

Social Networking, Social Movements, and Saudi Arabia A Review of Literature

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ABSTRACT

The Middle East and northern Africa have been thrown into upheaval as social movements have grown and taken hold in many of the countries. The role of social networking sites in these recent uprisings has been largely debated. Whether or not social networking sites such as Twitter and Face book played any real part in the social movements has been downplayed on many occasions. However, others have highlighted their use as key. Yet amidst the chaos during the Arab Spring, Saudi Arabia has largely gone unaffected by social movements. There has been disagreement as to why the citizens of Saudi Arabia have not rallied against the government. This paper delves into this issue by first providing background on social networking sites' users, the permissibility of free speech and their role in the Arab Spring in order to explore how Saudi Arabia was able to evade social uprising despite the movements that arose throughout the area. The author concludes that even though the Internet in Saudi Arabia is actively censored and social networking sites are not, therefore it has been the social changes that the government has made in response to outcry from the public that has allowed the country to evade uprising.

Keywords: *Social networking sites, Arab Spring, Saudi Arabia, Face book, Twitter, Censorship*

1. INTRODUCTION

Social technology has boomed over the last decade permeating the world over. It has come to encompass the lives of both young and old alike. Many feel imprisoned by this technology and have come to trust it. This has happened on varying degrees, but what is more phenomenal is the effect that social networking has had on society as a whole. Social networking sites (SNSs) are unlike much that has come before. While the Internet has the ability to interconnect the world, it is SNSs that provides the platform for a unique form of interaction that has helped ring in revolution and social change.

The Arab Spring continues to have a long-lasting effect on Middle Eastern countries as citizens and governments attempt to recover from the revolutions that literally rocked the countries. The actual role that SNSs played in these uprisings has been disputed. Yet, it is undeniable that SNSs helped in disseminating information in a way that was both swift and widespread. As the information of revolution made its way across the Arab Peninsula and northern Africa, one country in particular remained relatively untouched. Amidst the chaos in Egypt, Tunisia, Libya, Yemen, to a lesser extent in Bahrain, Algeria, Iraq, Jordan, Kuwait, Morocco, and Oman, and as of recently Syria, Saudi Arabia had minor protests with little disruption to society.

Many will argue that the censorship of the Internet has much to do with the lack of social movement in Saudi Arabia. However, on the other hand, popular approval of the government and its actions may just as well be a feasible reason for the minor outbursts in Saudi Arabia during the Arab Spring. The Saudi Arabian government makes no qualms about the censorship of its Internet. In fact, it is the citizens of Saudi Arabia that are responsible for most of the censoring. However, SNSs go relatively uncensored.

This paper explores the role of SNS, specifically Face book and Twitter, in the recent Middle Eastern uprisings, and will look explicitly at Saudi Arabia and its social movement. This paper will review current literature on SNSs. Specifically, this paper will first investigate who users of SNSs are, the effect that SNSs had on social movements before more closely examining the use of censorship and SNSs in Saudi Arabia to determine why the country went largely unaffected by the Arab Spring.

2. SOCIAL NETWORKING SITES AND THEIR EFFECTS

In their most basic form, SNSs connect users with similar interests or common backgrounds. For purposes of this paper, Boyd and Ellison's [9] definition of social network will be utilized. Therefore, a social network site can be defined as an online service which permits users to create and modify a profile, either public or semi-private, accumulate a list of connections, as well as view the list of their connections and others utilizing the services. Breslin and Decker [11] group SNSs together as those that share common functions such as a list of friends with the ability to search for more people, the ability to interact with others using private or public messages, discussion forums, blogs, or communities, share and manage events, and upload media.

While Boyd and Ellison chose to limit their definition to social network sites rather than extend the definition to include SNSs in order to emphasis the interactions between users with whom are previously part of their extended social network, this paper will extend the definition to include SNSs building more upon Breslin and Decker's view of social networking. Thus, a social networking site meets the requirements of a social network site and broadens to include those sites that give rise to social interaction of those who may not have similar connections, but rather those who share similar

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interests. As an area of concern in this paper is the phenomenon of SNSs and the rise of social movements, the definition must emphasize the interaction of those without common connections.

2.1 Social Networking Sites and Their Users

At the present time, there are hundreds of SNSs that range in focus, age group, and geographic region. Social networking has been around longer than most would think. Its form has not always been so widespread, but the effect was similar. Despite the diverse history of SNSs, this paper will only focus on select SNSs to explore the possibilities that social networking has on society and social uprisings.

Social networking has evolved immensely over its life span. As technology has evolved and the needs and wants of the users have become more refined, so have the stages on which they are delivered to the ever-growing masses. Today's SNSs have become more interactive and far more capable of having an effect on the users and society. These sites have a plethora of uses and are utilized by people of all ages although some sites are preferred over others for varying reasons. There has been a shift in the users of SNSs from that of younger users to an older demographic. In 2008, of the Internet users 35 years or older only 18 percent identified themselves as a member of SNSs whereas in 2010, the number of Internet users age 35 or older increase to 48 percent. This increase is almost double that of the users between the ages of 18 to 35 [21].

Face book has the largest following of users of the SNSs. According to the Pew Internet and American Life Project, a survey of 2,225 American adults conducted between October and November 2010, 92 percent of the participants identified themselves as Face book users [21]. Another survey shows that 72 percent of Face book users are between the ages of 25 and 54 [28]. However, according to a Consumer Report from 2011, more than 25 percent of Face book users in the previous year were under the age of ten [15]. The mass numbers of diverse users utilize Face book with regularity and for extended lengths of time. On a per month basis in 2011, Face book had 590 million unique visitors [28]. The number of monthly active users in 2012 jumped to 845 million [33]. With the site offering a multitude of services and with the massive number of users to engage with, users spend more time on the site.

Similarly, Twitter, which launched in 2006, has an extensive number of users. Overall, Twitter claims to have 175 million users. In 2011, Twitter delivered 33 billion 'tweets,' or messages made up of 140 characters or less, a day [36]. The Twitter following has only increased over time with a record of 25,088 tweets per second during the airing of Japan's "Castle in the Sky." Twitter, while offering fewer services than that of Face book, has a dedicated following of users who continue to grow and set records.

2.2 Social Networking Sites and Speech

With such a large following of dedicated users, SNSs are bound to have an impact both positively and negatively on society as a whole. SNSs have become a source for news, an advertising outlet, an investigating service, a discussion forum, a photo album, a game center, a message board, and a social gathering place. One of the most interesting effects has been how news is spread or acquired, as well as how people interact with each other.

Looking specifically at how SNSs have changed the way that people interact and also with whom users interact, there is a clear shift in the use of the Internet. The Internet has been previously thought of a source for information, but with the advent and increased use of SNSs, the Internet has now become a social gathering place (Weaver & Morrison, 2010). This new social gathering place is where users can not only seek information, but share it with others in an informal setting. Today, journalism is no longer static, but rather an interactive experience between author and reader with both playing the part of writer and reader [38]. The Internet, and specifically in mass form SNSs, have eliminated the barrier that once put distance between what people wanted to convey and the place from which to do it. It is now in hands of any given individual to determine what is newsworthy, as there are few limitations on what can be published [19]. While most SNSs have regulations on what can or cannot be said, with the mass number of users and the ability to create profiles and pages within minutes it becomes difficult to regulate prohibited speech.

However, that is not to say that SNSs do not provide guidelines for acceptable speech and enforce those guidelines. For example, Face book allows users to report abuse or policy violations in regards to imposter accounts, bullying, intellectual property infringements, unauthorized payments, advertising violations, pornography, scams, violent or graphic posts, hate speech, and promotion of "cutting," eating disorders, or drug use [17]. While Face book provides guidelines to acceptable and unacceptable speech on the site, all reported violations are not removed. Face book determines the seriousness of the violation in determining if the page will either receive a warning or become disabled [16].

Therefore, when abiding by SNSs user guidelines, or when violating those guidelines, but flying under the radar until, if, or when, the page is reported, the interactive ability of SNSs provide users with a podium from which they can speak to a wide audience, often saying things that they might not otherwise say or even have to opportunity to say. Yet, the increased ability to speak one's mind had initiated debate as to whether Internet anonymity is beneficial to online speech or detrimental to its validity [13]. This form of anonymity has both positive and negative consequences.

On one side, SNSs have given a voice to those who are otherwise ignored or silenced while simultaneously protecting their identity. Internet speech

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also requires greater reader responsibility as posts can be classified merely as noise or legitimate information [31]. Responsibility falls on the reader to make such a distinction yielding a better read and more informed individual. Anonymity can also be an outlet for users, as many utilize SNSs as an online support community when in crisis seeking advice and empathy in relative secrecy [39].

However, on the other hand, SNSs have given people the means to cultivate and spread hate, ignorance, and lies under a cloak of namelessness. On SNSs, pages dedicated to specific views do not always permit deviation from those beliefs offering little diversity in views or real dialogue between converging belief systems [31]. Opposing views can simply be deleted. Moreover, anonymity gives users a sense of power over others spurring hate speech, harassment, and intimidation [27] and with anonymity in SNSs there is a lack of legal accountability [31] [7]. All in all, online speech and to a certain extent SNSs speech are free from governance and provide a means for users to express thoughts and ideas that could be condemned.

2.3 Social Networking Sites and Arab Spring

Many of the aforementioned benefits and detriments of anonymity on SNSs have helped social movements that are becoming all too common around the world. Arab Spring and Occupy Wall Street were given an immense boost from SNSs. That is not to say that these social movements happened because of SNSs, but SNSs did play a role in the social movements.

Looking specifically at the Arab Spring, there are those that downplay the role of social networking sites in the social movement that grasped the world's attention choosing to focus on other factors such as the patterns and demographics seen across the span of nations involved. Indeed, demographics are certainly a very interesting factor to consider. For instance, in the Middle East between 55 to 70 percent of the percent of the population is under the age of thirty, what is generally referred to as the "youth bulge" (DeLong-Bas, n.d.). The youth of the Middle East, like the youth of the world, have a special connection with technology and its abilities. In fact, it was this connection with technology that helped cultivate dialogue bringing confidence to the citizens of the Middle East that the oppression and hardship that they were living was widespread.

Arab Spring dramatically shifted the politics of many Middle Eastern nations throughout 2011, and continues to do so. The uprisings in Tunisia did not start on SNSs, but the information was quickly disseminated on SNSs following the protest and self-immolation of Mohamed Bouazizi in the city of SidiBouazid on December 10, 2010. Footage of protesters was posted on Face book within days [33]. News spread like wildfire and within days protests could be seen across the country. The youth of Egypt followed suit protesting in Tahrir Square. In the days before the protest that was to take place on the

national holiday, Police Day, the Face book page "Day of Revolution" had more than 90,000 followers [18]. A domino effect had been unleashed as protests and uprisings in Tunisia and Egypt triggered a domino effect in Algeria, Yemen, Lebanon, Jordan, Palestine, Bahrain, Iran, Libya, Morocco, Iraq, Saudi Arabia, Syria, Israel, and Kuwait [8].

While not every government in the Middle East was overthrown or even saw substantial protest, many countries had an increase in the use of SNSs. In comparison to 2010 during the same period, the number of Face book users grew 15 percent in Bahrain, 29 percent in Egypt, and 17 percent in Tunisia [22]. Twitter also saw a jump in hash tags relating to Arab Spring. As protests raged on in Egypt the number of tweets referring to political change soared from 2,300 a day to 230,000 [29]. In the course of months, there were 1.4 million tweets referencing Egypt. Other hash tags such as "Jan25" had 1.2 million mentions, "Libya" had 990,000, "Bahrain" had 640,000, and "protest" had 620,000 [22].

In places where protests are outlawed and signs of unrest are quashed instantaneously, social media became the initial gathering place for Egyptian and Tunisian revolutionaries. In the weeks before the resignation of President Hosni Mubarak, the number of tweets referring to political change increased ten-fold. In the two weeks following Mubarak's resignation an average of 2,400 tweets from neighboring countries about Egypt's situation. Similarly, following Tunisian president, Zine el Abidine Ben Ali's resignation there was on average 2,200 tweets [40]. As a result of the increased use of SNSs during the uprisings, both the Egyptian and Tunisian governments cut access to all communications including the Internet and mobile phones hoping to silence protesters. However, quite the opposite occurred, as the moves only enraged protesters more and resulted in the governments issuing apologies and restoring all communications [20].

Many still argue that SNSs are not responsible for the revolutions that took place, and rightfully so. Revolutions are not a new thought or action; social revolutions are as old as government itself and have previously occurred without the use of SNSs, or even technology. However, in the age of technology, the ability to mobilize mass numbers of people has never been easier. Still, it was the citizens, not SNSs, who took to the streets risking their lives for social change. It was the citizens, who fought for what they believed and that tenacity should not be slighted. SNSs can be credited with helping to bring both national and international attention to the actions and atrocities of the regimes in power [38]. Moreover, SNSs hosted and brought ease to a conversation that would cross national borders, cultures, and socioeconomic standing, which would ultimately rally the world behind their cause. SNSs in themselves are not revolutionary, but the way in which they were utilized can be considered innovative and a significant aspect in the

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social change that the world has had the world tweeting.

3. CENSORSHIP IN SAUDI ARABIA

As aforementioned, as protests ensued in Tunisia and Egypt, the governments attempted to cut its citizens off from telecommunications in an effort to end the mass protests. However, protests in Saudi Arabia never reached that point and it is important to delve into why that may have happened. Internet censorship and freedom of speech are both highly sensitive topics. While those topics have endless discussions describing the right or wrong of the situation, this discussion presents observations, rather than opinions, of the government censorship of the Internet. Saudi Arabia, among other countries, actively censors the Internet within its borders. However, unlike many other countries, Saudi Arabia is blunt about its censorship practices.

3.1 The Government's Effort to Censor the Internet

The censorship of the Internet in Saudi Arabia is both effective and open. The government actively informs its citizens of what is censored and to what extent. The government maintains a webpage that explains not only what is censored, but how information is censored and the underlying reason for Internet censorship. The Saudi government filters the Internet for that which it believes to be immoral or illegal including pornographic material, and WebPages relating to "bombs, alcohol, gambling and pages insulting the Islamic religion or the Saudi laws and regulations [24].

The Internet Services Unit (ISU) at King Abdul Aziz city for Science and Technology in Riyadh is responsible for the censorship of the Internet in Saudi Arabia. Webpages are filtered based on content through the use of a proxy server. The proxy server is edited for content and filters any information that is judged to be immoral or illicit as listed on the Internet Services Unit's webpage [4]. As stated on the ISU website, "All incoming Web traffic to the Kingdom passes through a proxy farm system implementing a content filtering software. A list of addresses for banned sites is maintained by this filtering system. This list is updated daily based on the content filtering policy" [25].

3.2 The Saudi Citizen's Role In Internet Censorship

When attempting to access a webpage that is censored by the government, the user will receive a response page that informs the user that the page is inaccessible due to censoring. The government does not only provide ample explanation of what is censored and for what reason, but the government also permits Internet users to participate in the censorship process [14]. An Internet user is able to submit requests for websites that they believe to be contrary to the beliefs to be blocked [25]. On the other hand, users are also able to submit requests to the ISU to review and if accepted unblock the pages [3]. Many Saudi citizens actively participate in the censorship of the Internet as the Internet Services Unit receives hundreds of requests daily from Internet users to have webpages blocked based on their content [24].

4. SOCIAL NETWORKING AND SOCIAL MOVEMENTS IN SAUDI ARABIA

Saudi citizens take an active role in maintaining the high standard of their society as hundreds of requests are submitted to the Internet Services Unit to be evaluated for censorship. Many may conclude that Saudi citizens find the Internet contrary to their beliefs; however Saudi citizen, especially the youth, are active on the Internet and on SNSs. Following the Internet's debut, there were 200,000 Internet users in December 2000, which grew to 2.54 million by 2006 [23]. As of December 2011, the number of Internet users in Saudi Arabia had grown to 13 million demonstrating that nearly half of the entire population makes use of the Internet. Of the 13 million Internet users more than 4.5 million make use of Face book [26]. Overall of the Middle Eastern countries, Saudi Arabia ranks third in number of Internet users [6].

4.1 Permissibility of Social Networks

While the Internet is actively censored for any information that is contrary to the cultural and religious beliefs of the society, SNSs have a tendency to be overlooked by the government in terms of censorship. Both Twitter and Face book usually "transcend censorship" allowing conversations that would normally not be permissible on conventional media outlets [6]. On one occasion in November 2010, Face book was completely blocked for several hours, however the government maintains that the instance was accidental and access to the site was quickly restored [41]. Because the SNSs are generally not regulated by the state, it is on SNSs that Saudi citizens are able to hold discussions that are otherwise condemned. This has become especially important for many Saudis as state run media is similar to the Internet in that it is censored for content. As a result, many Saudis have become increasingly discouraged and distrusting of state run media instead turning to foreign press for information and to SNSs to incite discussion [1].

Although many Saudi citizens enjoy the freedom of speech that Twitter and Face book allow them, there still remain topics that are not permissible both in the eyes of the government as well as the people of Saudi Arabia. Just as the government attempts to protect the national culture and religion, Saudi citizens also work to maintain and defend their way of life and beliefs. In February 2012, Saudi journalist HamzaKashgari fled the country after making offensive comments about the Prophet Muhammad on his Twitter account. Kashgair was banned from working for any Saudi newspaper or magazine, and left his home country to escape the citizens, whom he had enraged with his comments [2]. What's more, in response to Kashgair's words 13,000 Face book users joined the group, "Saudi people want punishment for HamzaKashgari" and there were more than 30,000 Twitter responses directed at Kashgari [42].

The government has generally accepted the SNSs; conversely other authority figures have outright denounced the sites. The Grand Mufti of Saudi Arabia Abdulaziz al-Sheikh warned Twitter users that the site

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was a not a legitimate source of information and was utilized to spread lies and insight unrest [6]. Other religious figures both inside and outside of Saudi Arabia have condemned social networking sites, especially in the wake of the comments made by Kashgari.

On the other hand, the Saudi Information Minister, Abdulaziz Khoja has a Face book page and Twitter account that is actively maintained and used as a source to disseminate information to his contacts. The Information Minister expressed that his decision to make use of the SNS was based on the need to connect with the youth of Saudi Arabia and to speak the language that they do [5]. Similarly, Prince Al-Waleed bin Talal recently invested \$300 million in Twitter [36]. Some have worried that the recent censorship abilities that Twitter has enacted was linked to the prince's investment, however the transaction is likely to be merely just that a business transaction [35].

Therefore, while the Internet is widely and openly censored, SNSs retain a freedom that differs from other forms of media in the country. This has allowed for Saudi citizens to express opinions and thoughts not generally welcomed in state run media. Although the government does not actively censor SNSs, Saudi citizens have taken it upon themselves to act as overseers of the sites in order to protect and uphold the general beliefs and views of Saudi society. As a way to reach the Saudi citizens in a way that conforms with their lifestyle, Saudi officials can also be found on the sites sharing information as it becomes available.

4.2 Arab Spring And Saudi Arabia

SNSs have had a profound effect on Arab Spring, which undoubtedly has had an even more extreme effect on Middle Eastern dynamics and relations, as well as world relations. The world was witness as citizens took to the streets fighting for their causes and giving their lives for what they believed. For months, and for nations like Syria the revolution carries on, protesters gathered in mass numbers in the street in demonstration of their unity and unwavering stance.

Saudi Arabia seemed to escape such protests with the exception of small, minority, Shiite-led protests in the eastern city of Qatif that were quickly put down. There are many that assert that the strict control over the Internet, as well as zero tolerance for protest quashed whatever thought of uprising that may have crossed the minds of the Saudi citizens. However, SNSs are greatly uncensored by the government. Several Face book groups that condemned the Saudi government and called for protest, however the groups saw little response. For example, the "Saudi Day of Rage" Face book page saw little support [10]. Many claim that the government's strict stances on protests have kept the Arab Spring and the revolution it seeks from taking hold in Saudi Arabia. Still, that does not fully explain why there has been so little response or call for protests on sites that are not actively censored by the government.

Alternate explanations may exist. "Some say the elements of rebellion are there: disaffected youth, unemployment, religious and tribal splits, human rights abuses, corruption, and aged leadership. Others point to the country's wealth and argue that the monarchy is both popular and resilient" [12]. In response to the uprisings that took place in nations around Saudi Arabia, the government took extra precautions to provide for its citizens. The government diffused the citizens' concerns with "modest political reforms" such as granting women the right to vote in local elections, and increased college, housing, and social security benefits [30]. Additionally, King Abdullah increased the public sector's wage and dispensed an extra two months' wages to all public employees in the country, which make up 90 percent of the country's workforce (Haykel, 2011). Thus, Saudi Arabia was able to avoid any significant uprisings not by resisting political reform, but rather by cooperating and accommodating the needs of its people through the identification, recognition, and resolution of several social issues.

5. WHAT THE FUTURE HOLDS

The future of Middle Eastern social movements is unpredictable for many nations, but for others stability reigns. With that said Saudi Arabia is unlikely headed to a social revolution in the near future as the nation is steadfast in its pursuit of national stability and security. Similarly, the government has no intention of changing its policy on Internet censorship and remains dedicated to the protection and preservation of its societal traditions and beliefs.

The Saudi government has yet to begin censorship of SNSs. If the Saudi government and other governments worldwide allow for SNSs to remain uncensored, then the future of SNSs truly remain in the hands of those who use the site. Although Twitter has recently developed the means to censor and filter Tweets on a country by country basis, other sites remain unrestricted. Therefore, it is up to the users of those SNSs to determine how it is used and for what purposes. Just as no one could have predicted the role that it would play in the Arab Spring, it is unlikely that one can predict the role that it may play in the future.

One thing that does remain certain is that the use of SNSs has shifted, their importance has been amplified, and their popularity has never been greater. SNSs for many serve as an outlet for many whose voices are silenced by politics, culture, or gender when the sites are left uncensored. For others, SNSs now serve as a source for information, especially for those who are unable to trust the media that is available to them. Nevertheless, the role that SNSs played not in initiating or carrying out social movements, but by providing a worldwide meeting place that incited discussion and resolution has been solidified in history.

<http://www.ejournalofscience.org>**REFERENCES**

- [1] Al-Ibrahim, B. (2012 Feb 8). Journalist flees Saudi Arabia after tweet on Prophet. Alakhbar. Retrieved from <http://english.al-akhbar.com/content/journalist-flees-saudi-after-tweet-prophet>
- [2] al-Ibrahim, B. (2011 Dec 27). Saudi Arabia's press: The new McCarthyism. Alakhbar. Retrieved from <http://english.al-akhbar.com/content/saudi-arabia%E2%80%99s-press-new-mccarthyism>
- [3] Aljabre, A. (2012). Saudi Arabia censorship: A model for workplace productivity. *International Journal of Business, Humanities and Technology*. 2(1), 142-147.
- [4] Al-Tawil, K. (2001). The Internet in Saudi Arabia. *Telecommunications Policy*. 25, 625 – 632.
- [5] Abbas, F.J. (2009 Jul 7). "Just add me": Saudi Information Minister embraces social networking. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/faisal-abbas/just-add-me-saudi-informa_b_226281.html
- [6] Abdallah, M. (2012 Jan 31). Saudi Arabia: Boycotting Twitter to save it. Alakhbar. Retrieved from <http://english.al-akhbar.com/content/saudi-arabia-boycotting-twitter-save-it>
- [7] Balkin, J. M. (2009). The future of free expression in a digital age. *Yale Law School Legal Scholarship Repository Faculty Scholarship Series*. Paper 223. Retrieved from http://digitalcommons.law.yale.edu/ffs_papers/223
- [8] Blight, G., Pulham, S., & Torpey, P. (2012 Jan 5). Arab spring: an interactive timeline of Middle East protests. *The Guardian*. Retrieved from <http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline>
- [9] Boyd, D., & Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*. 13, 210–230.
- [10] Bradley, J. (2011 Oct 13). Saudi Arabia's invisible hand in the Arab Spring. *Foreign Affairs*. Retrieved from <http://www.foreignaffairs.com/articles/136473/john-r-bradley/saudi-arabias-invisible-hand-in-the-arab-spring?page=show#>
- [11] Breslin, J. & Decker, S. (2007). The future of social networks on the Internet: The need for semantics. *IEEE Internet Computing*. 11(6), 86-90.
- [12] Conan, N. (Interviewer) & Haykel, B. (Interviewee). (2011 Jun 7). How the Arab Spring affects Saudi society [Interview transcript]. Retrieved from NPR Web site: <http://www.npr.org/2011/06/07/137036450/how-the-arab-spring-affects-saudi-society>
- [13] Davenport, D. (2009). The social derivation of technical systems. In B. Whitworth & A. de Moor (Eds.), *Handbook of research on socio-technical design and social networking systems* (50-64). Hersey, PA.: Information Science Reference.
- [14] Drezner, D. (2005). Weighing the scales: The Internet's effect on state-society relations. Paper presented March 2005 at conference: "Global Flow of Information," Yale Information Society Project, Yale Law School. Retrieved from <http://islandia.law.yale.edu/isp/GlobalFlow/paper/Drezner.pdf>
- [15] Enough is Enough. (n.d.). *Social Networking Statistics*. Retrieved from <http://www.internetsafety101.org/Socialnetworkingstats.htm>
- [16] Face book. (2012a). Does Face book remove everything that gets reported? Retrieved from <http://www.facebook.com/help/?faq=126110750802585>
- [17] Face book. (2012b). Report abuse or policy violations. Retrieved from <http://www.facebook.com/help/?page=178608028874393&ref=hcnv>
- [18] Fahim, K. (2011 Jan 25). Violent clashes mark protests against Mubarak's rule. *The New York Times*. Retrieved from <http://www.nytimes.com/2011/01/26/world/middle-east/26egypt.html?pagewanted=1&r=1&hp>
- [19] Gelman, L. (2009). Privacy, free speech, and "blurry edged" social networks. *Boston College Law Review*. 50(5), 1315-1344.
- [20] Glaser, M. (2011 Dec 28). Top 10 media stories of 2011. Retrieved from <http://www.pbs.org/mediashift/2011/12/top-10-media-stories-of-2011-arab-spring-rip-steve-jobs-phone-hacking362.html>
- [21] Hampton, K., Goulet, L.S., Rainie, L., & Purcell, K. (2011). *Social networking sites and our lives*. Pew Internet & American Life Project. Retrieved from <http://www.pewinternet.org/~media/Files/Reports/2011/PIP%20-%20Social%20networking%20sites%20and%20our%20lives.pdf>
- [22] Huang, C. (2011 Jun 6). Face book and Twitter key to Arab Spring uprisings: Report. *The National*.

<http://www.ejournalofscience.org>

- Retrieved from <http://www.thenational.ae/news/uae-news/facebook-and-twitter-key-to-arab-spring-uprisings-report>
- [23] Communications and Information Technology Commission. (2012). Internet in Saudi Arabia. Retrieved from <http://www.internet.gov.sa/learn-the-web/guides/internet-in-saudi-arabia>
- [24] Internet Services Unit King Abdulaziz city for Science and Technology. (2006a). Introduction to content filtering. Retrieved from <http://www.isu.net.sa/saudi-internet/content-filtrng/filtrng.htm>
- [25] Internet Services Unit King Abdulaziz city for Science and Technology. (2006b). Local content filtering procedure. Retrieved from <http://www.isu.net.sa/saudi-internet/content-filtrng/filtrng-mechanism.htm>
- [26] Internet World Statistics. (2012 Feb 12). Middle East. Retrieved from <http://www.internetworldstats.com/middle.htm#sa>
- [27] Jobling, V. (2011 Apr 24). Anonymity: The default identity for cyber-bullies on social networks. Retrieved from <http://networkconference.netstudies.org/2011/04/anonymity-the-default-identity-for-cyber-bullies-on-social-networks/>
- [28] Kiser, P. (2011 Apr 13). Who uses Face book, Twitter, LinkedIn, & MySpace? 4thQ & 1stQ Stats and Analysis. Retrieved from <http://socialmediatoday.com/paulkiser/285851/who-uses-facebook-twitter-linkedin-myspace-4thq-1stq-stats-and-analysis>
- [29] O'Donnell, C. (2011). New study quantifies use of social media in Arab Spring. Retrieved from <http://www.sciencedaily.com/releases/2011/09/110914161733.htm>
- [30] Ottens, N. (2011 Oct 3). Morocco, Saudi Arabia, Arab Spring models. Atlantic Sentinel. Retrieved from <http://atlanticsentinel.com/2011/10/morocco-saudi-arabia-arab-spring-models/>
- Parameswaran, M. &Whinston, A.B. (2007). Social computing: An overview. Communications of the Association for Information Systems. 19, 762-780.
- [31] Parameswaran, M. &Whinston, A.B. (2007). Social computing: An overview. Communications of the AIS. 19, 762-780.
- [32] Reuters. (2010 Dec 19). Witnesses report rioting in Tunisian town. Reuters. Retrieved from <http://af.reuters.com/article/topNews/idAFJ0E6BI06U20101219>
- [33] Rousseau, B. (2012a) Face book statistics 2012 [Infographic]. Retrieved from <http://gizmaestro.com/26/02/2012/social-media/facebook-statistics-2012-infographic/>
- [34] Rousseau, B. (2012b). Twitter statistics 2012 [Infographic]. Retrieved from <http://gizmaestro.com/25/02/2012/social-media/twitter-statistics-2012-infographic/>
- [35] Rushkoff, D. (2011 Dec 20). Should Twitter fear Saudi prince? CNN. Retrieve from <http://www.cnn.com/2011/12/20/opinion/rushkoff-saudi-prince-twitter/index.html>
- [36] Segall, L. (2011 Dec 19). Saudi prince purchases \$300 million stake in Twitter. CNN Money. Retrieved from http://money.cnn.com/2011/12/19/technology/saudi_prince_twitter/index.htm
- [37] Senger, D. (2010). Can social media spread democracy? Retrieved from http://www.dustinsenger.com/publications/report/Social_Media_Democracy.pdf
- [38] Social capital. (2011). Twitter, Face book and YouTube's role in Arab Spring. Retrieved from <http://socialcapital.wordpress.com/2011/01/26/twitter-facebook-and-youtubes-role-in-tunisia-uprising/>
- [39] Spark, D. (2009). Anonymous social networks open the gates for digital therapy. Retrieved from <http://www.socialmedia.biz/2009/08/19/anonymous-social-networks-open-the-gates-for-digital-therapy/>
- [40] Taylor, K. (2011 Sept 13). Arab Spring really was social media revolution. Retrieved from <http://www.tgdaily.com/software-features/58426-arab-spring-really-was-social-media-revolution>
- [41] Whitney, L. (2010 Nov 15). Face book temporarily blocked in Saudi Arabia. CNET News. Retrieved from http://news.cnet.com/8301-1023_3-20022766-93.html
- [41] Yahoo! News Makers. (2012 Feb 14). The Valentine's day asylum. Yahoo! News New Zealand. Retrieved from http://nz.news.yahoo.com/opinion/post-/blog/news_makers/post/80/comment/

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