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THE ROLE OF NATIONAL CULTURAL DIFFERENCES IN USER ADOPTION OF SOCIAL NETWORKING

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ABSTRACT

Social networking sites are extremely popular around the world with millions of users logging in daily to reconnect with their friends or find new ones. Using Hofstede's dimensions of national culture and diffusion of innovation as theoretical basis this paper investigates whether users of social networking websites perceive and adopt online social networking differently across different cultures, specifically focusing on Morocco and the United States. Most studies of social networking websites have focused on the users in the United States. This research proposes a unique cross cultural comparison of social networking and its diffusion in different countries.

Keywords

Social networking, diffusion of innovation, national cultural dimensions, Morocco

INTRODUCTION

Information and communication technologies are changing the ways individuals communicate, socialize and learn. Recent years have seen an explosion of social networking sites such as Facebook, MySpace, hi5, Friendster, LinkedIn, etc. Social networking (SN) technologies are applications that enable the process of connecting people based on social ties and bonds. These websites are a virtual meeting place for friends, classmates, coworkers and people with similar interests, connections or affiliations. SN technologies have been in existence for a long time online. They started as Internet chat, instant messaging and discussion forums, and grew into portals that provide continuous communication and information sharing with one's friends and sometimes anyone else who wants to browse ones profile.

While most of the social networking websites are in English, there are many country and region specific sites serving different national and cultural groups (e.g. Cloob.com in Iran, iWiW.hu in Hungary, VKontakte.ru in Russia, CyWorld.com in South Korea, Grono.net in Poland, Hyves.nl in Netherlands). The concept of staying in touch with friends, reconnecting with old friends and acquaintances and meeting new friends has a broad cross cultural appeal. This paper considers the cultural differences and their moderating impact on adoption and use of social networking technology. Specifically, we focus on Facebook social networking platform and on two very different countries: United States and Morocco. We compare the Facebook adoption and use by US and Moroccan Facebook users based on several innovation characteristics and hypothesize that the differences and strengths in their perceptions of social networking technology are based on their underlying cultural differences.

SOCIAL NETWORKING SITES PHENOMENON

Social Networking sites are defined as "as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (Boyd & Ellison, 2007). Users join SN websites to satisfy their need for belongingness, esteem needs through self-presentation, and due to peer pressure (Krasnova et al. 2008). The most popular website, Facebook[1] started in early 2004 as a Harvard only SN application and over time expanded to include other universities, then high schools and today it supports even corporate networks (Boyd & Ellison, 2007). Many sites focus on specific interests (e.g., skispace.com) or regions, but the largest ones offer a variety of interactive tools for anyone wishing to maintain a personal online communication portal. Majority of the SN sites are open to anyone, yet some are by invitation only (e.g. aSmallWorld.com).

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[1] Facebook has more than 66 million active users. It counts an average of 250,000 new registrations per day since January 2007 (Facebook, 2008).

As millions of SN website users flock to these portals to socialize, the owners generate revenue by selling advertizing. In 2008 projected revenue for MySpace was $750 million, while Facebook expected to make $500 million and LinkedIn $100 million (Fitzgerald 2008). As SN websites collect a wide variety of personal data that its users are eager to share with the world, SN are able to specifically target advertising to its members based on member's interests and affiliations. The marketing potential of such databases is immense and most importantly users provide those detailed accounts of themselves for free and with a high degree of honesty.

Businesses are taking notice of SN sites and incorporate them into their interaction with customers and stakeholders. For instance, Southwest Yorkshire Mental Health NHS Trust has setup a group on Facebook to promote patient involvement and stimulate debate about its services (Nursing Standards Journal, 2007). Ernst & Young is reaching out to potential new recruits by answering questions from college students. Serena Software recently instituted Facebook Fridays to promote networking with Serena and to communicate with its partners, customers, potential employees and even people who may be running this company in the future (Li, 2007).

CULTURAL DIFFERENCES

Several studies have shown that difference in cultures may explain differences in perceptions, adoption and diffusion of information technologies (Srite & Karahana, 2006; Van Slyke, Bélanger, & Sridhar, 2005; Tan, Watson, & Wee, 1995). Cultures differ, according to Hofstede (1991), based on five dimensions: power distance, individualism, masculinity, uncertainty avoidance, and long term orientation. Power distance refers to the extent to which the less powerful members of a society expect and accept that power is distributed unequally. Individualism refers to the degree to which a society reinforces individual vs. group relationships and achievements. Masculinity refers to degree to which the distribution of roles between genders is clearly distinct. Uncertainty avoidance refers to the extent to which members of a society can tolerate or feel threatened by uncertain conditions. Long-term orientation focuses on the degree the society embraces, or does not embrace, long-term devotion to traditional, forward thinking values.

Table 1 presents scores for four dimensions of culture as calculated by Hofstede for Morocco, USA and world average. Originally Hofstede did not provide cultural dimensions for separate Arab countries; instead he clustered them under Arab World region which did not include Morocco. However, later Hofstede have estimated Morocco's scores which appear to be close to the Arab World cluster which included Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia, and the United Arab Emirates. Morocco is an Arab country located in North Africa and Muslim faith plays a significant role in the lives of its people. There is no estimate for long term orientation score for Morocco or for Arab World because long-term orientation category was added later to his studies and is available only for 23 countries. Consequently, we are only using four dimensions for comparison.

Dimension	Morocco*	USA	World Average
Power Distance	70	40	55
Individualism	46	91	43
Uncertainty Avoidance	68	46	64
Masculinity	53	62	50

*Estimated values by Hofstede

Table 1. Hofstede's dimensions of culture for USA and Morocco

Based on Hofstede's analysis high power distance (PD) (70) and uncertainty avoidance (UA) (68) are predominant characteristics of Arab World countries, and Morocco in particular. Morocco and United States greatly differ on all four Hofstede's cultural dimensions. Power distance score for Morocco is 70, which is significantly higher than US PD score of 40 and indicates high level of inequality of power and wealth. In uncertainty avoidance (UA) dimension, Morocco ranks among cultures with high scores (68 compared to 46 for USA). Cultures with a high UA score will prefer the tried and tested paths over taking risk and trying new methods. These societies are very risk averse and tend to adopt strict rules, laws, and policies to minimize uncertainty. Morocco's masculine dimension score of 53 (a little higher than 50 average and lower than 62 for US) suggests that Moroccans as a nation are less assertive and competitive than Americans and are more modest and caring. Morocco's individualism score (46) is significantly below US score of 91, in fact US has the highest score for individualism category in the world. This indicates that Moroccan culture is more collectivist. In collectivist societies,

"people from birth onwards are integrated into strong, cohesive in-groups, often extended families (with uncles, aunts and grandparents) which continue protecting them in exchange for unquestioning loyalty" (Hofstede, 2008).

DIFFUSION OF INNOVATION

Diffusion of innovation (DOI) theory explains how innovations spread within a social system (Rogers, 1995). DOI posits that five perceived characteristics of innovation affect adoption behavior (Rogers, 1995). These characteristics include relative advantage, compatibility, trialability, observability, and complexity. Moore and Benbassat (1991) in a study examining the diffusion of IT innovations have extended Rogers innovation characteristics to include eight characteristics namely voluntariness, relative advantage, compatibility, image, ease of use, result demonstrability, visibility, and trialability (Table 2). Because use of social networking sites is voluntary we decided not to use this variable in our study. DOI has been used in several studies as an underlying theory to understand IT adoption (Agarwal & Prasad, 1997; Agarwal & Prasal, 1998; Van Slyke, Bélanger, & Sridhar, 2005).

Innovation Characteristics	Definition
Relative Advantage	Degree to which an innovation is perceived as being better than its precursor
Compatibility	Degree to which an innovation is perceived as being consistent with the existing values, needs, and past experiences of potential adopters
Complexity	Degree to which an innovation is perceived as being difficult to use
Result Demonstrability	Degree to which the outcomes of using an innovation are apparent
Visibility	Degree to which the innovation is apparent and visible
Trialability	The ability to test a new innovation prior to committing to its usage
Image	Degree to which use of an innovation is perceived to enhance one's image or status in one's social system

Table 2. Innovation Characteristics

Online social networking is a massive social phenomenon and therefore, DOI can be helpful in examining how SN spread within a social system. SN is enabled by information and communication technology and heavily depends on continuous user participation. The benefits of using a social network increase as the network grows and as participants actively participate in socializing, information sharing and communication. Cultural differences not only affect the adoption of information technologies but also the way individuals perceive online socializing and social networks.

RESEARCH HYPOTHESES

Based on the cultural differences between the two countries (USA and Morocco), we hypothesize that users perception of SN websites and their participation in SN would differ significantly.

One of the primary features of sites such as Facebook is that it allows its users not only to meet new people but mostly to communicate and renew the ties with people who are part of the user's extended social network. A study by Steenkamp et al. (1999) on the impact of cultural dimensions on innovativeness reported that members of collectivist societies tend to be less innovative than those in individualistic societies. Since users frequently use SN to self-express (Krasnova et al. 2008), users from individualistic US culture are more likely to participate more actively in SN activities. Hence the following hypothesis:

H1: Moroccan users will have a lower perception of relative advantage of SN websites than US users.

Cultures that exhibit high uncertainty avoidance prefer traditional and tried methods over new innovations. In Morocco face-to-face interaction remains key to effective communication, and online socializing is less compatible with their traditional way of life. Moroccans are less individualistic than Americans and maintain close contact with their extended family and, thus, are less likely to seek connections out of their existing group. This is especially true for all collectivist societies (Straub et al., 1997). Opening ones personal life to the entire world or community is not compatible with a modest and less assertive culture. Consequently, we hypothesize the following:

H2: Moroccan users will have a lower perception of compatibility of SN websites than US users.

Moroccans high level of uncertainty avoidance makes then uncomfortable with uncertain and ambiguous task. Members of high uncertainty avoidance societies tend to have a feeling of "what is different is dangerous" (Hofstede, 1991, p.119),

whereas members of low uncertainty avoidance tend to have a feeling of "what is different is curious" (Hofstede, 1991, p.119). Therefore the relative complexity of social networking sites and their relative newness might lead Moroccan users to perceive them as less attractive to use than their American counterparts. Hence, we hypothesise the following:

H3: Moroccan users will have a higher perception of complexity of SN websites than US users.

More than 60% of Facebook and MySpace users reside in the USA (comScore, 2007). Since the majority of social networking sites are in English and based in the US, the benefits of joining a SN website for American users are more apparent. SN websites expand their membership through invitations generated by other users. Because social networking is not widely popular and Moroccans tend to avoid unknown, the connections generated by new users in Morocco will be fewer and thus, Moroccans will enjoy less obvious results. Similarly, and for the same reasons, visibility will be perceived less by Moroccan users than by US users.

H4: Moroccan users will have a lower perception of result demonstrability of SN websites than US users.

H5: Moroccan users will have a lower perception of visibility of SN websites than US users.

In societies that score high uncertainty avoidance, members tend to resist change and avoid new situations. Additionally, the exploration of new products and ideas may not be highly valued in collectivist culture as it would be in individualistic cultures. High level of conformity with the group and tendency to initiate new behavior may not be desirable in such culture. Even though Internet and PC penetrations in Morocco is considered the highest in Africa, it is still relatively low (Arab Advisors Report, 2003). The main reason behind this low trend is the fact that consumers still consider Internet and PC prices to be very high (ANRT, 2007). Concomitantly, low Internet and PC penetration levels in Morocco may add to the low level of trialability of such new innovations.

H6: Moroccan users will have a lower perception of trialability of SN websites than US users.

Morocco's power distance score of 70 is much higher than the US score of 40 and even world score of 55. This score indicates inequality of power and wealth. In a social system where division between classes is so clear, one's status is very important. Because Internet access and computer ownership is perceived as a privilege of the middle and upper classes, the status and image that participation in SN brings will be even more pronounced in Morocco. This leads us to believe that Moroccan users will find social networking sites to be more image enhancing than in the USA.

H7: Moroccan users will have a higher perception of image of SN websites than US users.

Users of SN websites create profiles in which they disclose personal information and share their daily lives with their community of friends. Acquisti and Gross (2006) study of US Facebook users reported that users honestly reveal many details about themselves. US culture is highly individualistic and builds on individual accomplishment and assertiveness. On the other hand Moroccan culture is more modest and adopts strict rules. People tend to rely on a small group of family and friends and will be less likely to try and separate themselves from the group. US users will be more likely to express themselves openly on SN and provide details about their personality to stand out in the crowd. Moroccan users will be less likely to separate themselves from the group and will keep their profiles modest.

H8: Moroccan users will reveal less personal information than U.S. users on social networking websites.

RESEARCH METHODOLOGY

Survey methodology is being used to test the proposed hypotheses. To eliminate the potential differences in perception of SN due to variation in platforms, we focused on Facebook users only. Facebook is widely used in the US and because there is no country specific SN website for Morocco, Facebook is the most common SN site over there.

To measure innovation characteristics we used previously developed and validated short scales by Moore & Benbasat (1991). A pilot test was conducted in both countries and several minor changes were made to the instrument. Table 3 summarizes all constructs and their sources. 200 Facebook users are being recruited in each country to participate in the study. The hypotheses will be investigated using ANOVA.

Construct Name	Items	Type	Source
Relative Advantage	4 items	7 point Likert	Moore & Benbasat (1991) modified for SN context
Compatibility	3 items	7 point Likert	Moore & Benbasat (1991) modified for SN context
Complexity	4 items	7 point Likert	Moore & Benbasat (1991) modified for SN context
Result Demonstrability	4 items	7 point Likert	Moore & Benbasat (1991) modified for SN context
Visibility	2 items	7 point Likert	Moore & Benbasat (1991) modified for SN context
Trialability	2 items	7 point Likert	Moore & Benbasat (1991) modified for SN context
Image	3 items	7 point Likert	Moore & Benbasat (1991) modified for SN context
SN Participation	3 items		Self developed
Revealed Information	4 items	7 point Likert	Self developed

Table 3. Construct Operationalization

PRELIMINARY RESULTS

To pretest the instrument a pilot survey was administered to a small sample of Facebook users in each country (30 in Morocco and 15 in the United States). Table 4 presents the demographics of the pilot survey participants.

	Morocco	**USA**
Gender		
Male	13	6
Female	17	9
Age		
20-29	29	9
30-39	0	6
50-59	1	0

Both groups reported being Facebook users between 1 and 2 years. Moroccan users login into their Facebook accounts 5 days a week on average and spend 10 to 30 minutes on the SN. US users login 4 days on average and spend less than 10 minutes on average. There were differences between the different age groups of US users with 20 to 29 age group login in on average 4 days a week and 30 to 39 age group login in 1 to 2 days a week. This differences may be due to the fact that the average age of a SN site users is 22 (comScore, 2007), and the older age group is not as active in the SN. Despite privacy concerns, 100% of respondents in the US pilot sample and 93% of the Moroccan sample indicated that they have provided their real full name (first and last) on Facebook. The remaining 7% of the Moroccan sample provided only their first name on Facebook.

CONCLUSION

The objective of the study is to examine how national cultural differences may impact the adoption of new technologies and specifically online socializing. Social networking sites are gaining popularity in developed countries and are offering their users an opportunity to learn, communicate and socialize virtually with the help of modern technology. Examining perceptions and experiences of Moroccan users of SN websites would offer an opportunity for cross cultural comparison and enhance our understanding of adoption of new technologies in countries in Africa and Arab world nations. Because the advertising revenue of SN website depends heavily on the number of active users, owners of social networking websites should understand cultural differences to better attract users in different cultural markets.

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