AN INVESTIGATION OF SOCIAL MEDIA USE IN SAUDI ARABIA

Sanaa Askool

Informatics Research Centre, University of Reading, Reading, U.K.

Keywords: Social Media, Web 2.0, Saudi Arabia, Developing Countries.

Abstract: Social media are new communication tools and exist in a range of forms that allow a user to connect and interact with others. Additionally, they offer a way to create a collaborative environment through participation and sharing information. Even though social media tools are widely used, it is not well understood how individuals' concerns and motivations influence their use. This paper aims to investigate the use of social media among people in Saudi Arabia using a survey method to understand the impact of cultural restrictions on individual's motivation, intention behaviour and their actual use in business. Based on the research results, users' attitude and behaviour towards the use of social media are discussed.

1 INTRODUCTION

The fast growth of Web 2.0 technologies that have been observed over the past few years is changing the daily life of many people around the world. What attract individuals to use social media are the ease of connection, communication, participation and collaboration, as well as avoidance of restriction for meeting people who are in different places. In addition, they provide people with new and different ways to interact over the Internet; using their PCs or mobile devices. At the same time, the engagement with these tools creates potential benefits as well as concerns about the ways people are using them. Similar to other communications tools, social media services include certain social norms, rules and principles which users have to follow.

Attitudes towards social media and their impacts have been studied by researchers in the developed countries (Dinev et al., 2009, Wu et al., 2008). However, to the best of our knowledge, there is no study that focuses on peoples' behaviour towards using social media tools in the Middle East, in particular in Saudi Arabia. The kingdom of Saudi Arabia currently is experiencing a rapid social change as a result of wealth created by its oil and the government's commitment to modernization. It is also facing population growth coupled with the young-age structure of the Saudi population (Ministry of Economy and Planning Report, 2009). As a result, we believe that it is important to study

the effects of social media on Saudi society and its people's attitude and behaviour towards using them.

The survey conducted look at the social media that are used by Saudi society. It aims to understand how people are using these sites and their attitudes and behaviours towards this form of communication tools. This paper draws on a quantitative research method; using a questionnaire for people in Saudi Arabia who are using these websites in their everyday lives and activities. One of the purposes of this paper is to see whether the growth of social media can be considered as a positive approach to develop social and business relationships and as a widely used source of information.

2 BACKGROUND

2.1 Social Media / Web 2.0

Social media and Web 2.0 are two terms that are often used interchangeably which refer to highly interactive technologies that emphasise human interaction, collaboration and connectivity (Burns, 2008). Blogs, microblogging, wikis, podcasts, social networking services (SNS), video and RSS feeds are the most common types of social media. In this paper we will try to cover some of those tools:

Blogs are online journals (Mayfield, 2006) offering many different messages such as long essays, personal diaries or links to other websites.

Microblogging is a real-time communication publishing that combines social networking with bite-sized blogging where messages are limited to 140 characters. Twitter is the most popular and fastest growing service.

SNS: Personal web pages that focus on building online communities and interacting with others to share information, interests and activities (Kolbitsch and Maurer, 2006). The most famous SNS are Facebook, MySpace, and LinkedIn.

Wikis: enable a group of people to co-author and interact by adding or editing articles online (Kolbitsch and Maurer, 2006). Wikipedia, a widely known online encyclopaedia, is the most famous example, edited by users globally.

Over the past few years, these social media tools have spread widely among individuals (Chui et al., 2009) and have attracted attention of practitioners and researchers. According to Nielsen's (2010) report almost three quarters (74%) of internet users around the world are using SNS/blogging sites while the average hours of using these sites equals six hours per month. It was also revealed that more than 100 million users access SNS every month (Chui et al., 2009). It is clear that a massive growth can be highlighted and using these tools is not limited to younger generations. According to a survey conducted by Pew Internet to explore the Internet usage in the US (Madden, 2010), the use of social media has increased significantly and the quickest growing age group is over 30. Moreover, the number of users on SNS almost doubled over a year for the 50 and over age group (Madden, 2010).

Nielson (2009) revealed that the global use of SNS has dramatically increased from December 2007 to December 2008; the SNS have attracted close to 67% of the total online global population, up from 61% the previous year. Members use these websites for interacting, managing relationships and keeping friends updated on their lives by sharing status updates, photos and video (Nielsen Online, 2009). The main reason for this widespread attention can be attributed to the fact they have attracted millions of people who use them as their preferred communication channel. While a wide range of tools are coming under the list of social media, in this paper we will cover the most common ones.

People use social media tools for personal and professional use (O'murchu et al., 2004). Several attractive factors that encourage people to join these websites were discussed by Dinev (2009) and Wu et al. (2008). Social media tools allow groups of people to interact with each other or with other interested members, with people from other disciplines with similar interests, and with industry professionals and mentors. They are easy and effective tools to create and manage their relationships (O'murchu et al., 2004). More individuals have been encouraged to be a part of these social and professional networks as a result of the development of the infrastructure of these tools (O'murchu et al., 2004). In summary, all of these tools can be used within an enterprise to support or replace their current communication, cooperation, collaboration and connection efforts.

2.2 Saudi Arabia and Internet Usage

In order to understand the impact of social media on Saudi life, it is important to investigate the Saudi Arabian culture. One of the key factors that affect not only Saudi social life but also business is the family : the most important social institution in community because of the importance of family ties is based on Islam (Al-Saggaf, 2004). The religion of Saudi Arabia is Islam, a Muslim must keep in contact with other members in the extended family at all times and offer them anything considered as a way of keeping ties with them (Al-Saggaf, 2004). Therefore, Saudis prefer building social and business relationships with family members rather than others (Long, 2005). However, rapid modernisation and increased interaction with the outside world resulted in changing in the Saudi social environment.

In terms of business, most of Saudi firms are family businesses that are owned and operated by the dominance of a family and the senior executive positions are filled by wealthy and well-educated immediate family members (Long, 2005). In addition, a family firm is considered as the social welfare safety net that assists all members of the extended family. Conversely, social networks have also an impact on business; given a good relationship with the right person, it will help a firm to sell their product (Rodenbeck and Wells, 2004). Therefore, it seems that Saudis have a different way of doing business and managing relationships.

At the same time, the growing number of educated people in Saudi Arabia, who are now participating in the different roles of technical, professional, and managerial positions, has been accompanied by a fast growth in Internet usage from around 1 million in 2001 to an estimated 11.4 million and the penetration rate increased to 43.6% at the mid of 2011 (Internet World Stats, 2011). In addition, Saudi Arabia is considered as one of the fastest growing Internet markets and as the best country among Arab countries in broadband speed with average 3.53Mb/s (Kassar, 2010). According to

the CITC (2010), a remarkable increase in the number of broadband subscriptions from 2.75 million to 4.4 million between 2009 and 2010. This growth was due to an exceptional grow in wireless and wireless broadband and connections; grew by more than 100% over 2009 which representative to two-thirds of full broadband connections. In the mean time, competition in the mobile telecommunications market has resulted in main improvements in service offerings, quality of service, customer care, reduced prices, and subscriber growth in using online services. A study in using information technology (IT) in Middle East shows that usage behaviours are often different from those reported in the West due to cultural differences (Alsukkar and Hasan, 2005). In Saudi Arabia, culture continues to provide an important contribution to the business environment; there are tightly interwoven personal relationships, thus, social networks are expected to play a more significant role in various aspects of the community including business (Long, 2005).

The social media revolution in Arab world has been viewed either negatively or positively by contributing to economic growth globally (Arab Social Media Report, 2011). It has also indicated that social media tools have the potential to promote social inclusion and create opportunities for employment, entrepreneurship and development (Arab Social Media Report, 2011). Morrison (2010) states that based on The Facebook Global Monitor Data From Inside Face Gold report, Saudi Arabia achieved an impressive growth of 13.4% in active users between March and April 2010 and, with its relatively low penetration rate, there are more opportunities for growth in the future. It seems that social media have attracted young people in Saudi Arabia and freed them from some restrictions, giving them chance to express themselves and communicate with others.

3 RESEARCH QUESTIONS AND METHODOLOGY

The literature review suggested that different external factors influence the use of technology and may be experienced differently by different users. Culture has been highlighted to be an external factor that influences the use of technology and information system—which leads the question of how society culture influence the behaviour intention and in turn the actual use of such a system. Straub et al. (2003) proposed a model called Cultural

Influence Model and found that cultural beliefs have great impact on resistance to IT transfer in Arab countries. Loch et al. (2008) tested this model to investigate how culture-specific beliefs and values can enable and impediment the use of Internet in Arab countries. They revealed that both social norm and the degree of technological culturation influence both individual and organisational use and acceptance of the Internet. On the other hand, it has also suggested that motivation plays great roles in forming the user behaviour towards new technology (Davis et al., 1992). Two types of motivation were highlighted: intrinsic motivation and extrinsic motivation. Davis et al. (1992, p.112) defined extrinsic motivation as "the performance of an activity because it is perceived to be instrumental in achieving valued outcomes that are distinct from the activity itself, such as improved job performance, pay, or promotions". Intrinsic motivation refers to "the performance of an activity for no apparent reinforcement other than the process of performing the activity per se" (1992, p.112). Despite the fact that both types of motivation have effect on the user intention to use technology, different impacts across different users may be found. Accordingly, limited studies investigate the influence of cultural restrictions on users' motivation, behavioural intention and finally the actual use. This leads to the following research questions:

Q1: How do cultural restrictions in Saudi society affect the use social media?

Q2: What is the relationship between cultural restrictions in Saudi society and users' motivation to use social media?

Q3: What is the relationship between cultural restrictions and users' intention to use social media?

Q4: What is the relationship between cultural restrictions and the actual use of social media?

A conceptual model (Figure 1) was developed which guided data collection and analysis to understand how it does relate to cultural restrictions, users' motivation, behavioural intention and actual use in both social and business.
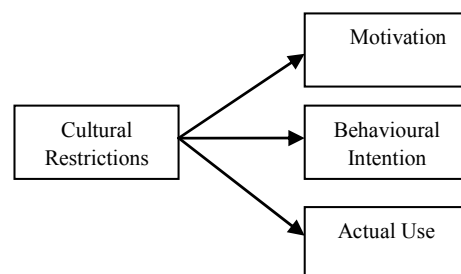

Figure 1: A conceptual model for understanding social Media usage.

The study was conducted through a survey method for collecting the data with a total sample of 600 people who were pre-selected from the Saudi community. The survey was conducted between 1st June and 15th July 2010. Most of the respondents were participants of social media websites. A total of 362 valid responses were collected, yielding a response rate of 60.1% (362/600).

3.1 Survey Administration

A questionnaire was designed for this purpose in English, translated to Arabic. To confirm the validity of the instrument, two academics who were knowledgeable in instrument development and in the field of internet technology use reviewed the survey. Then, the survey was initially sent to some IS experts for review and feedback and then pr-tested with ten people located in Saudi Arabia. The feedback in general was positive; only some questions were rewarded to improve their clarity. An online survey was preferred to attract interested Web users and due to the fact that social media usage attitudes and behaviour was the object of the study. The participants were asked which of listed communication and interactive tools they used, including, SNS, instant messaging (IM), blogs, wikis, podcast, audio and video tools, and for what purposes. They were also asked if they know the terms "*social media* and *social networking sites*".

In the survey, we defined a cultural restriction as any issue or fear related to Saudi culture that influences their use of social media due to the fact that culture is one of the most key factor that play major roles in Saudis' social and business life. As the survey were developed to capture the perceptions of cultural restrictions, users' motivation, behavioural intention and the use of social media, participants were asked to express their level of agreement on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

3.2 Measurement Scale Validation

Measurement items were developed based on literature review or were identified from thorough consultation with information system experts to ensure their validity and reliability.

Data was analysed using SPSS statistical software packages. Scale reliability test were conducted in order to confirm the reliability of the instruments. The final instrument includes 22 items presented in Table 2 and 4 with a Cronbach's alpha (α) reliability of 0.780. This instrument includes:

seven items for capturing cultural restrictions with α = 0.721); eight items for measuring motivation determinants with α = 0.772 (Intrinsic: 0.766 and extrinsic: 0.719); and 5 items for behavioural intention determinants with α = 0.792. Each instruments questions have an acceptable degree of reliability; an α greater than 0.7 is often used as the threshold for reliability (Hair, 1998). Then, frequencies, percentage, average, ANOVA and correlation tests were used to analyse the data.

4 RESULTS

4.1 Demographic Characteristics

Because the paper focuses on individuals' attitudes towards the use of social media, demographic information was a part of the survey. Table 1 shows the distribution of the demographic characteristics of the respondents. Only employed respondents were broken down into five groups (sales & marketing, customer services, information technology, human resources and education) based on their nature of job, i.e. students were excluded from these groups.

4.2 The Use of Social Media

The survey shows that people in Saudi Arabia are aware of the term social media and social networking sites, i.e., where users can share their thoughts and experiences and leave comments on each others' profiles. 80.4% were knowledgeable with these terms and only 19.6% were not familiar. In addition, the survey indicates that people tend to use the sites' brand names such as Facebook rather than the generic term. Figure 2 presents the awareness of these terms based on age groups.

In terms of main social media tools that are used by Saudi society, we found that a different combination of tools are used for both work and social/leisure purposes. It was found that YouTube is the most popular tool used by Saudi society for social life with 92.3%. However, only 44.5% of them used it for work. In terms of SNS, Facebook is used for social, leisure purpose and for professional purpose as well more than LinkedIn. This could be because the aim of LinkedIn is to create professional network rather than a social one or simply that Facebook is more popular than other SNS. Wikipedia and Google Docs are considered appropriate for professional work more than for personal and social life. This may be due to the fact that around 43.1% of respondents were students and

employees who are working in educational sectors. Conversely, while Twitter is well known in Saudi society, the percentage of people who are using this service for professional activities was only around 40% and 62% for social purpose. A significant number of people (more than 82%) stated that they never used or heard about social bookmarking services such as Digg in addition to other sites such as MySpace and Google Wave.

Table 1: Profile of survey sample.

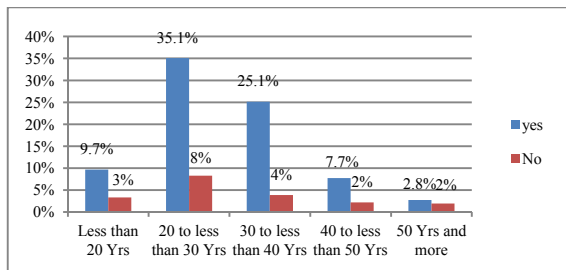| Respondents Characteristics	Number of respondents (n=362)	Percentage
Age		
Under 20	47	13.0
20 to less than 30	157	43.4
30 to less than 40	105	29.0
40 to less than 50	36	9.9
50 and more	17	4.7
Gender		
Male	218	60.2
Female	144	39.8
Education		
High school	70	19.3
Diploma	12	3.3
Bachelor's degree	152	42.0
Master's degree	102	28.2
Doctoral degree	26	7.2
Occupation		
Employee-government firm	71	19.6
Employee-private firm	152	42.0
Self employed	43	11.9
Student	93	25.7
Unemployed	3	0.8
Department		
Sales & Marketing	71	19.6
Customers Services	18	5.0
Information Technology	78	21.5
Human Resource	57	15.7
Education	45	12.4
Other	93	25.7

Figure 2: Awareness of social media and social networking sites terms based on age groups.

Based on the responses, we found that people are using some alternative sites and they also emphasised that local web forums in Saudi Arabia are widely used as social networking tools. Overall, a person uses at least 3-4 applications from the list provided in the survey. An adult usually uses a variety of social media sites; it is common to have a profile on two or three social media sites with the main ones being Facebook and Twitter. The level of activity on social media varied among the respondents. Based on the participants answers, 58% of respondents are either partially (36 %) or actively (23%) contributing to these sites and most active users are employees in private organizations and students (see figure 3).
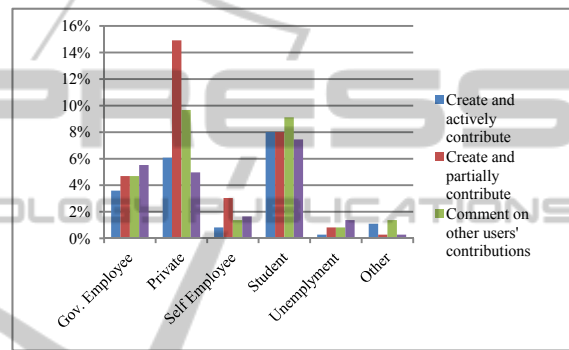

Figure 3: Users' contribution on social media sites based on their occupation.

4.3 Concerns and Restrictions

As Saudi society is considered as very conservative community the survey highlights the major concerns and restrictions of the use of social media in Saudi Arabia which is presented in Table 2. These factors have been considered as they tend to have direct effect on their usage behaviour. One of the answers emphasized the privacy issue: "*I think the main issue for most people would be privacy. I have seen people in America (Saudis [in America]) and Americans) talk about Facebook or Twitter as a threat to our lives. So by time and experience people will figure whether they will be (or not) involved in such social/communication websites*".

4.4 Demographic Factors

In order to get a better understanding of individuals' attitudes, behaviours and barriers of using social media amongst the Saudi society, the effect of several demographic factors such as gender, education level and occupation on the use of social media decisions were analyzed using ANOVA

Table 2: Users concerned regarding using social media.

Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard Deviation
Restrictions around meeting new people	90 24.9%	180 49.7%	51 14.1%	32 8.8%	9 2.5%	2.14	0.97
Restrictions around giving out personal details	108 29.8%	198 54.7%	30 8.3%	10 2.8%	16 4.4%	1.97	0.94
Rules around meeting people you met on Social Media Sites in person	99 27.3%	139 38.4%	56 15.5%	33 9.1%	35 9.7%	2.35	1.242
Only add others as friends if I know them before	144 39.8%	123 34.0%	63 17.4%	32 8.8%	0 0%	1.95	0.96
Restrictions around posting photos	162 44.8%	132 36.5%	56 15.5%	8 2.2%	4 1.1%	1.78	.86
Restrictions around posting video	142 39.2%	121 33.4%	77 21.3%	10 2.8%	12 3.3%	1.98	1.01
Rules in privacy settings	144 39.8%	126 34.8%	62 17.1%	27 7.5%	3 0.8%	1.95	0.97
I am not familiar with social media tools	4 1.1%	32 8.8%	56 15.5%	201 55.5%	69 19.1%	3.83	0.88

(analysis of variance) with the level of significance of 0.05 for all tests. The summary of the concerns and restrictions questions and the demographic factors along with ANOVA analysis is presented in Table 3. According to the result, there were significant relationships between demographic characteristics and the use of social media.

4.4.1 Gender

Some differences were highlighted among the Saudis in terms of their views of cultural restrictions that may hinder them to use social media. Female respondents were more concerned than male respondents about meeting new people either face to face or via social media. According to the survey, female respondents agreed that 'restrictions around meeting new people' is one of the major concerns that may delay the social media usage among Saudis with mean score 3.15 compared to 1.86 for men. In terms of 'rules around meeting people you met on social media sites in person', it was also perceived differently by gender: Women (mean score 3.24) agreed more strongly than men (mean score 2.50).

Similarly, women have more 'restrictions around giving out personal details' than men. There was a difference between male and female with mean score 1.06 and 2.25 respectively. In addition, a great difference was found in participants' responses regarding 'only add others as friends if I know them before' between male (mean score 1.50) and female (mean score 3.24).

The reasons for these differences could be due to the fact that Saudi sociality is classified as gender segregation community and the social and cultural restrictions on Saudi women are more than the one on men; male-female interaction must be strictly limited. Interestingly, some of the male respondents, for example, stated that *"I only add to my network and share information with people I know before"*. This could confirm that some Saudis regardless of gender prefer to keep their relationships within family member and friends.

Based on responding to the statement 'restrictions around sharing photos' and 'restrictions around sharing videos', there was a significant difference between the perception of the male (mean scores 1.70 & 1.50) and female (mean scores 2.44 & 3.24). These results were expected in terms of sharing personal photos and videos as Saudi society considers publishing personal photos and videos on these sites as a serious matter and these activities contain several dimensions of psychological, social and ethical issues that may lead to harm and damage to family reputation. However, professional women confirmed that they are using these sites to advertise products and services or to recruit people which required publishing some photos and videos. However, professional women confirmed that they are using these sites to advertise products and services or to recruit people which required publishing some photos and videos.

Table 3: Influence of demographic factors on the use of social media.

	Cultural Restrictions		Mean	SD	F	Significance
Gender	Restrictions around meeting new people	Male	1.86	0.89	12.650	.002
		Female	3.15	1.54		
	Restrictions around giving out personal details	Male	1.06	0.86	8.235	.004
		Female	2.25	1.04		
	Rules around meeting people you met on Social Media Sites in person	Male	2.50	1.84	3.673	.001
		Female	3.24	1.51		
	Only add others as friends if I know them before	Male	1.50	0.84	4.039	.000
		Female	3.24	1.51		
	Restrictions around posting photos	Male	1.70	0.88	5.390	.003
		Female	2.44	1.07		
	Restrictions around posting video	Male	1.50	0.84	19.652	.000
		Female	3.24	1.51		
Education Level	Restrictions around giving out personal details	High School	1.51	0.76		
		Diploma	2.08	1.17		
		Bachelor	2.07	1.02	5.396	.000
		Master	2.11	0.92		
		Doctoral	2.04	0.45		
	Rules in privacy settings	High School	2.00	1.01		
		Diploma	1.75	1.14		
		Bachelor	1.88	0.94	5.373	.000
		Master	2.98	1.02		
		Doctoral	3.19	0.80		
The Nature of Respondents work	Only add others as friends if I know them before	Sales & Marketing	1.23	0.58		
		Customer Services	1.13	0.47		
		IT	3.38	1.20	5.783	.000
		HR & PR	2.26	0.80		
		R & D	2.67	0.96		
	Rules in privacy settings	Sales & Marketing	1.44	0.43		
		Customer Services	2.31	1.12		
		IT	3.04	1.34	13.123	.001
		HR & PR	1.48	0.45		
		R & D	1.18	0.38		
	I am not familiar with social media tools	Sales & Marketing	2.55	1.82		
		Customer Services	4.01	0.91		
		IT	2.04	1.64	3.280	.003
		HR & PR	3.48	1.86		
		R & D	3.18	1.91		

4.4.2 Level of Education

In the survey result, education level did not show a considerable influence on the perception of the use of social media as much as the gender factor. Only two statements were recognised as matters of concern: 'restrictions around giving out personal details' and 'rules in privacy setting'.

However, respondents who belong to the higher education level were slightly more in agreement that 'restrictions around giving out personal details' could prohibit Saudi people to use these tools than those who belong to the high school level. One

reason behind this difference could be that social media have attracted young people as a way to create relationships outside their family members and close friends. One can say that young people see these tools as a fun and easy leisure activity so the privacy and safety issues did not come to the top of their mind. Also one can argue that there are shifts in attitudes towards cultural issues in the Saudi society.

In contrast, differences among several level of education according to mean scores, high school (2.00), diploma (1.75), bachelor degree (1.88), Master (2.98) and PhD (3.19) was also observed in terms of privacy. This indicates that respondents

who have a postgraduate degree would prefer to have more control in privacy and security setting when they use social media than others respondents.

4.4.3 The Nature of Work

In this study, most of respondents (81.2%) were employed. The survey result indicated that there are differences among the professions of respondents in terms of privacy and security issue in the use of social media. The sentence 'only add others as friends if I know them before' was perceived differently by respondents from different departments. Respondents who are working with clients, i.e., sales & marketing (mean score 2.27) and customer services (2.31) were less concerned about adding people that they did not know before to their network, compared to those in IT and R&D. The reasons behind such difference in perception could be attributed to the nature of their job and tasks.

In terms of privacy setting for achieving better understanding of respondents' attitude, there was a significant difference among various jobs classification; respondent who belong to IT and customer services agreed (mean score 3.04 and 2.31 respectively) that they would require more privacy and security setting but respondents from other departments agreed only to some extent.

On the other hand, professionals agreed that 'I am not familiar with social media tools' is one of the reasons make them not to use social media. A great difference was found in familiarly with social media usage: professionals in IT and sales & marketing were less in agreement with the statement 'I am not familiar with social media tools' with mean score 2.04 and 2.55 respectively. The reason for this could be that most government and private enterprises block these websites. One or respondents stated that '*despite the benefits provided by social media, many of firms are reluctant to use these tools*'. These differences in perception could be because Saudis prefer to keep their face-to-face interaction.

4.5 Correlation Analysis

We argued that there are relationships between cultural restrictions and users' motivation, behavioural intention and the actual use of social media. Therefore, in order to assess whether there are association relationships between these factors, a correlation analysis was applied. The summary of this analysis results is presented in Table 4. The independent variable is cultural restrictions and the

dependent variables are user motivation, behavioural intention and actual use.

Table 4: Correlations between cultural restrictions, users' motivation, behavioural intention and actual use of social media.

Dependent Variables	Independent variable
Intrinsic Motivation	Cultural Restrictions
Keeping in touch with family members	.292**
Keeping in touch with friends	.283**
Managing existing relationships	.059
Sharing ideas, photos and video	-.105*
Extrinsic Motivation	
Meeting new people	.270**
Creating new social networks	.156**
For communication and general discussion with others	.104*
Looking for Professional/business networking	.039
For collaborative business work	.098
Behavioural Intention	
I do not have interest in using social media tools	.404**
I prefer to rely on face-to-face of using social media	.459**
I communicate with people in other ways	.401**
Using social media is waste of time	.494**
Social media use (Business Activities)	
Talking about shopping	.083
Advertising and Marketing	.054
Recruiting Purpose/Seeking Job	.007
Public Relations	.038
Knowledge Transfer	.014
Engagement with customers	.038
Social media use (Social Activities)	
Planning Events	.028
Engaging in Social Issues	-.054
Engaging in Political Issues	-.014

Note: Results calculated with Pearson's r and significant correlations are shaded *p<.05, **p<.01

The motivation includes intrinsic and extrinsic motivations. Cultural restrictions concern relates to all items of intrinsic motivation except "Managing existing relationships" item. The negative correlation coefficients result point to the greater

level of cultural concerns, the less likely that people will share ideas, photo and video with other over social media. Regarding extrinsic motivation, cultural restrictions relate to social networking item in terms of meeting new people (270^{**}), creating new social network ($.156^{**}$) and communicating with other for general discussions ($.104^{*}$).

With regards to the influence of cultural restrictions on the behavioural intention variable, the coefficient values of all items are higher than other variables. This means that culture has significant impact on user's behavioural intention. "Using social media is waste of time" item has the highest coefficient result ($.494^{**}$) followed by "I prefer to rely on face-to-face of using social media" ($.459^{**}$).

The actual use of social media in Saudi society is captured through two measures: social usage and business usage. Unexpectedly, even though these cultural restrictions have considerable influence on user's behavioural intention to use social media, no relationships were found between cultural restrictions and the actual use of these tools in either social or business activities.

It could be said that the results of the correlation test present both surprising and confusing results. As the correlation coefficients were relatively low, it is difficult to understand how cultural concerns influence the use of social media in Saudi society. However, these results can highlight some insights.

5 DISCUSSION

The growth in the use of social media websites has encouraged individuals and enterprises to improve their personal and business relationships in addition to employing them in business activities such as marketing, sales and recruitment. As more and more people use these tools, it is important to understand their attitudes towards usage of these technologies. This paper investigated several significant issues impacting users' attitude and behaviour towards these tools in the context of Saudi Arabia.

We found that survey respondents are well aware of these tools and they are using them for social and leisure purposes more than business activities. They are using them to communicate through their PCs and mobile phones. YouTube, Facebook, and Twitter were the top three tools used by Saudi society, in that order. iTunes was ranked of highest interest, followed closely by Twitter. In terms of professional activities, Wikipedia, Google docs and LinkedIn websites were the most popular tools. However, while there are factors that encourage

people to use these communication tools, some cultural restrictions were reported, as well as, issues related to individuals' views towards these tools. As individuals' attitude and behaviour towards such a new innovation usually has an impact on usage and acceptance behaviour (Davis et al., 1989, Venkatesh et al., 2003), the findings may help system designers when designing tools or software in order to satisfy users and allow them to have a greater control in managing their accounts. For example, while some participants are more open to sharing their personal information, other make full of use of set privacy level features and they ask for more control.

It is notable that there were significant differences in the usage of these social media based on the demographic factors. It is interesting to find that in terms of gender, there exists a significant difference between male and female. This finding is similar to the results from previous study (Eyrich et al., 2008, Curtis et al., 2010). For example, the male used a greater number of social media tools and features and they are more active than female. This is indicative of the fact that females have more concerns towards using social media than male because of the social and cultural issues around the Saudi society. A study revealed that 68% of Saudi girls prefer to conceal their family name on their profiles, and 32% of them have accounts in Facebook under an alias or false name compared to 80% of Saudi boys who are members of Facebook under their own full name (Khaddaf 2010). It is also common for Saudi women to publish photos of their father, brother, a cartoon, or a drawing rather than posting photos of themselves (Khaddaf, 2010). Our study also found that differences exist between people with different academic levels with different background. It is clear that demographic factors have a strong influence on decisions regarding the use of social media. In addition, cultural restrictions and users' concerns have been considered as they tend to have direct effect on their usage behaviour.

According to the results of the correlation statistical test, some relationships were found between cultural restrictions, motivation, behavioural intention and actual use. For example, relationships were found between these restrictions and users' motivation to use social media in creating social networks but not when they doing business. We can argue that as Saudi Arabia is a very conservative society, these restrictions could have affects on using these tools in terms of creating personal relationships rather than on building business relationships. This also confirms that Saudi culture is facing a cultural shift in regards to

business and social media will create change in Saudi society and will open new business opportunities. Conversely, cultural restrictions have more impact on behavioural intention than other constructs. This could be due to the fact that Saudis still prefer to use other ways to be in touch with their relatives or friends or even when creating business, such as face-to-face and through phone calls. One of the respondents emphasised that people in Saudi Arabia "*still rely on their mobile and SMS to communicate with others*".

Overall, the research results show that social media could be important tools to create relationships with others for both social and business life. A limitation of this research is that it based only on a survey method and the survey was limited to the people who are currently using social media. Another limitation of our analysis was the relatively small size of the sample compare to the total population of Saudi Arabia.

6 CONCLUSIONS

The paper investigated how people in Saudi Arabia are using social media tools, as well as their attitude, and behaviour towards them. A quantitative survey method was used to conduct this research. We analysed how gender, education level and occupation impact users' behaviour towards using these tools. In addition to understanding the individuals' behaviour towards social media use, the focus of these explorations is to discover current and potential use of social media in terms of business activities. As the result of this paper was based on descriptive analyses, ANOVA and correlation tests, future work will include a further statistical analysis to investigate the relationships between privacy and security concerns, and trust in social media tools and their members and other different issues that were examined in the survey. Furthermore, a qualitative approach could be used to investigate and look at the attitudes, behaviours, and wider issues that arise from survey results. Conducting interviews with some survey respondents may help to present rich insights around individuals' use of, and attitude towards social media.

REFERENCES

Al-Saggaf, Y. 2004, The effect of Online Community on Offline Community in Saudi Arabia. *Journal of Information Systems in Developing Countries (EJISDC)* 2**,** 1-16.

AlSukkar, A. & Hasan, H. 2005, Toward a model for the acceptance of Internet banking in developing countries. *Information Technology for Development,* 11**,** 381-398.

Arab Social Media Report 2011, Facebook Usage:Factors and Analysis. Dubai, Dubai School of Government.

Burns, K. S. 2008, A historical Examination of the Development of Social Media and its Application to the Public Relations Industry. *ICA Preconference.* Montreal, Quebec, Canada

Chui, M., Miller, A. & Roberts, R. P. 2009, Six Ways to Make Web 2.0 Work. *McKinsey Quarterly* 64-73.

CITC 2010, CITC Annual Report Riyadh, Communications and Information Technology Commission.

Curtis, L., Edwards, C., Fraser, K. L., Gudelsky, S., Holmquist, J., Thornton, K. & Sweetser, K. D. 2010, Adoption of social media for public relations by nonprofit organizations. *Public Relations Review,* 36**,** 90-92.

Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. 1989, User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science,* 35**,** 982-1003.

Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. 1992, Extrinsic and Intrinsic Motivation to Use Computers in the Workplace1. *Journal of Applied Social Psychology,* 22**,** 1111-1132.

Dinev, T., Xu, H. & Smith, H. J. 2009, Information Privacy Values, Beliefs and Attitudes: An Empirical Analysis of Web 2.0 Privacy. *The Proceedings of 42nd Hawaii International Conference on System Sciences (HICSS 42).* Big Island, Hawaii.

Eyrich, N., Padman, M. L. & Sweetser, K. D. 2008, PR practitioners' use of social media tools and communication technology. *Public Relations Review,* 34**,** 412-414.

Hair, J. F. 1998,*Multivariate data analysis,* Englewood Cliffs, N.J. ; London, Prentice Hall.

Internet world stats 2011, Internet Usage and Population Statistics.

Kassar, T. 2010, The top broadband speed countries in the Arab World. *Interactive Middle East.*

Khaddaf, I. a. 2010, 68 Percent of Saudi Girls Drop Last Name on Facebook. Asharq Al-Awsat

Kolbitsch, J. & Maurer, H. 2006, The Transformation of the Web: How Emerging Communities Shape the Information We Consume. *Journal of Universal Computer Science,* 12**,** 187-213.

Loch, K. D., Straub, D. W. & Kamel, S. 2008, Diffusing the Internet in the Arab World: The Role of Social Norms and Technological Culturation. IN Leidner, D. E. & Kayworth, T. R. (Eds.) *Global information systems the implications of culture for IS management.* Amsterdam; London, Elsevier Butterworth-Heinemann.

Long, D. E. 2005,*Culture and customs of Saudi Arabia,* Westport, Conn., Greenwood Press.

Madden, M. 2010, Older Adults and Social Media: Social Networking Use Among those Ages 50 and Older Nearly Doubled Over the Past Year. Washington, D.C, Pew Research Center.

Mayfield, A. 2006, What is Social Media? , iCrossing.

Ministry of Economy and Planning Report 2009, About Saudi Arabia.

Morrison, C. 2010, Saudi Arabia Leads the Middle East With High Growth in March. *Inside Facebook.*

Nielsen Online 2009, Global Faces and Networked Places. A Nielsen report on Social Networking's New Global Footprint.

Nielsen Online 2010, 2010 Media Industry Fact Sheet. The Nielsen Company.

O'Murchu, I., Breslin, J. G. & Decker, S. 2004, Online Social and Business Networking Communities. *DERI Technical Report 11/08/2004.* NUI Galway, Ireland, Digital Enterprise Research Institute.

Rodenbeck, M. & Wells, C. 2004, The Complete Idiot's Guide to Understanding Saudi Arabia. *The New York review of books.,* 51**,** 22.

Straub, D. W., Loch, K. D. & Hill, C. E. 2003, Transfer of information technology to the Arab world: a test of cultural influence modeling. *Advanced topics in global information management.* IGI Publishing.

Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. 2003, User Acceptance of Information Technology: Toward A Unified View. *MIS Quarterly,* 27**,** 425-478.

Wu, M.-Y., Chou, H.-P., Weng, Y.-C. & Huang, Y.-H. 2008, A Study of Web 2.0 Website Usage Behavior Using TAM 2. *Asia-Pacific Services Computing Conference, 2008. APSCC '08. IEEE.*