



AN EXPLORATORY STUDY OF THE PROFILE OF THE SAUDI USER OF SOCIAL MEDIA

¹DIMITRIOS XANTHIDIS, ²ALI SAAD ALALI

¹Dhofar university, Department of Management Information Systems,

College of Commerce and Business Administration

²MSIU University, Department of Information Studies,

College of Computer and Information Sciences

E-mail: ¹dxanthidis@du.edu.om, ²asaalali@gmail.com

ABSTRACT

The use of social networks is entering the era of maturity. The large technology vendors are all the more interested in getting involved in the Social Media game unable to afford being left out of these compact and huge potential markets. This exploratory quantitative study aims to reveal those demographics facts related with the usage of the social networks in Saudi Arabia that form the profile of the local user. The findings show a general agreement with the main conclusion of other public surveys in the country pointing to a heavy use of the social networks, at more than 85%. They also suggest that the younger the individual the more likely it is to get involved in the Social Media and in the case of female individuals, though slightly less in population, but seemingly more intense use of them. Education does not seem to affect the frequency of the use as long as the individual are at least basically educated. Likewise income and employment status only indirectly affect this use since they affect the amount of free time one has to get involved with the social networks. Finally, as expected, the more one is connected to the Internet the heavier the use of the Social Media.

Keywords: *Saudi Arabia, Social Media, User Profile, Personal Attributes*

1. INTRODUCTION

After about a decade from the birth of the so-called Social Media, i.e. Facebook, Twitter, LinkedIn, etc. signs point that the eSociety is getting into what could be referred to as the maturity era. One can easily sense this by observing at least two distinct behaviors.

First, everyday a number of research studies and commercial articles are published with discussions related anyhow with the advent, rapid growth and most recent behaviors in Social Media usage. The need is such that web sites are developed with the aim of monitoring these developments, real time, even in countries that perhaps one would not expect a couple of years ago, like in the Middle East (gogulf.com, socialbakers.com).

Second, there seems to be a trend to have technology giants get deeply involved, somehow, with the Social Media either acquiring related companies or building their systems with eSociety in mind. For instance, Apple acquired Topsy a

small analytics firm focusing in Social Media data analysis [1] obviously having serious plans since, of course, no one invests \$200 million in a small firm without good strategic reasons and vision for the future. Also, the vast majority of the new applications, either for the PCs and laptops or for the tablets and smartphones, but also the web sites are developed with the provision of sharing information through any of the available social networks mainly Facebook, Twitter and LinkedIn. Even the new electronic devices, e.g. tablets, smartphones, etc., are designed to provide easy access to these networks to their users. There are studies made on the effect of the social media on their users' communication quality and other behaviors [2] and suggestions that the trend is to heavily utilize one's social networking identity and statistical facts even in the process of hiring the individual or promoting a person's move to higher ranks in an organization [3].

Research on content quality analysis studies, performed on social media usage, offers valuable



insight related to the human behavior not just online but especially on these social networks [4]. Others shed light on the impact of these networks on general human behavior trying to draw the profile of their regular user and reveal aspects of the users' personality. Simple data mining of representative social media population samples and, then, deep qualitative analysis assisted in mapping the pros and cons of these effects on human behavior [5]. Further study of this behavior is deemed of critical importance now more than before in the light of the other new technologies rapidly emerging worldwide, i.e. Big Data and Cloud computing [6].

A serious effort is made that these developments are carefully followed in the Gulf Council Countries (GCC) despite the possible suggestion of the opposite because of the particularities of these societies. Not only these particularities are not applied in this case but also it could be easily argued that as far as Social Media usage the region is probably in the forefront making very heavy use of these networks and leading several local societies into transformations with worldwide impact just unthinkable just a few years ago. Indeed, statistics show that about 40% of the population of the Middle East has access to the Internet and of those a very high 88% are using Social Media on a daily basis. Facebook enjoys a very high number of 58 million users in the region with Twitter attracting 6.5 million of them and LinkedIn with 5.8 million users [7].

2. AIM AND OBJECTIVES

The current study focuses on the effects of the personality of the average Saudi on his attitude towards the use or not of Social Media. It aims to answer the following questions:

-What is the current usage frequency of Social Media in Saudi Arabia?

-How do personal characteristics, i.e. age, gender, education, income, employment status and profession affect this attitude?

-What is the connection between Internet usage and Social Media usage if any?

3. BACKGROUND

In recent years there has been a rapid growth of social networking technologies having as a direct result the development of electronic communities or else eSocieties for social, academic, educational, entertainment, commercial or other purposes. For

example, the latest developments in Cloud computing technologies encouraged the firms to claim an increase in their market share by advertising their products through social media networks [8].

Moreover, the evolution of virtual worlds as new forms of eSocieties could not be anticipated when Tom Truscott and Jim Ellis created in 1979 the Usenet which was a worldwide discussion system permitting Internet users to exchange public messages. But with the proliferation of Internet Communication Technologies contacting people worldwide became easier, more convenient and efficient. The growing availability of high speed Internet access gave added value to the existing concept of usage of communicating through social media applications; this fact led to the creation of social network sites like "My Space" in 2003 and "Facebook" in 2004. This, in turn, introduced the term "Social Media" which is hitherto used and will be used in the future according to current technological conditions [9].

Even if social media technologies came to stay for good, there are some serious concerns on individuals' personality impact that must be considered and examined. Basically it is suggested that the more these individuals, and especially the youngsters, overuse social media the more increased is the likelihood they will forget the importance of the real world and, accordingly reduced will their desire be on building a real identity offline [2]. Thus, it is important for social leaders to support the investigation and monitoring of the real social media user profile and try to find ways to improve their mental welfare as well.

It is not all bad though despite the serious concerns for youngsters. No doubt platforms like Facebook and Twitter are the most powerful forms of media for communication today and, as Jim Taylor declares, bring along also significant benefits for family and friendly relationships. There is, indeed, a risk for the heavy users of increased anxiety, psychiatric disorders and, perhaps, other unhealthy behaviors mainly associated with symptoms of depression but at the same time especially the younger ages can experience a great deal of social support when they feel vulnerable, or uncomfortable in creating relationships and in need of such support. These individuals may easily take advantage of the distance and the relatively safe environment that the social media offer to those who use them to practice their social skills. Additionally, in a global professional environment where mobility is a key element quite often these



media enable families to eliminate the burden of the distance and facilitate high quality communications between their members [10].

Just relatively recently several researchers started focusing on the level of influence of the social media on the psychological factors affecting one's personality when studying these people's virtual profile status and content while online [11]. One such example of a study by Correa suggested that extraversion and openness to experiences were closely and in a positive way related with the social media and that there are indications of variations in this behavior by age and gender [12].

According to Kaplan and Haenlein the higher the online social presence the larger the social influence depending, of course, on the personal profile of the user. Constant social online presence seems to be more and more important for social media users and especially to those who want to enjoy commercial benefits [9]. Social media platforms like "Twitter" enable constant social presence and, according to Dunlap and Lowenthal, improve social interactions, which occur more naturally [13].

More particularly in the Arab world the number of social media users has grown exponentially since 2011. Once merely used as a social and entertainment tool now social media has penetrated in almost every aspect of the Arabs' daily lives, transforming the way they socialize, do business, communicate with government officials and government agencies and participate in civil movements [14].

GCC are experiencing great acceptance of social media by local communities and Saudi Arabia is the leader in the region in that respect. This is mostly due to its commitment for modernization but also because of its people's will to engage in socializing through new, more private and easy to use ways without time and distance limits and borders [15]. At the same time, though, Saudi government has made attempts to control and, in some cases, to block particular online communities in an effort, on one hand, to protect the public from misinformation and/or harmful political attitudes that aim to disturb the social peace and local traditions and, on the other hand, promote interaction between the government and its citizens. Social media experts suggest that governments might want to see these new communication channels as an opportunity to reach a part of the society they were not able in the past. They believe that with the right regulation framework and through a process of trial and error governments will be able to cope with this

increased flow of information and, eventually, find the balance they seek in favor of people's common wealth and prosperity [16].

Apart from governmental policies the technology development relative to information accountability has made available various tools that can be very helpful in regulating the social media environment. Some of these tools provide a way to help the receiver of the information to trace its origin and, thus evaluate the level of trust on the information [17]. Christopher Bier proposed a joint architecture to enable data tracking and control [18].

The social media broad acceptance from the local communities in the GCC region attracted the attention of the commercial sector. Today the most important marketers in GCC area have engaged in social media platforms like Facebook, Twitter and YouTube to perform low cost advertising projects for their products [19]. Salem's findings related to the use of Facebook suggest it is the most popular social network followed by Google+. These online communications channels indeed have replaced the traditional communications between people who now use all the more the social media for socializing [20].

Especially in Saudi Arabia, "Facebook", "Twitter", "YouTube", "LinkedIn" and "Google+" are the most popular social media used mostly for educational, entertainment, socializing, professional and marketing reasons [21]. Because of this huge success a great debate continues over the value of this use of the communication medium in education and commerce fields, governmental usage and possible consequences on Saudis life taking as granted the acceptance of social media in Saudi communities [22].

4. METHODOLOGY

This exploratory quantitative study aimed at drawing the profile of the average Saudi towards the use of Social Media. The authors focused on the relation between the extend of usage of the social media in the country and certain demographics attributes of the participants, more specifically gender, age, education, employment status, income, profession and Internet usage. The idea was to describe how the particular character and social environment of the individual participant affects his involvement with Social Media.

At first the researchers made some contacts with people of influence in the Saudi society and other individuals with different ages and educational



and/or professional backgrounds. The idea was to extract important information on how to reach people given the distance restrictions or possible gender related obstacles and what is the level of interest in filling questionnaires of this kind. Moreover, some translation issues had to be solved and any kind of suggestions suitable for this survey were taken into account when formulating the final draft of the questionnaire. This was especially important given the particular character of the Saudi society and culture. Then, the questionnaire was formatted so as to satisfy the objectives of the research. It was first tested on a small sample of 20 individuals and valuable information was taken that helped fine-tune its final version.

A full-scale survey followed and deployed during a period of three months (March till June 2013) and 596 individuals, conveniently selected, agreed to participate in it, either offline through personal face-to-face interviews or through an online survey using Google docs. It is worth noting that the authors had to follow some “cleaning” of the responses since a very significant number of them were given by people not residing in Saudi Arabia but in other countries of the GCC and, also, in North African countries and even in U.S.A. and E.U. This “cleaning” was necessary so as to avoid the distortion of the data that was planned to involve only Saudi Arabia residents.

The set of data gathered was formatted in such a way as to be suitable for data analysis through statistical packages that can perform the cross tabulations and statistical calculations necessary. For this purpose SPSS 20 was used to perform the descriptive statistical analysis, mainly cross-tabulations and analysis of variance (ANOVA), and MS Excel was used to provide quality charts used to interpret the results.

4.1 The sample

Although a considerable number of individuals were approached (more than 600) of all ages and walks of life but, eventually, only mainly those under 45 years old accepted to contribute to this research. Indeed, 385 of the participants revealed their age and of those 18 were less than 18 years old (4.6%), 169 were between 18 and 25 (42.9%), some 110 were in the range of 26-35 (27.9%), 59 more were 36-45 (15%), another 24 between 46 and 60 (6.1%) and, finally, 5 were the elders, i.e. older than 60 years old (1.3%). This is not a perfect sample as of age however, it should be noted that, in general the population percentage in the country of those more than 45 years old is far less the younger ones. This provides a feeling of consistency as to the

actual average age of the population which might be used to extrapolate the whatever results of the study on the particular sample to the country as a whole, although one should not forget the study is only exploratory and suggestive of general trends in the country.

As to the gender the sample is, actually, quite balanced. Out of 392 participants 193 specified they were male (49%) and another 199 were female (50.5%). The majority of the sample (222/386 individuals; 56.3%), as expected, has an undergraduate degree; some 49 more (12.4%) hold a graduate degree and 13/386 (3.3%) are with a Ph.D. Just 1 individual finished the elementary school (0.3%) and only 6 finished the intermediate school (1.5%). A considerable 67/386 of the sample got a secondary school diploma (17%) and 27 more (6.9%) any other type of diploma. There were also 2 persons that did not want to say or could not say (0.5%).

The main part of the sample population included those employed (186/383 responses; 47.2%) followed closely by the students (138/383; 35%). A small 6.3% (25/383 individuals) are unemployed and a quite similar 6.1% (24/383) declared housewives. Just 10 are retired from work (2.5%). Different types of professions were identified as those of the participants, including medical/nursing, education, technology, linguistics, financial, cultural/religious, management, trade, public services and military. Each of these had a share of between 2% and 4.6% except those in education (probably students) with a 17.5% and those in management with 8.1%.

5. FINDINGS

The basic result of the study (table 1) is that the vast majority of the sample population is not only connected to the Internet but, furthermore, use the Social Media either “always” (39.2%) or “a lot” (37%) or at least “often” (15.6%). Only 6.1% make “little use” of the Social Media, a negligent 1.4% just “rarely” and a statistically insignificant 0.6% “never” uses them. Add to that the fact that an accumulative 52.8% are “always” online, another 32.9% use the Internet “a lot”, and a good 10.5% use “often” the Internet. Only 2%, 0.3%, 1% and 0.3% use it “a little”, “rarely”, “only for emails” or never”.

From these general findings one gets the idea that Saudi society is moving towards all the more heavy use of the Internet and the Social Media now but especially in the years to come.

Table 1: Social Media use based on participants' use of the Internet (Sample: 362 responses)

Use of Social Media	Never		Rarely		Little use		Often		A lot		Always		Total
	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
Internet use	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1
Never	1	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1
Only email	0	0.0%	0	0.0%	2	50.0%	0	0.0%	0	0.0%	1	25.0%	4
Rarely	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	00.0%	0	0.0%	1
Little	0	0.0%	0	0.0%	3	37.5%	0	0.0%	2	25.0%	3	37.5%	8
Often	0	0.0%	1	2.6%	7	18.4%	18	47.4%	7	18.4%	5	13.2%	38
A lot	1	0.8%	1	0.0%	8	6.7%	19	16.0%	73	61.3%	17	14.3%	119
Always	0	0.0%	3	1.6%	2	1.0%	19	9.9%	51	26.7%	116	60.7%	191

Table 2: Social Media use from a gender viewpoint (Sample: 370 responses)

Use of Social Media	Never		Rarely		Little use		Often		A lot		Always		Total
	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
Gender	1	0.6%	4	2.2%	13	7.2%	31	17.2%	67	37.2%	63	35.0%	180
Male	1	0.6%	4	2.2%	13	7.2%	31	17.2%	67	37.2%	63	35.0%	180
Female	1	0.5%	2	1.1%	12	6.3%	26	13.7%	67	35.3%	79	41.6%	190

Table 3: Social Media use from the age angle (Sample: 367 responses)

Use of Social Media	Never		Rarely		Little use		Often		A lot		Always		Total
	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
Age	1	5.9%	0	0.0%	1	5.9%	1	5.9%	6	35.3%	8	47.1%	17
<18	1	5.9%	0	0.0%	1	5.9%	1	5.9%	6	35.3%	8	47.1%	17
18-25	0	0.0%	3	1.8%	7	4.3%	22	13.4%	59	36.0%	73	44.5%	164
26-35	1	1.0%	2	1.9%	8	7.6%	17	16.2%	37	35.2%	39	37.1%	105
36-45	0	0.0%	1	1.9%	8	14.8%	10	18.5%	19	35.2%	15	27.8%	54
46-60	0	0.0%	0	0.0%	1	4.3%	6	26.1%	8	34.8%	7	30.4%	23
>60	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	75.0%	1	25.0%	4

Table 4: Social Media use based on participants' education (Sample: 368 responses)

Use of Social Media	Never		Rarely		Little use		Often		A lot		Always		Total
	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
Education	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1
Elementary	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1
Intermediate	1	16.7%	0	0.0%	1	16.7%	0	0.0%	1	16.7%	3	50.0%	6
Secondary	0	0.0%	1	1.6%	3	4.8%	8	12.9%	23	37.1%	27	43.5%	62
Diploma	0	0.0%	2	8.3%	3	12.5%	3	12.9%	9	37.5%	6	25.0%	24
Undergraduate	0	0.0%	3	1.4%	14	6.6%	35	16.4%	84	39.4%	76	35.7%	213
Graduate	0	0.0%	0	0.0%	2	4.1%	9	18.4%	13	26.5%	23	46.9%	49
PhD	1	7.7%	0	0.0%	2	15.4%	2	15.4%	3	23.1%	5	38.5%	13

These figures confirm the findings of other surveys in the region raising the population of the users of the Social Media to 88% of the total populations (<http://www.go-gulf.com/blog/social-media-middle-east/>). The most important findings of this study, though, are those related with the connection between the personal profiles of these users and this use.

5.1 The role of gender, education and age

Figure 1 illustrates the role of gender, education and age in Social Media usage in the country. The chart does not leave much room for subjective interpretations.

As far as gender is concerned (table 2), although in both cases of males and females the use of Social Media is very high but it looks that female participants overall make slightly more usage (4.9 mean, i.e. "a lot") compared to males (4.6 mean, i.e. "a lot" again but less intense), and there is slightly less variation in their behavior (standard deviation 1.46) than in the case of males (1.61). Indeed, 89.4% of the male participants use the Social Media "often" (31/180; 17.2%) or "a lot" (67/180; 37.2%) or "always" (63/180; 35%) whereas 90.6% of the females of the sample admitted use "often" (26/190; 13.7%) or "a lot" (67/190; 35.3%) or "always" (79/190; 41.6%).

Figure 1: Social Media Usage from a gender, education and age point of view
(Sample: gender 370 responses, education 368 responses, age 367 responses)

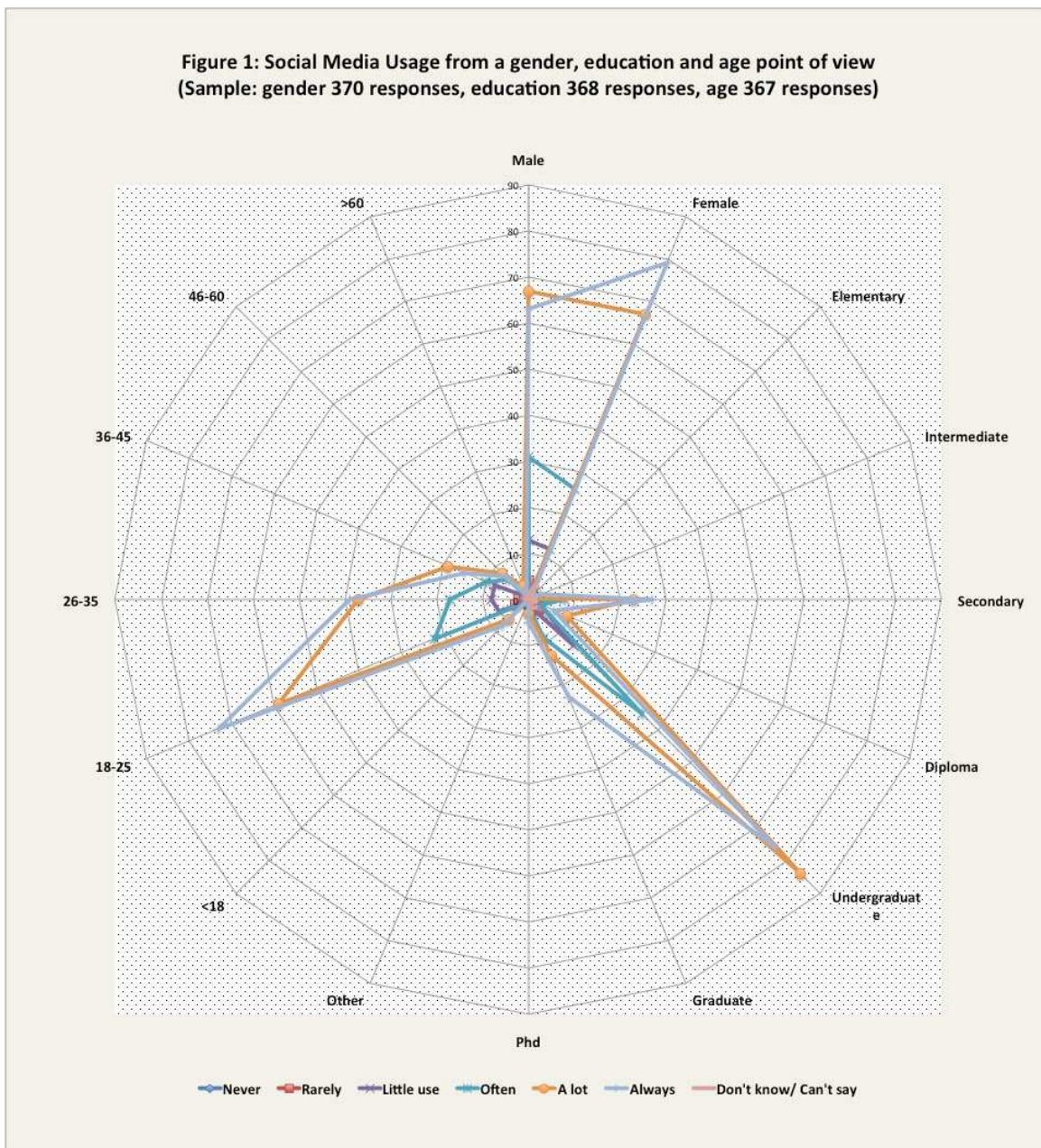


Figure 1. Social Media Usage From A Gender, Education And Age Point Of View

The results look quite similar in the case of the role of age in Social Media usage (table 3). It is not really worth noting the specific statistics for the various ranges of age since they look, to a very large extent, very similar with the case of gender statistics. It is suffice here to say that like in the previous case the average statistical mean is, again, 5.0 for the case of the individuals between 18 and 25 and 4.8 for those in the age range 26-35, i.e. “a lot” and almost “a lot” with the other cases following very closely behind these. The only

difference seems to be that the standard deviation in general is just very slightly more significant than in the case of gender analysis. There is no statistically significant change in the general results when the role of education of the participants is investigated (table 4).

5.2 The role of income and employment status

Figure 2 illustrates the role of income and employment in Social Media usage in Saudi Arabia. The main pattern does not change significantly but only slightly towards the use of the Social Media “always” when looking things from the individuals’

employment status viewpoint. Indeed, the statistical mean is floating around the 4.6 and 5.0 marks i.e. close to the “a lot” mark.

always connected, with 35.8% using them “a lot” and 17.6% (31/176) declare “often” using them.

Table 5: Social Media use based on participants' employment status (Sample: 368 responses)

Use of Social Media	Never		Rarely		Little use		Often		A lot		Always		Total
	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
Employed	0	0.0%	3	1.7%	16	9.1%	31	17.6%	63	35.8%	61	34.7%	176
Unemployed	1	4.0%	0	0.0%	0	0.0%	2	8.0%	8	32.0%	13	52.0%	25
Student	1	0.7%	3	2.2%	7	5.2%	18	13.3%	48	35.6%	57	42.2%	135
Housewife	0	0.0%	0	0.0%	1	4.5%	3	13.6%	12	54.5%	6	27.3%	22
Retired	0	0.0%	0	0.0%	1	10.0%	3	30.0%	3	30.0%	3	30.0%	10

Table 6: Effect of income on Social Media use (Sample: 338 responses)

Use of Social Media	Never		Rarely		Little use		Often		A lot		Always		Total
	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	Pop.	%	
No income	0	0.0%	1	2.1%	3	6.4%	9	19.1%	12	25.5%	22	46.8%	47
<4,000SR	0	0.0%	2	2.8%	4	5.6%	11	15.3%	29	40.3%	25	34.7%	72
4,0001-8,000SR	0	0.0%	1	1.8%	4	7.3%	4	7.3%	23	41.8%	23	41.8%	55
8,001-15,000SR	0	0.0%	0	0.0%	9	9.3%	20	20.6%	33	34.0%	35	36.1%	97
15,001-25,000SR	1	2.0%	1	2.0%	4	8.0%	5	10.0%	20	40.0%	17	34.0%	50
25,001-45,000SR	0	0.0%	0	0.0%	1	11.1%	1	11.1%	3	33.3%	4	44.4%	9
>45,000SR	1	12.5%	0	0.0%	0	0.0%	2	25.0%	1	12.5%	4	50.0%	8

There are some interesting points to discuss when looking deeper in the statistics. First, in the case of the “unemployed”, although only 25 identified themselves as such but 92% of those admitted making heavy use of the Social Media either “often” (8%) or “a lot” (32%) or “always” (52%). In contrast only a single individual identified as unemployed claimed never making use of the Social Media. The pattern is almost the same in the case of the students (135 responses identified in the sample) with 91.1% of them declaring heavy use of the Social Media either “often” (13.3%) or “a lot” (35.6%) or “always” (42.2%). In the case of the housewives (sample: 22 responses) 95.4% stated they belonged in the category of making heavy use of the social networks. The only difference with the previous cases, other than the extremely high percentage, is that there is a significant shift towards those using them “a lot” (54/5%) not altering, though, the general pattern described just previously. The statistical average mean and the standard deviation is still almost the same as before.

Lastly, the results point to a clear shift of the pattern towards less use of the social media but, once again, not significant change of the previous patterns. From the 176 individuals (out of 368) that are employed 155 declared being involved in the social networks (88.1%) but many less (34.7%) are

The pattern looks very much the same in the case of those “retired” but the sample here is very small, just 10 responses, and, hence, no safe conclusions can be drawn.

The results of the statistical analysis of the responses based on the “income” do not lead to significantly different conclusions than in the previous case of the “employment status”.

All these suggest that although the employment status and income do not directly affect the use of the Social Media but they do so indirectly since the more time one has the more likely it is to spend it in socializing or other activities through the social networks.

6. CONCLUSIONS

The results of this study of the profile of the Saudi user towards the Social Media are in general agreement as to the main conclusion that the Saudi Arabia residents make very heavy use of the Social Media, more than 85%. The results suggest that female individuals make slightly more use of the social networks although males are following very close. This does not mean that more females are using the social media than males (actually it is possible that the opposite is true as it happens in other countries worldwide) but that they use it more

as far as the time they spend in it and more intensely i.e. doing more activities than males.

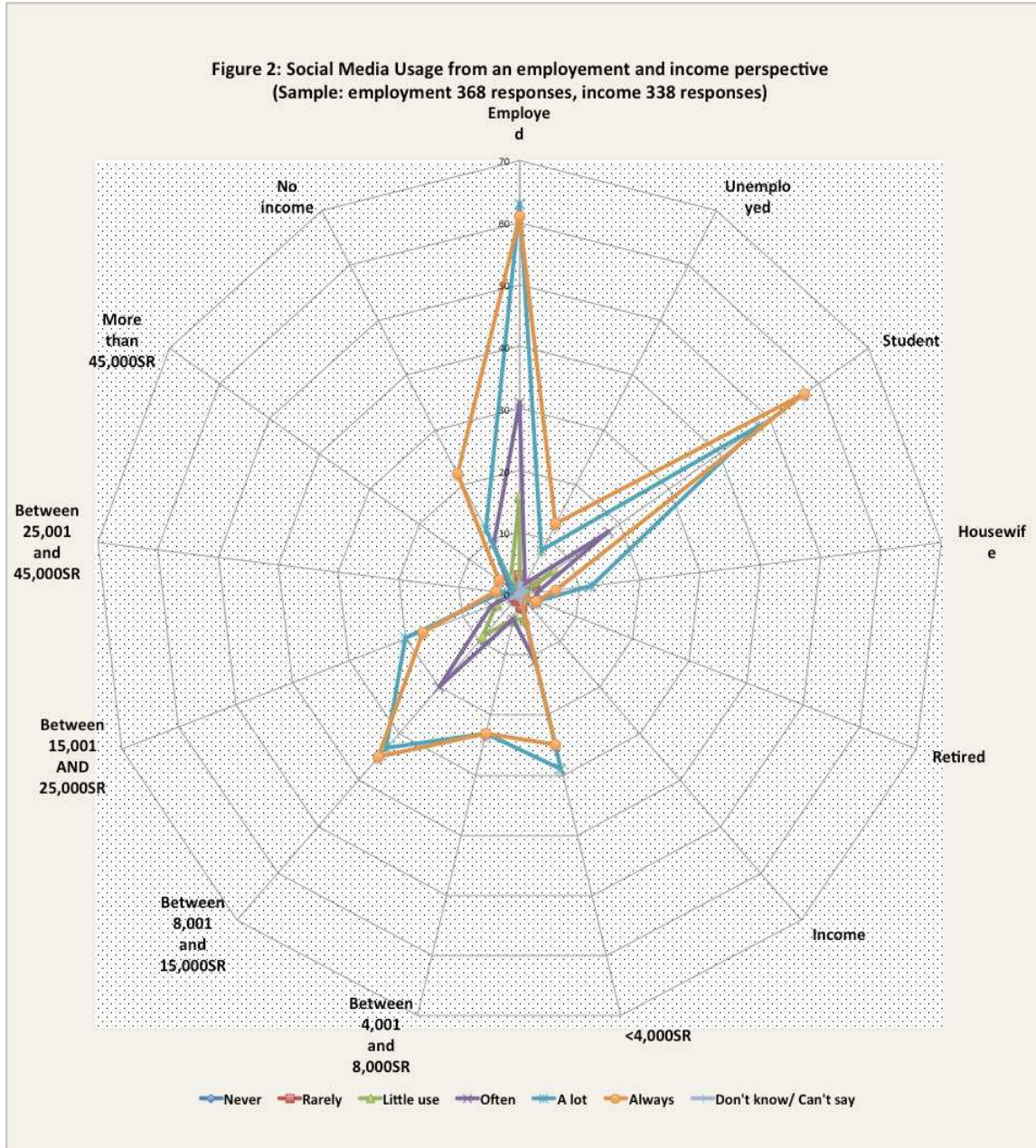


Figure 2. The role of income and employment status

The second conclusion is that the younger an individual the more use of Social Media s/he makes. This should be considered as positive news for the growth of the social networks in Saudi Arabia since, it is absolutely certain, that the young people growing older and the new generations coming in the frame will, most likely, only intensify their habits of socializing through the Social Media much as their parents are doing now. Thus,

governments, businesses and even academic or other institutions should keep that in mind.

Another point is that the education does not seem to have any affect on the frequency of the use as long as the individual's level is higher than the secondary level. The explanation for this is, probably, the need from the part of the individual to have a minimum of education, especially computer and Internet literacy, so as to, at least, be able to follow the other members/friends of his/her social network. Likewise in the case of the income and



employment status that do not seem to affect the use of the social networks directly but indirectly since it seems the more time an individual has the more s/he will make use of the Social Media.

Finally, this study revealed there is a very strong connection between Internet usage and Social Media usage. Indeed, the survey showed that Saudis make heavy use of the Internet and the heavier that use is the more they utilize the Social Media.

REFERENCES:

- [1] D. Wakabayashi, D. MacMillan, "Apple Taps Into Twitter, Buying Social Analytics Firm Topsy", *The Wall Street Journal*, [Online]. Available at: online.wsj.com/news/articles/SB10001424052702304854804579234450633315742, 2/12/2013.
- [2] D. Xanthidis, "Facebook: Welcomed Technological Progress or Hazardous Addictive Instrument", *IADIS International Conference on Internet Technologies and Society*, Perth, Australia, 2012, pp. 243-246.
- [3] R. Samani, "Treat Social Media as a shop window for employers, but be careful", *BBC News*, 2/11/2012, [Online]. Available at: www.bbc.co.uk/news/business20155192.
- [4] E. Agichtein, C. Castillo, D. Donato, A. Gionis, G. Mishne, "Finding High-Quality Content in Social Media", *ACM Proceedings of the 2008 International Conference on Web Search and Data Mining*, New York, NY, U.S.A., 2008, pp. 183-194.
- [5] Y. Amichai-Hamburger, G. Vinitzky, "Social Network Use and Personality", *Computers in Human Behavior*, Elsevier, Vol. 26, No. 6, 2010, pp. 1289-1295.
- [6] M. J. Grohol, "Using Social Media as New Tool to Explain Human Behavior", *PsychCentral.com*, 14/2/2014, [Online]. Available at: psychcentral.com/news/2014/02/14/using-social-media-as-new-tool-to-explain-human-behavior/65880.html.
- [7] "Go-Gulf.com", "Social Media Usage in Middle East – Statistics and Trends", 4/6/2013, [Online]. Available at: www.go-gulf.com/blog/social-media-middle-east/.
- [8] B. P. S. Moore, "A Survey of Cloud Computing and Social Networks", *Network and Communication Technologies*, Vol. 2, No. 2, 2013, pp. 11-16.
- [9] M. A. Kaplan, M. Haenlein, "Users of the World, Unite! The Challenges and Opportunities of the Social Media", *Business Horizon*, Vol. 53, No. 1, 2010, pp. 59-68.
- [10] J. Taylor, "The Bad, the Ugly, and the Good of Children's use of Social Media", *Huffpost Parents*, 28/5/2013, [Online]. Available at: www.huffingtonpost.com/dr-jim-taylor/the-bad-the-ugly-and-the-_b_3346768.html.
- [11] K. Moore, J. C. McElroy, "The Influence of Personality on Facebook Usage, Wall Postings, and Regret", *Computers in Human Behavior*, Elsevier, Vol. 28, 2012, pp. 267-274.
- [12] T. Correa, A. W. Hinsley, H. G. Zuniga, "Who Interacts on the Web? The Intersections of Users' Personality and Social Media Use", *Computers in Human Behavior*, Elsevier, Vol. 26, No. 2, 2010, pp. 247-253.
- [13] C. J. Dunlap, R. P. Lowenthal, "Tweeting the Night Away: Using Twitter to Enhance Social Presence", *Journal of Information Systems Education*, Special Issue, Vol. 20, No. 2, 2009, pp. 129-136.
- [14] R. Mourtada, F. Salem, "Social Media in the Arab World: The Impact on Youth, Woman and Social Changes", *European Institute of the Mediterranean (IEMed)*, Barcelona, 2012, pp. 269-274.
- [15] "The Social Clinic", "The State of Social Media in Saudi Arabia 2012", 6/1/2013, [Online]. Available at: www.thesocialclininc.com/the-state-of-social-media-in-saudi-arabia-2012-2/.
- [16] N. Parasie, "Once Wary GCC Governments Warm to Social Media", *The Wall Street Journal: Middle East*, 3/9/2013, [Online]. Available at: blogs.wsj.com/middleeast/2013/09/03/once-wary-gcc-governments-warm-to-social-media/.
- [17] P. Gundecha, S. Ranganath, Z. Feng, H. Liu, "A Tool for Collecting Provenance Data in Social Media", *Proceedings of the 19th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, Chicago, Illinois, USA, 2013, pp. 1462-1465.
- [18] C. Bier, "How Usage Control and Provenance Tracking Get Together – A Data Protection Perspective", *IEEE Security and Privacy Workshops*, 2013.
- [19] "Golf Business", "Revealed: The Top 10 GCC Social Media Brands", 30/9/2012, [Online]. Available at: gulfbusiness.com/2012/09/the-top-10-gcc-social-media-brands#U3ea4nYsnbo.



-
- [20] S. Alshaer, F. Salem, “The Arab World Online: Trends in Internet Usage in the Arab Region”, The Arab Social Media Report Series, Governance and Innovation Program, Dubai School of Government, OECD Publishing, 2012.
- [21] “Arab Social Media Report”, Transforming Education in the Arab World: Breaking Barriers in the Age of Social Learning, 6/2013, [Online]. Available at: www.slideshare.net/prayukth1/arab-social-media-report-24046476.
- [22] “Arab News” , “Future Role of Social Media in Focus”, 9/2013, [Online]. Available at: www.arabnews.com/news/463528.