in the Arab world, and the cost of Internet connectivity in most Arab countries. Another important factor was the lack of an e-business and e-banking culture, and the unavailability of secure e-commerce Web sites and electronic signature validation technique” (Abdulla, 2007, p. 35)

Warf and Vincent (2006) found a number of reasons handicapping the development of internet;

“the reasons that underlie the relatively late adoption of the Internet among Arab countries, including the dominance of the Latin alphabet, high access costs reflecting state-owned telecommunications monopolies, low Arab literacy rates, and restrictive gender relations that keep the number of females users low.”

It’s true that the Arab world has been slow to connect to the internet; among the first countries to connect were Lebanon and Tunisia. In Lebanon the war destroyed the infrastructures and drained the country into a digital gap, whereas in Tunisia, a lack of “positive” public policy towards a wider and more expanded access to the internet made the country nearly among the Arab laggards. The resistance to

the free flow of information from Arab governments is still one of the major causes of internet access problems, "The Internet, often extolled in the 1990s as a harbinger of democratic change, had not, by end- 2005 at least, caused the collapse of autocratic Arab regimes." (Hofheinz, 2007). The Arab states are most often the ones pinpointed when discussing their weak situation of internet, especially their repressive regimes and their fear from the emancipator role of the Internet and its "counter-hegemonic purposes in civil society" (Warf and Vincent (2006)). These authors added that those who enjoy the best-developed internet systems are those that built competitive telecommunication markets, equalized gender roles and made popular cybercafés. The Arab governments are also pinpointed for a deficient e-economy in the region. A study about major Arab webcasters demonstrated their capacity and potential in offering various types of content, but because of technological and market constraints, namely lack of broadband penetration and non-effective electronic banking system, the industry is still at its infancy (Allagui and Martin, 2006).

Some other authors identify the reasons why the Arab world is still lagging behind not in the government side, but in the users' side. For instance, Al-Nawawy (2000) researched Internet use in Egypt in comparison to other Arab countries and found out that deterrents are not infrastructure or culture or language or poverty (individual income or Service costs) but Individual awareness and Education. Wheeler (1998) found that in Kuwait, cultural factor, a fear to verbalize thoughts, prevented women from expressing their opinions and contributing to the public sphere.

This paper will focus on two dimensions of the digital gap, the access gap among Arab countries and the usage gap among Arab Internet users and Internet users globally. The research will identify Arab countries that are digital leaders and others, the digital laggards (Norris p.9). It will try to explain the variations among them. It will not consider the personal factors, nor the experience or skills or education of the users. When discussing the digital divide from an access perspective, this paper will

adopt a political economy approach where the role of the government, at a macro level, is scrutinized. When discussing the divide from a usage perspective, the paper will adopt a comparative approach between usage among the leaders and the laggards.

3- Methodology

This paper suggests discussing the above questions while conducting an exploratory qualitative research. First, it aims at portraying the access divide among Arab countries by using ICT indicators. The access to the Internet and the household broadband penetration are prerequisites to the new media consumption and to a positive web experience. Second, it investigates the audience usage of the web. It questions what websites do Arab users visit most, but it questions as well whether divergence in usage exists among users in the different Arab countries and users worldwide. The global usage is set as a benchmark of quality of web usage.

The research will use websites logs as a measure of success or popularity. A website is popular if it shows a high traffic of visitors and high ranking. Considering the very low penetration rate in some Arab countries, the usage gap will be measured only for the top-leading Arab countries in terms of internet penetration rate. For instance, will be studied the top 10 websites in the top 10 internet leading Arab countries and as a benchmark the top 10 global websites in the top 10 globally leading countries in terms of internet penetration rate.

The ranking is thought a rational choice for this research. Ranking is used in blockbusters, in best-sellers, etc. In fact, the Internet usage or popularity can be measured by a variety of tools keeping in mind that Internet methods are extensions of existing methods (Jones, 1999). Another option would be using questionnaires distributed to Internet users and asking them about their navigation habits. This method is limitative here because of the discomfort it creates among respondents; Internet usage is a personal activity and people preserve confidentiality when using the Net. This would incite them to give

biased information if they're asked what websites they visit. Moreover, to have a reliable representation, the survey has to be widely distributed among a representative sample of Arab websites users, all over the Arab countries, which is difficult to achieve under limitative academic research means. However, reliable statistics are available for the same purpose, providing information about the usage of web in Arab countries. Measuring traffic of "popular websites" is indicative of a "popular" use of the web in the region. For instance, Alexa.com, a subsidiary of the popular online retail store amazon.com, provides information on Web traffic per country, region or language. Alexa ranks websites based on the number of visits and tracks additional information such as, country of origin of the users, most visited web pages on the websites, etc. Alexa data is reliable; it has been used by many scholars as well as international organizations such as, United Nations, International telecommunication Union, etc.

4- A Dual digital Gap: The Asymmetric Equation Access and Usage

Internet Access in the Arab region

The internet access in the Arab world is increasing at a steady rate. In the United Arab Emirates, the penetration rate has increased from 35.1% in 2007 to 49.2% in 2008. The graph¹ Internet penetration rates among Arab countries show the Internet leaders and laggards in terms of penetration rates as percentages to all population. The graph shows unequal access to the Internet among the countries in addition to an unequal broadband connectivity. It illustrates that the only four countries enjoying more than 30% of the Internet penetration rates are four Gulf countries, UAE, Qatar, Kuwait and Bahrain. Lebanon, Saudi Arabia and Morocco are the only ones slightly above the 20% as Internet penetration rate. Egypt, Syria, Algeria and Oman seem to be adopting a slowly growth in internet penetration. The broadband rates show that except the six countries identified in the graph¹, all other Arab countries have a broadband rate less than 1%. The internet leader is not a broadband leader. With 49.8%, UAE is leading in internet connectivity but with 5.3% Bahrain leads in broadband/ ADSL connectivity. In

comparison, the top broadband leader in the world is Netherlands with 32.8% and the rate of the broadband penetration worldwide is 4.8%.

Graph 1- Internet penetration rates and Broadband* rates in Arab countries



*Only when 1% or higher the broadband rates are written on the graph. Broadband stats are of 2007, whereas internet penetration rate are of 2008. Source: www.internetworldstats.com

The adoption of policies to improve infrastructure, reduce internet costs, and offer a better experience for Arab Middle Easterners is a must for the Arab countries to catch up the growing trend of internet adoption. This shows in the case of Lebanon, less wealthy country. The Lebanon ministry of telecommunication has adopted a free market strategy and opened a competitive ADSL market; this explains the growth of the broadband connectivity in Lebanon that is very close to the one in Qatar or UAE.

Internet Usage in the Arab region

This paper tries to illustrate the usage of the Internet in Arab countries and to answer whether the Internet usage in Arab countries is localized or globalized and whether the Internet usage in Arab countries is different from the usage in Internet leading countries.

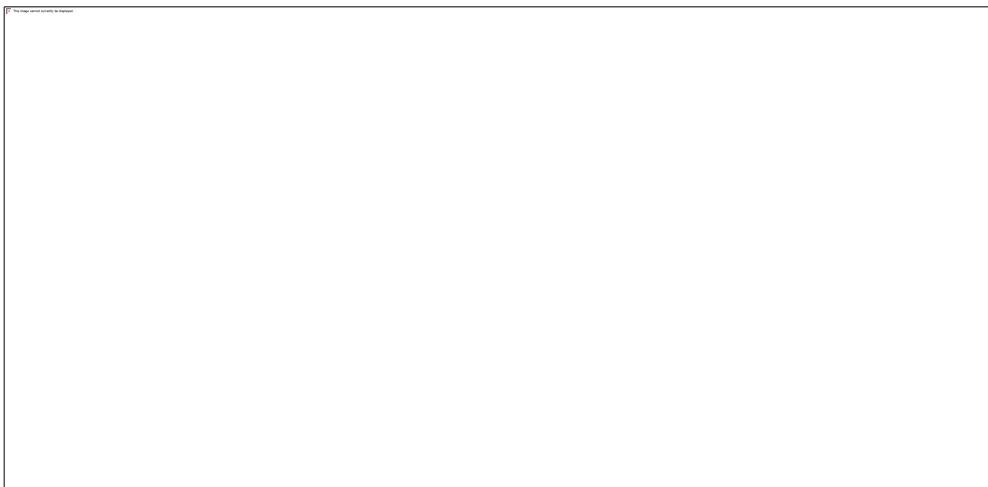
The following section shows the popular Arabic websites, based on Alexa ranking as explained above in the methodology. The selection is based on the language, here Arabic. Considering that users can access Arabic language from over the world, not only from Arab countries (ex. Arabic language users in Canada), it is important to identify the origin of users before making any statement about users in Arab countries. The place of origin or provenance of users is important to identify before driving conclusions about the Arab usage of the internet.

The table below, Table 1 Top 10 Arabic language websites provides a rank of Arabic languages websites based on the number of visits to each of these websites. Maktoob for instance, is the most popular Arabic website, based on the number of visits. The search engines are excluded from the ranking because they don't reflect the usage of visitors and because they serve mainly as intermediary or directory role.

Let's have a look now at the provenance of these websites users to confirm that the traffic is mainly originating in the Arab countries. When looking at the statistics, some countries might be represented by very small percentages; these fractions are available to make up to 100% of the visitors. Presenting all the percentages would make the table below very long, besides these very small percentages would also be meaningless and wouldn't add significance to the results, that's why we have chosen to stop at the first cumulated 50% of the visitors.



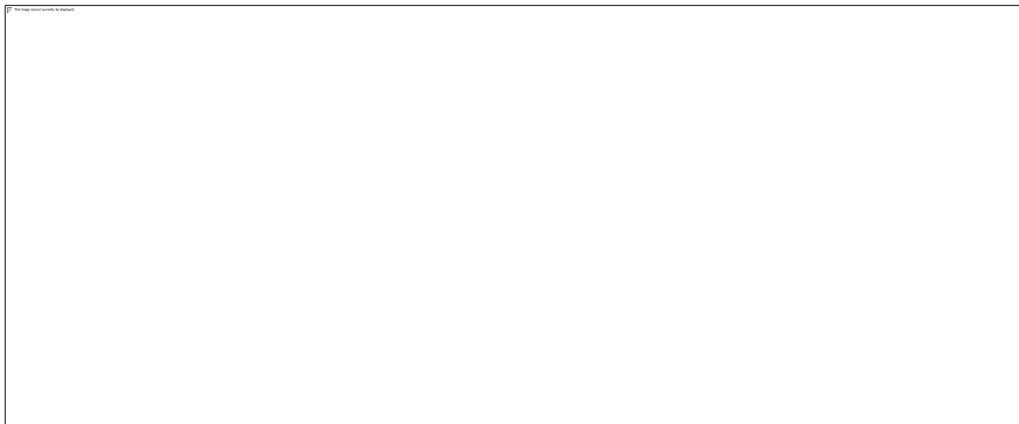
The table 2 below shows the origins of the websites visitors. The other countries generating the visits are not shown because they represent often small fragments; only those representing a cumulative 50% or more of the visitors are included in the table.



Except Al-Jazeera, the news broadcast channel, it's clear that most of these websites are visited mainly and primarily by users from Arab countries. Saudi Arabia and Egypt drive the highest number of

visitors. This can be explained in part by the high population in these countries, respectively 28,161,417 and 81,713,517 (Internetworldstst.com, statistics as per June 2008) When looking at these websites, one can identify two categories of websites, social networking and entertainment. The table of origin also reflects the “uniformity” of the Arab world. The concept of the Arab world might not exist in terms of politics, but it does exist in terms of social or cultural relation. If these websites are social networking or entertainment websites, thus cultural websites, one can see Arab users, whether from the Gulf or from North Africa, interacting on the same platforms; for instance, Kuwaiti users interacting with Egyptians or Saudi interacting with Algerians, etc. The Internet and the cyberspace reinforce and enhance socialization among Arab users with no regionalization, thanks to language and culture.

One of the objectives of this paper is to measure and portray the Arab usage gap. A comparison with the top 10 English language websites would set a benchmark of usage quality.



When looking at the table 3 above, one can see diversity in terms of Internet usage. Global or English speaking users visit websites from different categories. It’s also notable to see websites with user generated content websites, fact not notable in the Arabic language websites. Thus, global visitors use the Internet to access websites where they can produce as much as they consume. Categories of websites among the top 10 ranked websites globally file sharing that can be for entertainment, education, commerce or any other reason; social networking, education, publishing and e-commerce.

When looking at table 1 and table 3, one can conclude that global users are much less “passive” users than Arab users. They use the net for producing content, for buying and/or selling, for sharing, for socializing or for publishing.

The Global Net is used on a multilevel base (seven categories of usage), when the Arab Net is used on a limitative base (only two categories of usage).

The audience choice: Top ranked websites in the Arab countries

The audience’s usage of the Internet helps understanding usage pattern of the Internet, if it exists. One might wonder whether factors, such as, country wealth, literacy rate and education level, political level, country’s status on censorship, etc. have influence on the audience navigation and usage of the Internet.

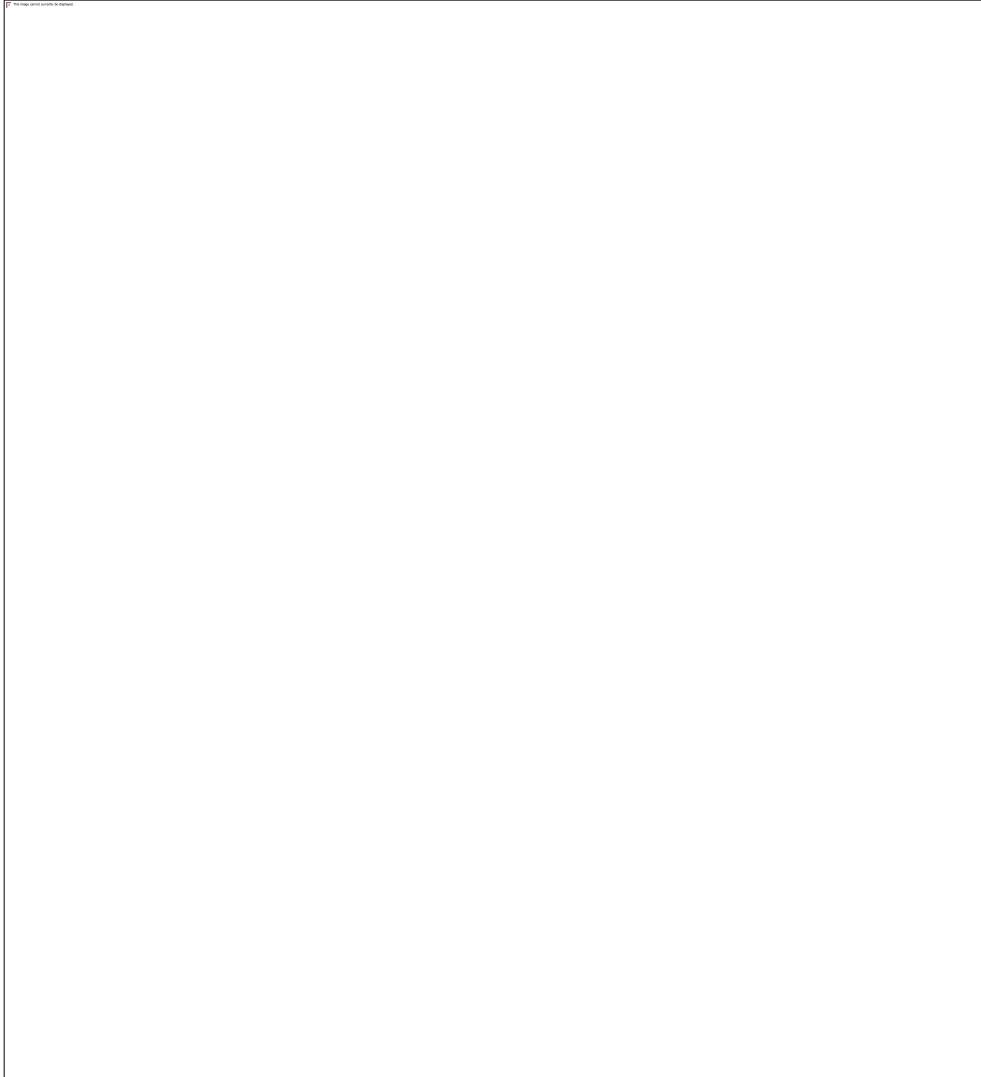
The traffic on the Top-visited websites is an indicator of how popular a website is. In the following, the Internet usage of the audience per leading countries in terms of Internet penetration rate is provided to describe what the majority of users in Arab country are doing on the Net.

The United Arab Emirates is a leading country in regard of Internet penetration, for instance the penetration rate is 49.2%, the highest among Arab countries. The UAE audience visits global websites first and foremost like Windows Live, YouTube, MSN and Facebook. These sites are also the most visited websites in Qatar, Bahrain, Kuwait, Lebanon, Morocco and Jordan. Only few and small variations among the other Arab countries for example in Saudi Arabia MSN and Facebook are ranked 6 and 7 when Saudi telecom (Stc SA) and Maktoob are ranked 3 and 4. In Tunisia, the popular forum Tunisia-sat.com is ranked fourth just after Facebook, WindowsLive and MSN. The news websites Maannews and Palestine press Agency are ranked 4th in Palestine. It’s true to say that most websites visited in these countries are international websites. There are some local websites that seem to be popular and highly visited

though, for example the corporate website Emirates in UAE, the forum and social networking website Tunisia-sat.com and the radio broadcaster Mosaiquefm in Tunisia, the forum Paldf in Palestine and a telecommunication and mobile service provider alfa in Lebanon. Some other websites have a pan-Arab profile, which means they are popular among Arab countries, for example, the Jordanian website Maktoob that is ranked 5th in six of these 10 countries. Maktoob is not among the top 10 only in Tunisia, Morocco and Lebanon where three out of 10 of these websites are local news websites. Palestine, Jordan and Bahrain all have also local news websites. The user generated content site Blogger figure among the top-visited only in UAE and Qatar, as for the online encyclopedia Wikipedia it appears only in Lebanon, Tunisia, Morocco and Jordan.

The categories of these top 10 Arabic websites can be summarized as follow:

- UAE: Entertainment, social networking, file-sharing, blogging and e-commerce. Seven out of 10 websites are global websites, 2 regional (Middle East) websites and 1 local website.
- Qatar: Entertainment, social networking, file-sharing and blogging. Eight out of 10 are global websites and two are regional (Middle East) sites.
- Bahrain: Entertainment, social networking, file-sharing and news. Six out of 10 are global websites and three are regional (Middle East) sites and one local news website.
- Kuwait: Entertainment, social networking and file-sharing. Seven out of 10 are global websites and three are regional (Middle East) sites.
- Lebanon: Entertainment, social networking, file-sharing, news and education. Six out of 10 are global websites and four are local news websites.
- Saudi Arabia: Entertainment, social networking, file-sharing and e-commerce. Seven out of 10 are global websites, two are regional (Middle East) sites and one is local corporate website.



- Morocco: Entertainment, social networking, e-commerce and education. Eight out of 10 are global websites and two are regional (Middle East) sites.
- Jordan: Entertainment, social networking, file-sharing, news, e-commerce and education. Seven out of 10 are global websites, two are regional (Middle East) sites and one is local news website.
- Tunisia: Entertainment, social networking, file-sharing, e-commerce and education. Eight out of 10 are global websites and two are local websites.
- Palestine: Entertainment, social networking, file-sharing and news. Six out of 10 are global websites and four are local news websites.

As one can see, there's a variety of Internet category use among the Arab countries' audience with a dominance of entertainment and social networking websites. Most visited websites are globally popular websites like Facebook or MSN. The traffic stats show that in some countries, users visit online news, for instance in Palestine four out of 10 popular websites are news websites and in Lebanon three out of the four local websites are news websites.

The usage of the Internet in Arab countries is no different from the usage of the Internet globally. The global popular websites appeal to Internet users wherever they are. Moreover, among the Arab countries, there's no significant usage gap. Users in countries where Internet penetration rate is higher do not have a use significantly different from those in countries where Internet coverage is less important. For instance, usage in UAE and Saudi Arabia are very similar despite the penetration rate in UAE that is double the penetration in Saudi Arabia. This observation applies to all other Arab countries, except for Palestine for example where the users show an extensive use of online news. The war and political situation, under which Palestinian users live, make the news part of their lives and the need of being regularly and continuously updated a must. Moreover, Maannews agency website publishes news and free of charge photos, it receives funding from Netherlands and Denmark that allow the station to work at a professional level (Najjar, 2007). Although Souri (2009, p.36) suggests that the Internet is used in Palestine for "a variety of business purposes (...) or to start English-language blogs to raise global awareness about everyday political conditions". Another observation can apply for North African countries, Morocco and Tunisia, where users do visit social local websites. For example, the website Tunisia-sat.com is a local forum that attracts mainly Tunisians. Mosaiquefm is also a local website, of a popular private radio channel in Tunisia that attracts youth and young adults and which success is due mainly because of the use of dialect as language and the modern music genre mixing international tubes as well as Arabic or Tunisian traditional songs. When looking at these top websites in Tunisia, one

can observe the absence of YouTube among the highly visited sites. This is because YouTube is banned and censored in the country.

What is the Internet usage among the countries where the Internet is highly penetrated?

With an Internet penetration rate higher than 90%, Greenland and Netherlands are the global leading countries in terms of coverage and connectivity. Norway, Antigua and Barbuda, Iceland, Canada and New Zealand have an Internet penetration rate higher than 80% whereas Australia, Sweden, Falkland Islands, Japan, Portugal and U.S. show an Internet penetration rate higher than 70%.

- Netherlands: Social networking; video sharing; entertainment, ecommerce, encyclopedia, news website, local e-zine (category information).
- Norway: Video sharing, social networking, news, ecommerce, local portal, encyclopedia
- Iceland: Social networking; video sharing; online news, blogging, local directory, encyclopedia
- Canada: Social networking; video sharing; entertainment, encyclopedia; blogging, e-government, local portal, e-commerce
- New Zealand: Social networking; video sharing; e-commerce; encyclopedia; news online; Blogging
- Australia: Social networking; video sharing; e-commerce; online news; encyclopedia, blogging
- Sweden: Social networking; video sharing; e-commerce; online local news; encyclopedia, blogging; entertainment
- Japan: Local portal; Video sharing; E-commerce, ISP/telecommunication; social networking; encyclopedia-education
- Portugal: Social networking; video sharing; ISP and local portal; Blogging, encyclopedia; entertainment; File sharing
- US: Video sharing; social networking; encyclopedia; E-commerce; local portal/directory

When looking at these navigation habits, one can identify some patterns. First, the leading countries in terms of Internet penetration enjoy a collaborative web. This shows in the popularity of websites that require generating content from the user, such as Wikipedia or the Blogging popular and highly visited in all of these leading countries. Moreover, e-commerce is also very popular usage among these countries visitors except, Iceland and Portugal. These are significant differences among usage within leading Arab countries in terms of Internet penetration rate. Furthermore, in seven out of the 10 leading countries, there's at least one local website or portal. In Japan for example, seven out of the 10 popular websites are local websites. They are five in Norway and four in New Zealand. This shows that the cyberspace proves to be built around a community or a locality and provides a social integration of the community.



Conclusion

Two dimensions of digital gap were discussed in this paper. The first is concerned with the access to the Internet; the second is concerned with the usage of the Internet in the Arab countries. The access gap is still problematic. Most of the Arab countries are not taking the appropriate measures and policies to expand the access to the Internet and to offer a better and faster navigation experience with the ADSL. This will not be overcome unless a political change happens and generates privatization of the telecommunications market while offering more competitive prices to users and companies who would like to access to the Internet. Lebanon is a good example here.

The access to the Internet among Arab countries is alarming. When UAE enjoys 50% of connectivity to the internet, less fortunate Arab countries like Libya, Sudan, Oman or Yemen did not reach even the 10% of connectivity rate. Obviously, one can see that the government is not prioritizing the telecommunication strategy and along with this, there's lack of vision of the Internet as an emancipator or evolutionary tool.

The usage of the Internet in Arab countries reveals a number of facts. First, it mirrors the usage of the Internet worldwide. The popularity of websites like Facebook or Youtube or MSN is international and the Arab users make no exception in their desire to connect with others or "social" network with other users worldwide or in the Arab countries. However, the Arab user plays a consumer role rather than a producer role. Arab users are not experienced enough to benefit from user generated content websites like Blogger for example. A collaborative Arab web is not evident either; in fact the websites like Wikipedia are occasionally visited. Moreover, the e-commerce is literally absent from the Arab usage of the Internet. Some initiatives are encouraging in regard of Arab e-commerce with websites like souq.com in UAE, but these remain punctual initiatives here and there and do not show as popular usage of the Internet. This is a significant difference from the internet leaders worldwide; all countries

offer a top ranked ecommerce website, but not in the Arab region. On the contrary, the free logic is still very strong in the Arab top ranked countries compared to leading developed countries. The hostility of the users might be the cause, because of the insecurity that the web might create, but research is lacking here to induce the governments change their politics and enforce the development of the web-economy. Same remark can be done in regard to the political web, the websites highly visited are not websites where the users can use their citizenship rights and exercise their responsibilities. They lack promoting the sense of citizenship, thus one can say that the Internet role in the Arab countries is not the expected evolutionary role. Internet usage in Arab countries mirrors the Internet usage worldwide. The success and popularity of the social networking tools worldwide is highly experienced in Arab countries but in much higher proportion than the ten leading websites globally. One can note a mix between localization and globalization when it comes to the navigation experience characterized by sociability and networking first and foremost. Hence the leading web in the Arab countries does not prepare yet for the civic engagement of visitors, and the substitute media role is not yet achieved. However, there are some positive signs. The multiplication of websites in Arabic language represents a potential of localization of the content, for instance the Arabic language on the net grew by 300% the highest increase in language on the Net. In addition to this, some Arab governments seem to be taking the right steps towards a better educated population. For example, among positive acts the Arab world is taking in favor of reducing the gap is the creation of a foundation to narrow the knowledge gap. The US\$ 10 billion foundation is created by prime minister of the United Arab Emirates and the ruler of Dubai, Mohammed bin Rashid Al Maktoum to encourage innovation and entrepreneurship and help establishing scientific research centers in Arab universities. This political will is an asset to the evolutionary role of the Internet in the Arab region.

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