

The Role of New Communication Tools In the Advancement of Social Movements in North of Africa

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Abstract: One of the most important issues in the twenty first century has been the start of the globalization process in its broad dimensions. In this view, globalization is the cause of a situation where the boundaries are removed; the power of the governments in some areas decreases; social relations deepen and integrated in a way as if they occur in the same place .it seems far events can have impact on the events around us. Also, the globalization can deepen democracy, decrease political concealment among the political figures, and helps to clarify this area, and can underlie people's movements and the emergence of democratic revolution.

Formation and evolution of new social movements, especially in less developed regions, mainly is the result of communication development and the masses awareness of social, political, economic and cultural conditions. In this paper we studied the role of new communication tools for new social movements since late 2010 in the Middle East and North Africa and the Arab world which is called "Arab Spring". In an overview of the new movements in the Arabic Middle East, we should say that although many factors in how to shape these movements can be traced, but based on this study, the most important factor involved in the formation and promotion of these movements is the role of new communication tools. The new tools, which are considered in the present study are, Internet, satellite and mobile phone.

Keywords: New Communication tools, New Social Movements, North of Africa, Arab Spring, Democracy.

I. Introduction:

Formed in the late 1970s, and expanded rapidly at all levels of personal and social life, Information technology was based on the transformation of communication that supported by digital networks.

Internet and wireless communications, fundamentally changed the way of communication and the nature of individual and social behavior, both at local and global situation were changed. Recent development in communications technology has changed our feeling about the concept of distance.

Time and space are closely pressed together. The territorial governments have lost obviously part of the order within the borders .power and number of new media and social networks has increased dramatically. Today's dramatic revolution in information and communications technologies and the formation of a new communication system based on digital universal language has changed; the community foundation is in such a condition that it would not tolerate any form of isolation and detachment. And even the most remote and most traditional societies failed to close their borders to global flows and networks.

Today controlling the flow of information in highly complex and diverse network of global

communication is difficult and in fact impossible, because the relationship that is based on communication technologies such as satellite, Internet, telephone and fax removes any natural and political restrictions, ideas and information cross national borders without any control. This extension in social environment can increase the range of people influence and substantially reduce the efficiency of natural and political distances in limitation social influence of phenomena. Within this space that is called "the space of flows ", the range of millions people with common goal, express themselves, related to each other, influence on others and affected by each other through the media. Another significant issue is that all cultural manifestations, from worst to best, come together in the digital world .a world that links historical effects of past, present and future to each other in a huge context .thus, they create a new symbolic environment. They change virtual world into reality world .the modern forms of communication don't require any geographical proximity to each other. They may be separated and in two different continent. This relationship is a social relationship that is allowed by e-mail, cell phone or other communication devices. This introduction want to say that one of the important issues in modern communication technologies is their role in the formation of new social movements. Basically now we can not talk about the new movements, without mentioning other elements such as the development of communication and connectivity features and technologies. Modern communication tools provide new and important resources to mobilizing social movements. These means will increase the ability of social movements to target formatting so that can resonate their voice outside of the country. This is possible by absorbing resources from outside the borders of the land. The movements for their promotions, conducting everyday activities need new communication tools like the internet network, satellite and so on. These devices can easily help to mobilize public opinion and social forces or different social classes, or at least resort these groups for mobilizations of troops, launched protests, demonstrations, marches, sit-ins, strikes, thereby they can act strongly and leave lasting impact on public opinions, thoughts and feelings of ordinary citizens. On this base, in this article we study the role of these new communication tools on the new movements in North Africa. Although several variables can be traced in shaping this movement, for example, movement of communities towards the globalization process, the social and class gaps in Arabic countries, intensifying the democratic, economic problems and inefficiencies of political systems; but the reality is that the role of new communication is the most important variable involved in formation and progress of this movement. The new tools, which are considered in the present study, are: internet, satellite and mobile phone.

II. New Media and New Social Movements

The development and expansion of technology have created profound effects on the different fields of human life, and one of the areas that are heavily influenced by innovations and advances in information and communication technology is social movement. New social movements support civil society against encroachments of the government (Habermas, 1987: 391-396; Habermas, 1989: 66-67; Habermas, 1996: 373). In addition, new social movements create social identity, knowledge and information. They, as Irman and Jameson claim, as a cognitive domain, "are the new social spaces that are filled by the dynamic interaction between the various groups and organizations" (Eyerman & Jamison, 1991: 55). New social movements are the organization that understand the problems and take them into the public agenda. Accordingly, aim of these movements is to create and publish emerging information independent of government needs. According to the Irman and Jameson, fragmented structure of the internet helps new social movements to emerge as the product of social encounters. Traditional news and information services are not suitable for these needs because they are more reactive than proactive. Several researchers, mentioned to the new communication technologies, especially social media, such as short messaging services, social sites and blogs, as new important resources for the successful organization and implementation of social movements. (e.g., Della Porta & Mosca, 2005; Langman, 2005; O'Lear, 1999; Wasserman, 2007). New social media technology, are used particularly in organizing and

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implementing community activities, promoting sense of community and collective identity among members of marginalized groups, creating a less exclusive political space, making relationship with other social movements, and spreading factors to obtain the support of the international community. New media communications are canals and important political tools for creating political understanding, awareness, and intellectual mobilizing among citizens, political and social groups. Flood information –by the new media, that its target is the entire world – gradually will cover all communities, and they will be involved in political and social issues. News media, satellite and internet are reporting social and political events every moment. Satellite and internet have a high educational potential. These Medias teach and notify citizens about political parties, political events, civil rights and government duties and responsibilities toward people. Also, new two-way and multi- way Medias by holding gatherings, political and social discussions, in electronic form on the internet or via satellite, can make citizens more aware of the deep political and social issues (Barber, 1998: 582).

Some applications of this technology in the creation and strengthening of social movements, as follows:

- 1- New media are a platform to express the goals, aspirations, political experiences and activities and struggles of social movements.
- 2- New media are the cause of the formation, cohesion and consolidation of collective identity of social movements.
- 3- New media result to mobilize the potential forces for supporting the movements.
- 4- Media coverage can make symbolic links between movements and other political and social actors such as political parties, trade unions, governments and political activists.
- 5- Media are affective in internal relations of the movements.
- 6- Media are the cause of the motivation and morale of members and supporters of the movement, and prevent their death (Sardarnia, 2008).

New social movements have made a perfect use from the new media. One can see that new social movements use the new media to support their internal and external activities, and their activities are within the framework of this media to create a basis for their activities. New social movements, use digital media democracy to transfer their information and ideas, attract new members, aggregate requests and connections (Nixon, 1999: 141). New communication technologies in addition to support new social and political movements in the conventional way –by providing opportunities for political expression, symbolic identity for collective actors, and exchange of information – they may serve as a new functional tool.

Information and communications technologies (Internet, mobile and satellite TVs), on the one hand, increase individuals and groups political and social awareness the and on the other hand make them involved in political and civic issues. Lady “Pippa Norris” suggests some major premises in relation to the effects of technology on civic engagement:

- 1- The Internet may lead to inform, organize, mobilize and engage individuals and to marginalize groups, younger and political minorities (Norris, 2001: 1).
- 2- The internet is a platform for opposition political parties and minority groups and could help to undermine authoritarian regimes and spread democracy (Norris, 2001: 4).
- 3- The Internet can influence on promote democratic political values, such as participation, freedom of expression, tolerance, justice and etc. (Norris, 2001: 2).
- 4- Spreading of these values can be appropriate for the context and environment of social movements and international support networks to develop and expand political worldwide participation (Norris, 2001: 13).

New communication technology can provide favorable grounds for social and political participation.

Studies of "Bimber", state that now, the internet is more effective on political participation and involvement of more conscious and interested people, and less effective on less aware common people. The reality is that Internet access require the individual computer skills, a former political awareness, sufficient income, and understanding of the English language. (Bimber, 2003: 210-211).

"Regnold" believes that at the era of the information technology, public area has made a complete revitalization. In this area, in addition to information sharing, interaction and discussion on virtual civilian communities may be possible. In his view, public electronic networks, represents a new form of electronic democracy. Electronic or digital democracy, is a strong democracy that can be used in a range of application of these technologies in the context of conferences, meetings and electronic communications between individuals, groups and individuals, between groups and between individuals and groups with government officials and can increase local and regional community participation in real and virtual politics spaces, (Sardamia, 2008).

New media can be a neutral forum for democratic dialogue which is independent of government control (Colman, 1999: 206). Internet has a favorable potential for communication between political activists and opposition groups to promote their views, expose confidential documents and government corruption organize protests against the government, collecting Internet complaint and spread political information in the world (Janson, 2001: 99 - 100).

III. New Social Movements In North Of Africa

Formation of broad social movements in the Middle East and North Africa, especially reaching to its goals at a short time in Tunisia and Egypt, has attracted of the many social sciences experts attention in recent years. In January 2011, Arabic countries and the whole world followed what happened in Tunisia and Egypt. Two Arabic regimes collapsed in one month. On 14 January 2011, Tunisian Pres ident "Zine El Abidine Ben Ali" after 27 days of protests, fled abroad. In Egypt, on 11 February 2011, the most powerful Arab President "Hosni Mubarak" left Egypt. The Egyptians recorded a record, as protests continued only for 18 days. It must be said that a new history is written in Arabic countries. This article argues that new media played an important role in the revolutions in North Africa.

IV. New Communication Tools and New Social Movements In North Of Africa

In recent years, the developing countries of the Middle East have been facing enormous changes in their social composition. For example, we can mention the rapid rise of the educated persons. The result was the emergence of the new elite that have provided the introduction of the new social movements. With the formation of a new class of graduates in these countries, these groups don't limit themselves to traditional media for accessing to information. Media such as radio, TV and newspapers, but they had opportunities such as internet and its advantages that resolve their information needs. Thereby creating a virtual network on the Internet is a great opportunity to influence and organize these groups (www.pri.org).

According to the report of, "Arabic Advisory Group" (a research and consulting based company in Jordan) in late 2009, the number of Internet users in 16 countries in Arabic, has been estimated between 40 to 45 million users, including Arabs and non-Arabs in these countries.

"The Arab Knowledge Site" in its 2009 report, announced the number of Arab Internet users, 60 million. In this regard, Google's chief executive, said:

"It is expected to be about 100 million Arab users permanent online in 2015" (pishkesvat.ir).

Events in the Middle East in 2011, which led to critics such as " Malcolm Gladwell", journalist ,writer, author and "Evgeny Morozov", blogger, established information and communication networks, can serve as a powerful accelerator of social change (Gladwell, 2010 & Morozov, 2011).

Facebook has over 677 million users in April 2011 (while the Middle East was one of the areas with the

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highest rate of new users) (www.insidefacebook.com/2011/05/11). Mobile phone subscribers have increased to more than 250 million. Twitter users are also more than 200 million users by the end of March. (www.mediabistro.com). In total, more than 200 million users a month, has about 4 billion tweets (venturebeat.com).

In the first quarter of 2011, significant changes took place in North Africa by use of the social media, this shift to online social media and online civic mobilization, either by citizens - to organize protests (both supporters and opponents of the government) disseminate information within their networks and raise awareness about events going on at the local and global level –or by governments to interact with citizens and encourage them to participate in governmental processes, or to block their access to websites and information sites are used (www.ottawacitizen.com).

The number of Facebook users in most Arabic countries has increased significantly, and the rise in countries where protests have occurred, was higher.

We don't want to say that there is a cause and effect relationship in this issue. We do not want to introduce Facebook pages as the only factor in organizing people during the protests; however, we can not deny these tools function as agents for the initial design calls for social mobilization. However, low penetration of Facebook in many countries (especially Syria and Yemen), it can be argued that these tools have not been central tools for many of the protesters. It can be argued that Facebook is a tool for a number of key activists, then, through strong relationships at other levels or through traditional networks in real life mobilized wider network. For example, Egypt has 5.5% penetration rate, but because of its large population it is relatively low, this rate means about 6 million Facebook users, which are associated with very large population that can be influenced by the information they received from Facebook users.

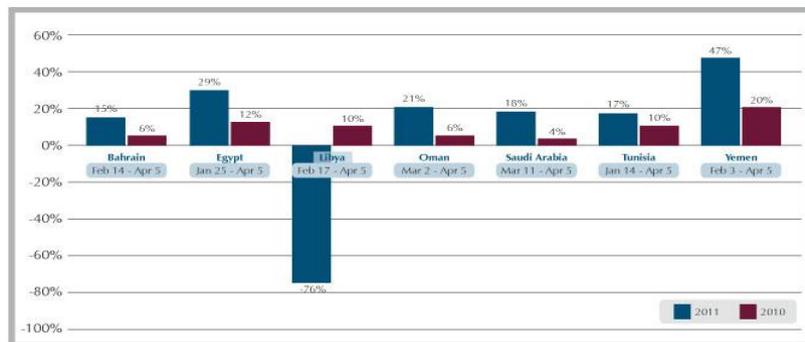


Figure 1: The growth rate of Facebook users over the protests of 2011, compared with the same period in 2010.

In contrast, it seems that the protests have been the cause of increase in the number of Facebook users in the region. In all countries where protests have occurred, exception of Libya, we have had a positive growth rate of Facebook users that can be explained by deported persons, or moved Facebook address (english.aljazeera.net/news/middle-east/2011).

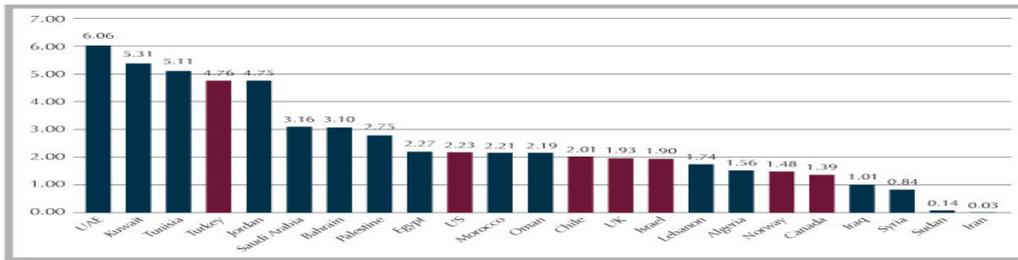
Moreover, as Figure 1 shows, the growth rate of users in each country during the same period before and after the protests, the growth rate has doubled and even tripled during that period in some countries. The users' rate alone is not an indicator for type of use. Some applications may be political; some other may be purely social and not entirely related to the social movements of the time. But the exponential growth in the number of Facebook users with protests in the country that requires further research to explore the possible relationship between them.

4.1. An overview of the Facebook users in the Arab world and North Africa

-Number of Facebook users in the Arab world is about 27711503 people (on April 5, 2011), which represents a double increase 21,377,282 people (5 January 2011), and roughly the same period last year (14,791,972 people in April 2010).

- At the beginning of April of 2011, the national average Facebook users in the Arab region, has increased over 7.5 percent, compared with less than 6 percent at the end of 2010- Number of Facebook users in the Arab world has risen 30 percent in the first quarter of 2011.

In addition,when we compare the absorption of Facebook in Arabic countries with some of the 10 first countries (in terms of Facebook penetration in the world) several Arabic countries in terms of new users , outpaced from 10 top countries, the three first months of 2011, the percentage of the population. In early April 2011, eight Arabic countries were obtained more users on Facebook (in terms of population) than the United States. (See Figure 2 and 3).



*2011 populations, from United Nations ILO Department of Statistics, <http://laborsta.ilo.org/>
See Figure 12 for rankings using official GCC population data

Figure 2: Facebook users in the Arab region and the world (5 January to 5 April 2011), consider the percentage of the population (laborsta.ilo.org)

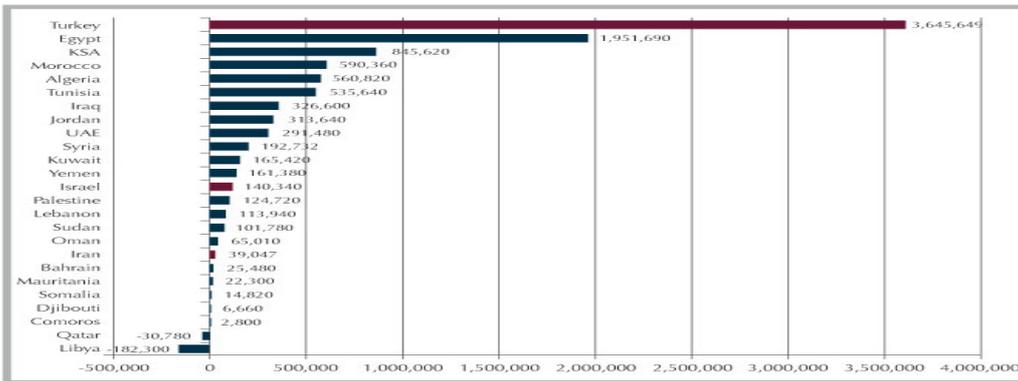


Figure 3: Number of Facebook users in the Arab region, plus Iran, Israel and Turkey (5 January to 5 April 2011).

Source: (Arab Social Media Report, 2011).

4.2. Twitter penetration in Arabic regions

Total number of active Twitter users of all the 22 Arabic countries (plus Iran, Israel and Turkey) during the period 1 January to 30 March 2011, it shows that the using of the tweet programming interface, has been developed especially for title of this study. In summary, the results of sampling a certain number of Twitter users in the country in two weeks has been extracted, and has been used sampling to estimate the population of active. (In this case refers to someone who has at least once during the two weeks of tweets. Disabled users are not included) Twitter users, tweets as they produced increased volume for a three months period after the first operation is considered.

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- Estimated number of active Twitter users in the Arab region at the end of March 2011, has been 1,150,292 persons. Multiplied by the ratio of active users (average 200 million / 35 million, equal to 5.7 percent), we have a total population of 6,567,280 people who tweet.

- Estimated number of tweets generated on Arabic region in the first quarter of 2011 (January 1 to March 30) by the "active users" was 22,750,000 tweets.

- Estimated number of daily tweets 252,000 tweets per day, or 175 tweets per minute, or about three tweets per second.

- Estimated number of daily tweets active users in Arabic countries in the first quarter of 2011 tweets was 0.81 per day (Arab Social Media Report, 2011).

Most popular tags on Arabic region in the first quarter was respectively # Egypt (1.4 million Tweets mentioned produced in this period) # 25 January (with 1.2 million mentions), # Libya (with 990,000 mentions), # Bahrain (with 640,000 mentions) and # objection (with 620,000 mentions).

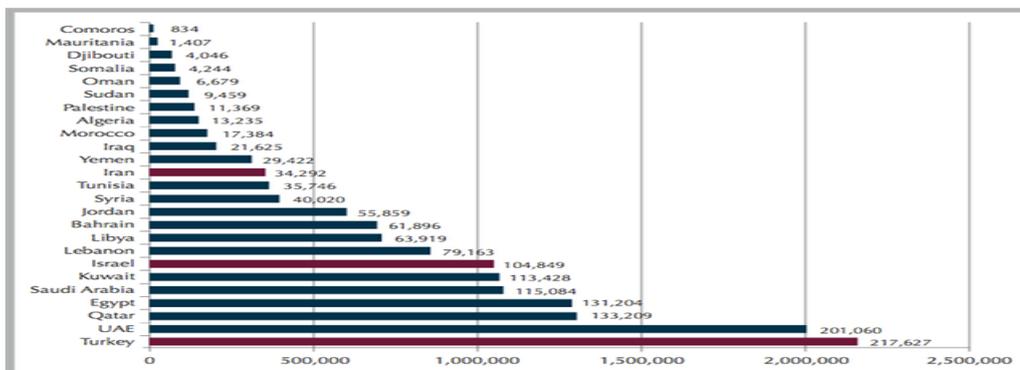
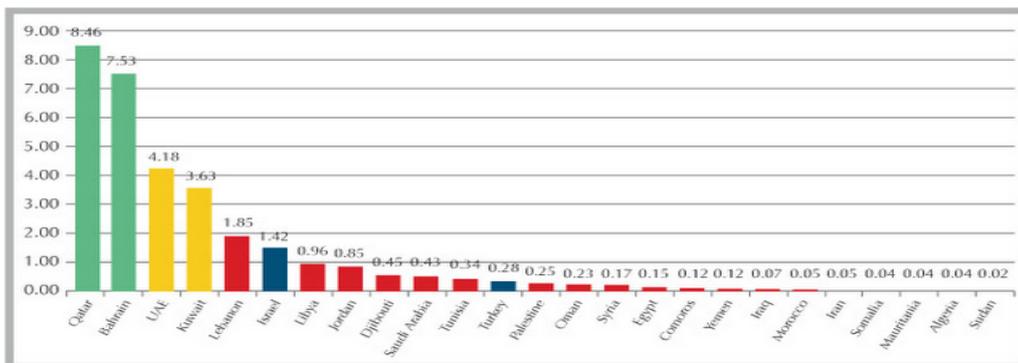


Figure 4: The number of active users of Twitter in Arabic as well as Iran, Israel and Turkey (the average number between 1 January and 30 March 2011)



* 2011 populations, from United Nations ILO Department of Statistics, <http://laborsta.ilo.org/>
See Figure 22 for rankings using official GCC population data.

Figure 5: Influence of Twitter in Arabic regions, in addition to Iran, Israel and Turkey (averaged between 1 January and 30 March 2011) (laborsta.ilo.org):

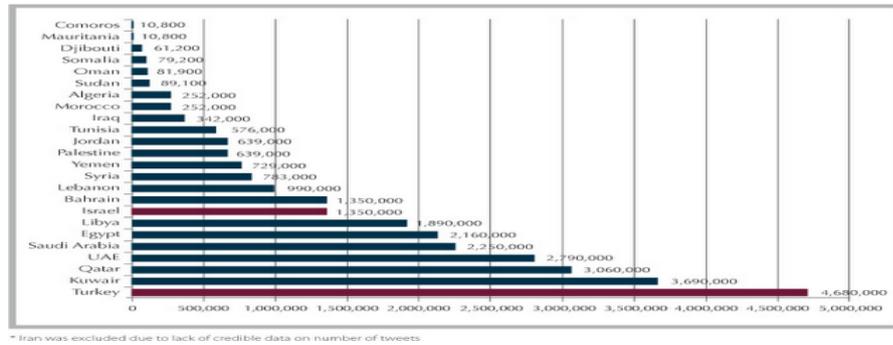


Figure 6: Number of tweets in Arabic regions, as well as Israel and Turkey (1 January to 30 March 2011)

4.3. Total tweets in Arab regions

Total size of tweets in all countries, between January 1 and March 30, shows that the tweets have been increased during this period of time. With considerable daily fluctuations in the volume of tweets in some countries, we can see that some of the volatility or "clusters" seems to coincide with current events at that time. It certainly does not mean that the events are related directly to fluctuations in the volume of tweets, but provides circumstantial evidence for adaptation to a high degree of linking current events with a high volume of tweets (Arab Social Media Report, 2011).

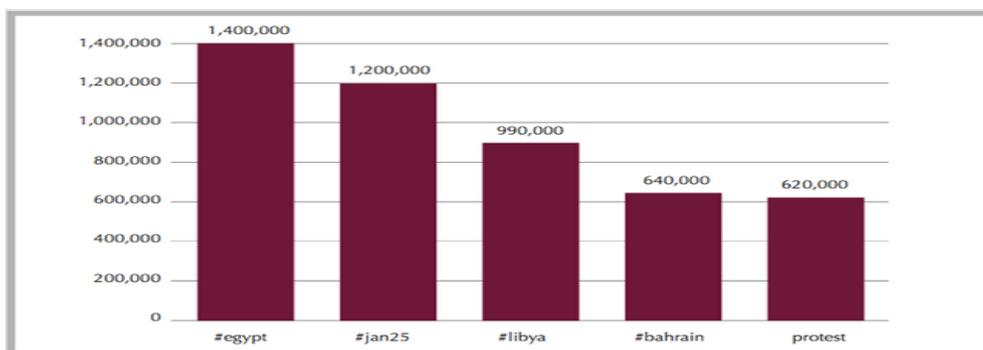


Figure 7: Top Tweets in Arabic in the first quarter of 2011 (number of citations).

It must be said that the volume of daily tweets, clusters and volatility with mentioned daily volume, popular keywords and tags along with the current events of the time, are for specific countries (www.wamda.com).

4.4. Regional review

-Compared to 2010, in the first quarter of 2011, Facebook growth in the Arab region has been much faster. Mean that the 30 percent in the first quarter compared with the same period in 2010, that has grown 18 percents. Countries that most social movements occurred, show the rise of new media tools during the movement. With the exception of Libya, which has significantly reduced the number of Facebook users, probably due to the mass exodus of refugees in the past few months after the start of the protests? Ranking of countries has the least change, which reflects the distribution of growth across the region.

- Women's participation in using Facebook still remains low. Although a small percentage of female users in this region have (up 33.5%) increased. percentage of female users around the world still is significantly higher (61 percent), and is growing rapidly.

- Youth on Facebook continues to grow in the region continue, and make 70 percent of Facebook users, although users who are over 30 years old, slightly increased, perhaps because most adults on the eve of social movements across the region joined Facebook.
- English is the language of choice for many Arabic users in seven countries, the French, is the language in five Arab countries; the Arabic language is the language of choice for many users in three countries. Facebook population in the remaining countries divided between English and Arabic. The availability of different languages interfaces, to some extent can explain the prominence of Facebook users than Twitter, because Twitter has recently launched its Arabic interface. When the topic of Twitter comes, Persian Gulf Cooperation Council countries (Specifically, Qatar, Bahrain, UAE and Kuwait Arabic), With Egypt's are five top countries in terms of volume of tweets and Twitter users. In general, the relationship between the volume of tweets and Twitter users shows that Twitter users are active across the region.
- Libya Twitter penetration rate is very low.
- Egypt, has one of the lowest penetration rates in the region's Twitter, Especially with regard to this fact that it has nearly 7 million Facebook users, and 18-17 million Internet users.
- In general, it seems that Internet and Facebook penetration along with Mobile phone subscription rate is a good indicator of Twitter usage. Given that Twitter connections via mobile has risen, language barrier, In countries where use an Arabic interface, Is evident. Political and social events, as it is clear in the above tweets, have affected total tweets throughout the region.

However, progress in this area was not without limitations and challenges. These advances have often been blocked by authoritarian regimes and combating the blogosphere has increased. also governments in this region imposed wide crackdown on bloggers, journalists, civil society and human rights activists. Hundreds of writers, journalists and Arab political activist faced sharp reactions from the government Because of their online activities. Including the Egyptian blogger named "Karim Nabil Suleiman» known as "Karim Omar", after enduring more than 4 years of imprisonment in November 2010 was released from prison.

Challenges and other restrictions by the government on the Internet was the weakness of bandwidth and internet speed. In 2009, there were 35000 and in late 2010, there were 40,000 active bloggers in Arabic countries. Although Egyptian interior minister was in charge of a construction where 45 people had control over Facebook, From 17 million activists in the Arabic countries, Nearly 5 million of them were Egyptians who used social networking sites. They include journalists, political leaders, and members of the political opposition, human rights activists, social activists, artists and royal family who are working online In French, English and Arabic countries.

Overall, the major social media networks serve in two overlapping functions: A) organizing protests And B.) Informing about the protests and their public demands at the international level.

4.5. Satellite and television networks and new social movements in North Africa

Satellite and television media have played an important role in social movements and popular revolutions in North Africa. Among them the name of Arabic language network like Al-Jazeera, Al-Arabiya, Arabic B.B.C, Al-Hurra, China C.C.T, Russia alyoum and foreign-language channels such as France 24, CNN, Euronews and Fox News draws attention.

Recently published in Jordan, the results of a study showed that Satellite TV has had an important role in social movements in North Africa. in this study, nearly 53% believed that AlJazeera played an important role in encouraging protests in a movement known as the Arab Spring. The title of the research, which was held from 5 to 7 December in Jordan, was "How do people evaluate the media coverage of the Arab revolution." Research shows that 39% of respondents believe Algeria was a reliable source of information and Jordan's channel with 13% and Alarabic with 12% played the most important role.

Al-Jazeera, in a few years as a regional media, by creating a transnational public space, played a major role in the movement of North Africa late in 2010. Some believe it has even more important role in the Arab spring. Compared with social networks.

The existence of a broad field that provides a common language caused Arab media to have wide varieties of governments and people. By employing professional journalists from different countries, Al Jazeera has won many audiences, by creating a delicate balance between the three orientations, Arab unity, the desire to Islam and the Liberalis (Beinin & Vairel, 2011).

This pluralism which is associated with increasingly developing mass media, led to an unprecedented media and political situation. Therefore, the maturation of social movements in the Arab world, much indebted to the tension between the political and information process.

By handing over the official interpretation of the facts to opponents in each Arab country, Algeria showed contradictory and inconsistent discussions to its viewers. Speakers' diversity, both based on their national perspective and sensitivity to the diversity of religious and their political and ethnic background, made it possible to circulate opinions, put aside national boundaries and censorship. In this way the channel involved in forming an Arabic public network that went beyond national borders.

During the Tunisian, Egyptian and Libyan revolution, Al Jazeera has aired nearly every moment of events. In Tunisia from the moments of Bo-Azizi self-immolation until Ben Ali escape, all events were presented also in Egypt Al Jazeera was covering all events until the escape of Hosni Mubarak.

When the young people in Tahrir Square raised the posters with the names of some top Twitter users, Alhurra recorded these images and broadcasted them all over the world and drew attention to them.

International network of foreign language in recent years, has established their Arabic-language network which played an important role in social movements in North Africa.

4.6. Mobile and social movements in North Africa

Recorded images of the events of the social movements in North Africa, mainly taken by mobile devices. Social networks start from mobile phones. SMS Also was a key factor in the global spread of ideas in the Arab Spring in North Africa. Many protesters have confirmed that they have the power of digital technologies to resist against their regimes. Images of popular uprisings in Tunisia and Egypt and broadcasting of Arab Spring news reached to Libyan citizens and transferred the ghost of objection to them. In addition to recording these images, mobiles also made it possible for protesters to communicate with each other.

Note that the increasing penetration the simple headsets of mobile phones in North Africa societies lead to drastic changes and opportunities for developing social interaction. Mobile phones grant these societies instant communication among people and let them share a certain set of values and a strong sense of companionship. Mobile and Social Media give the opportunity to the wide range of people to get involved in the campaign and increase citizen participation.

Either positive or negative, supporting or opposing, mobile phones and new technologies play a key role in people achieving and entering into politics. Although talking about immediate social change may be optimistic and unrealistic, but it must be said that mobile and social media have provided a basis for the development of a progressive and long-term social movement. Now, thanks to the power of this tool, people can simply use it. Distances have been shortened and time has been limited. While in the past organizing a revolution needed years of personal and confidential meeting, today's events such as those we have seen, thanks to information and participation that each person can easily identify, can be organized in a few days.

V. Result Analysis

Some findings on the role of new media in new social movements in the region are:

Arabic countries are progressing in different speed. Telecommunications infrastructure through increased high-speed broadband Internet, mobile Internet and optical cable are under construction and due to the demands of the young people (who make up nearly half the population of North African countries) are being strengthened.

Despite increased Arabic governments' efforts to control, filter, block websites, harassment, arrest and detention of activists, nongovernmental critical sites resist against virtual strike to their emails.

Even when Internet users do not violate the traditional red lines, Arabic regional governments attempt to impose emergency laws, cyber crime, anti-terrorism, and to establish terms and conditions for Internet service providers and publishing rules to justify the arrest, fines and imprisonment.

Some Arab officials and politicians are active in the social networking sites like Twitter and Facebook. The popularity of online news caused part of the audience of traditional media tends to them. Because It is expected that this trend grow, some traditional media have stopped printing in favor of a focus on electronic publishing (Ghannam, 2011: 7).

Nowadays, what made social networks more important and decisive is the fact that many media experts have cited them as the basis for the Arabic movements. Researchers from various disciplines such as communication, sociology, have studied in a wide range the use of social media in the social and political movements. But what is ignored is a coherent framework that can complete it and compare its findings from different studies and make a conclusion and develop a common pursuit to understand the role of technology for collective action. While general agreement among scientists is that social media as an effective and sustainable source may be used for social and political changes, its distinctive features is not well understood.

Lot of international media experts, analysts and commentators called recent movements in North Africa as the "Facebook Revolution," "Twitter Revolution" or even "laptop revolution".

Increase the growth rate of Internet users in North Africa; provide an appropriate vehicle for these phenomena so that North Africa with an unprecedented growth rate of 477% of Internet users shows the first place in the growth of Internet users. (www.tisri.org).

Now this is the question: can we really believe that technology has been affected the revolution in Egypt, Tunisia and Libya? There are different views about this issue. Some people may believe that all revolutions in history have managed without technology, and If people sit in front of their PCs, who should participate in protests. On the other hand, others argue that online social networks are creating electronic communities that help to form Anti-government ideologies, calls People to participate in demonstrations and organize protests and releases news from heart of the events. Regardless of these differences, we are confronted with significant phenomena that must be considered.

5.1. Spread of democratic values

Across the region, people increasingly tweet on the events that happened near them, the stories of success and hardship widely spread and created an "expansionary concept of liberty". The same idea was taken across the region through Facebook and YouTube, and inspiring images were sent and received by a mobile phone.

Tweets that were among simple users of the Twitter expanded the sense of talking about liberty beyond national borders (Howard & Others, 2011).

People in these countries, received the concept of political freedom from other countries and transmitted it. Two weeks after Mubarak's resignation, there are almost 3,400 daily tweets about the political crisis in Egypt in the neighboring countries. Also, in the heat of the events in Tunisia, there were 2200 tweets about the resignation of Ben Ali in and out Tunisia. In the following months, tags related to discussions about political change in specific countries often used by people in neighboring countries. In other words, people across the region began to have a long talk about social movements. When street protests in Tunisia and Egypt were severe, and then came protests in Yemen and Bahrain and Finally, Algeria and Morocco. People across the region tweeted on large events in real time. This is important because it shows how successful demand for political change in Tunisia and Egypt, have led People in other countries to discuss about how this issue is relevant to their own lives. In other words, it helped to create an atmosphere around the area to talk about the freedom (Howard & Others, 2011).

News about the departure of Ben Ali in Egypt expanded rapidly. State media in Egypt, which were slow to report the protests in Cairo, reluctantly covered Ben Ali's departure.

Like Tunisia, Egypt has long had a large public online circle where illegal political parties, radical Islamists, journalists and dissatisfied citizens interact with each other. The first occupants of Tahrir square in Cairo shared many hopes and dreams with their Tunisian counterparts. They were a community of like-minded people, unemployed, educated, and eager for change, but they didn't have fervor for a particular political or religious ideology. They were associated via social media, and then they used his cell phone, in street, to call the social networks. A large network of relatively liberal citizens, from middle class, and with peaceful views was quickly mobilized against Mubarak. Traditional Islamists, opposition parties and trade union organizations were in the field. News and speeches of President Hosni Mubarak, President of America, Barack Obama and regional leaders were heard in the square.

5.2. The expansion of the voices of democracy

One of the reasons why technology is an effective tool to advocate for democracy in Tunisia and Egypt is that both countries have relatively young population that they understand the technology.

Mobile phone is widely used in both countries, the more the government censored the media, the more the people used internet as a source of information. Internet use is also significant in both countries. All of these may explain why many people who came to the streets in early 2011, were young.

In terms of technology, there were people who were willing to blogging, tweet, or posted the events that were taking place, on Facebook (CIA World Factbook & World Bank, 2011). In addition to enabling young people to organize, new media have facilitated the growth of women's participation in political dialogue. Women also actively involved in the political dialogue on Twitter, they were present especially in street demonstrations in Tunisia and Egypt. In fact, through social media, Women like "Asra Abdel Fattah", the Egyptian Democratic Academy, Became the voice of opposition, And "Lille - Z Mvirtada", portrayed the role of women with a popular Facebook album (Howard & Others, 2011).

5.3. The expansion of the voices of freedom

Tunisian blogosphere has presented an environment for open dialogue about political corruption and a potential for political change. Twitter tells the success mobilization stories within and between countries. Facebook act as a central node in the network of the political discontent in Egypt. During the protests, YouTube and other video sites archives allowed citizen journalists to use cell phone cameras, and other consumer electronics for to broadcasting events that either the government could not cover them or did not want to cover them.

Social media alone did not cause political upheaval in North Africa, but information technology - such as mobile phones and the Internet- have changed the ability of citizens and civil society activists to influence domestic policy.

Social media like Facebook, Twitter and YouTube, have the effect on local system of political connections in various ways: First, social media offer a new opportunities and new tools for social movements to respond to conditions in their countries, It is clear that the ability to produce and consume political content, Independent of the social elite, is very important because they share general feeling of dissatisfaction and quickly developed the potential for change. Second, social media promote transnational links between individuals and groups; this means that networks form the connection between local and international democratization movements. Inspiration of success not only quickly spread in Tunisia like a contagious disease, but also thought taught Neighboring countries as well as civil society leaders the successful organization of effective strategies through social media.

Current events demonstrated that new technologies Such as the expansion of the internet, are social changes. Recent movements in North Africa are definitely a clear example of the speed and effectiveness of these tools in dealing with certain issues and communities that have similar values.

Arab Spring not only challenged the dictatorship of several years, but also enabled people to use new technologies to support the creation of shared value for revolution. In fact, the social unrest - political, which first formed in countries such as Tunisia and Egypt, and then in Libya, Syria and Yemen, new technologies, in different ways, had an important role.

However, it is important to recognize that while the Arab Spring has not only created by new technologies, but it is spread through them. In fact, if we compare and analyze the events that took place in these countries, we can say that social media and mobile phones not only gave people the opportunity to organize and coordinate, but also provided valuable tools for dealing with state control over the information.

Egypt, Tunisia and Libya are the three main countries in which social movements have succeeded. in all three countries Coordination of popular protests was published through key social media like Twitter and Facebook , while in the past the revolutionary movement spread through direct talking. It seems that today's social media and cell phones are the main tool for giving information on how to deal with protesters, security controls, reducing the risk of being arrested and strengthen core objectives into success.

Therefore, the initial success of these three great revolutions made by the powerful channels of conventional media that prevent government oversight and give people the opportunity to provide their needs. As many have pointed to this issue, The Internet has provided a means for collecting and disseminating information, Social media have facilitated connecting and organizing a group of people across the country and mobile phones have played a major role in coordinating local groups and events through video and photo recording.

The power of these tools is also recognized by government, so they decided to stop Internet sites and communications systems. However, this practice was counterproductive and some of participants objected to the defense of freedom of information, so that the government of Tunisia and Egypt were forced to apologize and re-established communication infrastructure. In fact, the high level of media censorship in countries in North Africa caused citizens increasingly distrusts the media and public information.

VI. Analysis

There are many reasons for the Arab Spring. One of the main reasons was the new media tools and their ability to deal with the political oppression. Bouazizi suicide story was one of several which were told on Facebook, Twitter and YouTube. So that the opposition were inspired by it to organize protests, criticize their government, and spread democratic ideas.

We have to say that the government's response, illustrates the important role of new media tools. While the Tunisian government blocked some special corridors and identified specific sites which were coordinated with the protest actions, The Egyptian government's response was most intense in terms of quality and even on the internet was unprecedented. Egyptian authorities after blocking Twitter and Facebook, they directly ordered to all the major telecommunications providers to block access to Internet as a result, 93% of networks and URLs were shut down in Egypt.

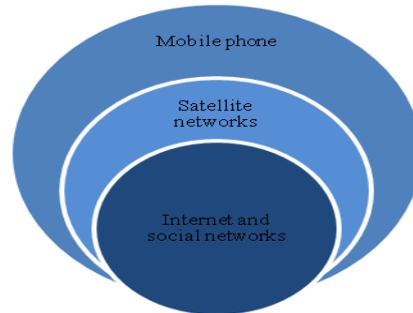


Figure 8: The role of new media tools in the form of social movements in Tunisia

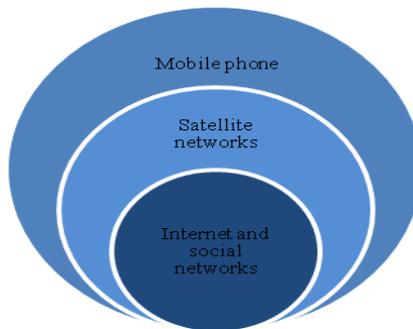


Figure 9: The role of new media tools in the form of social movements in Egypt.

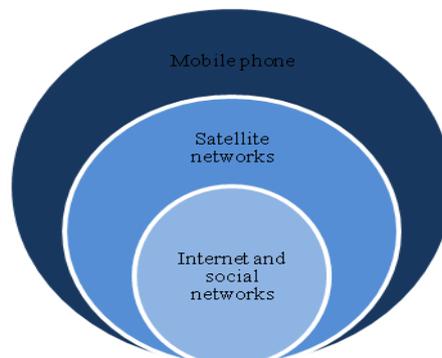


Figure 10: The role of new media tools in the form of social movements in Libya

According to International Telecommunication Union statistics for 2010, 34% of the Tunisian Internet access, 34% of Egyptians has Internet access and 21% of the Tunisians have simple tools to connect online. Nevertheless, Libya, with a much smaller population, it is estimated that has 5.5% of the Internet penetration rate. In other words, for every 50 Internet users in Egypt, there is only one Internet user, in Libya. In addition, the Facebook penetration rate in Libya is almost half that of in Egypt. Similar comparisons can be made between the Internet and Facebook Stats in Libya and Tunisia. Based on these findings, it is clear that Libya may not be able to use social media as effective as Tunisia. Or Libya has not been able to use the Internet for organizing or spreading protest messages about the Gaddafi regime. However, this figure does not reflect penetration rate of mobile phone which is certainly higher. As a positive point, the linear growth rate in Libya is promising.

Libya, compared with Egypt and Tunisia, has experienced lower levels of access to the internet. However, the limited or absent role of information and communication technology, and major social media networks, as a directly facilitator in organizing protests, doesn't reduce The role of electronic media - cell phone, tweet, email, and video clips – in transmitting events and news to the rest of the world.

In Tunisia and Egypt, social media activity, was controlled with less violence than in Libya. However, this does not reduce the level of state repression, and ultimately may have contributed to the trend of increased violence. In this context, the use of modern means of communication and information technologies can be seen as a basis for non-violent protest campaign for the restoration of the popular phenomenon. This pattern is certainly worthy of further research and empirical analysis.

However, events in North Africa in early 2011 proved that a regime may be able to temporarily suspend access to the Internet across the country; however, this does not affect the occurrence of social movements. Furthermore, these events demonstrate that this strategy does not work well in the world in which there are plenty of information and communication technology. In addition, the economic costs of credit repression are more than the benefits of gaining control over information. (Stepanova, 2011).

Our research has found three key findings:

First, the new media have played a pivotal role in shaping political debates in the Arab Spring.

Evidence strongly suggests that new media were used for political conversations in the key demographic group - young, urban, relatively well educated, many of whom were women. Both before and during the Revolution, the people used Facebook, Twitter and YouTube to exert pressure on their governments. In some cases, they took advantage of the new technology in creative ways. The evidence shows that political organizations and individuals used western news sites - such as the BBC and CNN, to promote credible information to their supporters in the revolutionary period. The result was that, with the use of digital technologies, Supporters of democracy created a pattern of liberal behavior which has its own lifestyle and taught a large numbers of people about freedom and revolution.

Second, the increase in online conversations about revolution has happened before the most important events. Determining the fact that whether online speeches were the stimuli of street protests or the presence of a large amount of people in the streets was as a result of continuous online talk, can be difficult. However, evidence suggests that online discussions have played an important role in the revolution that toppled governments in Egypt and Tunisia. Evidence shows that talk about freedom, democracy and revolution in blogs and on Twitter has often happened immediately before mass protests (Howard & Others, 2011).

The government also recognized the power of opposition with new media. In Tunisian authorities tried to prevent Facebook and other social media sites and arrest bloggers and others, who were using social media to spread the news about their government. But what they did not understand well was the technological understanding of democratic and this fact that they had talented hackers and computer programmers who were able to use the online services to help protesters against censorship.

Third, social media help to spread democratic ideas across international borders.

Our evidence suggests that democracy advocates in Egypt, Tunisia and Libya, used social media to communicate with others outside of their own countries. In many cases, the communication help to inform other about events that were taking place in the Western news agencies, and also news about current events around the region. In many other cases, we find that supporters of democracy in Egypt, Tunisia and Libya gained adherents in other countries.

VII. Conclusions

Today with advanced information and communication technology, it is possible to establish and exchange information rapidly. Everywhere, people can get the latest information they need in each context. The evolution of communication technology in the past decade has left a deep impact in all areas of human life.

Now it seems that informal or less formal layers of society that have been suffered from a lack of communication would be able to offset the deficit through new media. It has been proven that the exchange of information is a powerful tool in the creation and promotion of social movements. To with linking together like-minded groups, Technology, speeds political developments. With bringing Poor relations activity into virtual protest, social media, make them more powerful. As new media tools make it easy to organize, they will also affect the news and information cycle that is formed by the other media and the developments in other parts of the world.

Using modern technology, communications and media, today, all nations can interact with each other on major issues. People can make their own solutions to the public problems, and become familiar with each other's views. Thus, the power of decentralized information network to facilitate the free flow of information and the possibility of a protest movement is clear.

There is no doubt that social media have played an important role in the revolution that occurred in late December 2010 in the Arab world. Social media Introduced innovative resources that somehow provided a facility for receiving and disseminating information, helped to establish and strengthen the relationships between the activists; and increased the interaction between the protesters and the people of other parts of the world. Publication and dissemination of information about the events that led to the protests have largely done through social media. And demonstrators inspired by the provided encouragement and compassion through social media channels, and increased them, And lead them not only to became associated with each other, but also caused protests in other countries communicate with each other. Therefore, the revolutions in North Africa well demonstrated the opportunities presented by new media and social movements to mobilize and organize and implement large-scale. In addition, the use of social media helped to attract the attention of local and international assistance. Social media had such a speed and interactivity that was not possible by relying on traditional mobilizes resources such as brochures, faxes and phone. As a Tunisian protester has recommended, using media to spread the movement can be a powerful way to obtain a credit against the external pressure. The protesters were directly and indirectly able to release a continuous stream of text, videos and images of the streets. Resource mobilization through new media tools can help to understand the movements in Tunisia, Egypt, Libya and other social and political movements, in terms of influence and resources. At first, because of the ubiquity and potential for reaching a wide audience, Social media technologies may be seen as important resources and a tool for collective action and social change. . However, we have to consider the powerful impact of the external conditions, particularly in the areas of social, political, and historical movements, as well as the availability and interoperability of resources (Internet, mobile, satellite), and the efficiency of resource actors. Although research in the social utility of new media tools is still in its infancy, the combination of endurance and strength of the sources, in recent times, is striking. Undoubtedly, future studies will examine more aspects of these tools. Although the countries studied here were not randomly selected and although our findings may not be generalizable, this analysis contributes to our understanding of the revolutions in North Africa and evaluates the effectiveness of new media tools, as a major source of contemporary social movements. Despite all the attempts of governments of Egypt, Tunisia and Libya against Internet users and technology, In general, this technology was an affective factor in these countries revolution.

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