Implementing an Academic Research Social Network:
An exploratory study at Applied Science University

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Abstract. Online social networks presented a new and versatile medium of communication and collaboration over the Internet. The use of specific social networks that targets a certain audience is becoming more accepted today since interactivity and collaboration between members is secured and limited to specific groups. Academic research is one of the fields that can benefit from online social networks. Applied Science University is the first educational institution in the Middle East to adopted this new technology by creating an Academic Research Social Network for its professors to collaborate on different academic and research fields. But how effective was this new collaboration channel for ASU professors? Did they use the network for sharing research related information and was the exchange as effective as envisioned? An exploratory study of implementing an Academic Research Social Network at applied Science University is presented and discussed. The findings based on analysis of statistical information provided by the web server and the online social network application showed that only a 20% of university professors at ASU joined the network and created their online profiles. The level of awareness of the true value of the online academic research social network was very low. Academic Rank, Specialization, Computer and Internet Literacy in addition to English language skills played a role in adopting this new channel. In conclusion the research presents steps that can be taken to improve the use of this unique social media channel and guidelines for motivating professors are suggested based on the research findings.

Keywords: Social Networking, Web 2.0, Academic Research.

1 INTRODUCTION

The rapid growth of the internet has lead to many development in terms of services and communication channels and applications (Watts 2003). Web 2.0 applications is a recent advancement in Internet technology related to the creation of online social networks. MySpace, LinkedIn, Twitter and Facebook are just an example of successful social networks implemented on the cyberspace and mobile arenas Sergey Brin and Lawrence Page (1998). Online social networks presented a new and versatile means of communication and collaboration over the Internet.

Online social networks allow members to create their online profiles and pages with ease. It also enables them to interact with their friends or connections remotely from the comfort of their homes (Brin and Page 1998) (Latapy and Pons 2004). Sharing of resources online is one of the major capabilities of online social networks. Members can upload images, videos, files, documents and links to their profile for their friends to see, comment and tag (Milgram 2004). Online social networks has made it possible for people all over the world to become connected 24/7/365 with all their friends and loved ones.

Another capability of online social networks is the creation of groups. Groups can be public or secured and private (Hasan and Adamic 2007). Organizations are becoming familiar with the benefits of group social networks and many has jumped to the online social networking

wagon and started creating accounts for their members and customers to visit and share vital information online.

Some organization has built its own branded social networking sites just to allow its employees to use company resources and interact online and to allow customers to provide feedback about its products and services and get online support from company staff (White, Boorman, and Breiger 1976).

Academic organization are using social networking sites to create a network for its students. These networks are usually part of an e-learning system whereby students can collaborate with their professors and interact with their follow students online (Latapy and Pons 2004).

The technology behind social networking sites is not rocket science and it does not need experienced programmers to establish such a network (Latapy and Pons 2004). In fact there are many free open source applications and scripts that can enable anyone with limited computer knowledge to establish his own online social network (Flake, Lawrence, and Giles 2000). Wordpress, Buddypress, Dolphine to name a few are one of the best tools used by people and organizations today for the creation of social networks (Newman 2004).

The use of online social networks can differ in focus and scope. Some are open to all people from all over the world such as Facebook (Milgram 2004). Others are limited to business and professional people such as LinkedIn and some are related to a specific products or service such as Fliker (Wasserman and Faust 1994).

The use of specific social networks that targets a certain audience is becoming more accepted today since interactivity and collaboration between members is secured and limited to specific group (Flake, Lawrence and Giles 2000). Academic research is one of the fields that can benefit from online social networks. Applied Science University is the first educational institution in the Middle East to adopted this new technology and created an Academic and Research social network for its professors.

The network is been in existence since September 2010 and it was build using BuddyPress free open source social networking script (Milgram 2004). The site was made available to all university professors and instructors to sign in and start using the system. Membership registration was limited to ASU professors who has email accounts at the university server and ending with asu.edu.jo

The aim of this research is to explore ASU's implementation of an online Academic and Research Network based on statistical information provided by the web server and the online social network application. We conduct an analysis of 57 members who have joined the network out of 285 professors and instructors invited formally to become members. The analysis focus on members activities, collaboration and frequency of use..

2.PROPOSED EVALUATION CRITIERIA

To explore ASU academic research network we have focused on several key factors that indicates to what degree is the research network used and utilized effectively. The first of such factors is the awareness of the benefits of social networking sites among university professors (Latapy and Pons 2004) (Wasseman and Faust 1994). Statistical information gathered from the Research network server were used to indicate the frequency of visiting and using the site by faculty members. It also indicates the level of interactivity and collaboration between members (Flake, Lawrence, and Giles 2000). Profile information reflects the level of trust in the social network and to what degree it shall influence faculty members to complete their profile fields. Sharing and file uploading in terms of (images and video) shows the level of interactivity between the user and the social network (Wasseman and Faust 1994).

Messaging and chatting is also a major indicator of network usability among faculty members. Linking and creating groups and adding topics to forms in yet another indicator of employing the network in research related activities. The research also focused on academic ranks, specialization and language preferences.

3.ANALYSIS AND RESULTS

ASU employs 285 faculty members of which 208 holds a PhD. Degree the remaining 77 are masters holders. The server statistic showed that 57 members joined the network amounting to 20% of all faculty members at ASU.

Nine members where masters holders (15.7%) and the remaining 48 were PhD holders (84.3%). Three Full Professors, six Associate Professors and 39 Assistant Professors.

Awareness of social networking sites and their importance in academic research was higher among assistant professors, followed by associate professors and full professors. This may be contributed to the fact that assistant professors are younger than associate and full professors and therefore they are exposed to the web 2.0 technology and social networks relative to older generations.

Professors from technology, engineering, information technology, information systems and business administration backgrounds were the major players in ASU academic and research network.

Site visitation frequency and use were larger among masters holders and assistant professors. They tended to complete their profile and engage in online networking, messaging, chatting and file sharing.

Group creation and forum posting was very low, indicating a lack of understanding of how an online research network can nurture and nourish one's research through collaboration and interacting with fellow faculty members.

The language of the research network could have played a major role as a deterrent from using the network since most professors are not native English speakers.

4.CONCLUSIONS

Applied Science University is the first educational institution in the Middle East to create an Academic Research Social Network for its professors to collaborate on different academic and research fields. An exploratory analysis was conducted to measure the effectiveness of this new collaboration channel for ASU professors. The findings of the statistical analysis provided by the web server and the online social network application showed that only a 20% of university professors at ASU joined the network and created their online profiles. The level of awareness of the true value of the online academic research social network was very low.

Academic Rank, Specialization, Computer and Internet Literacy in addition to English language skills played a major role in adopting this new channel.

In conclusion the research implies that more awareness should be implemented all across the university to introduce new and existing members of the social network to the benefits of online collaboration and interaction among faculty members to improve the use of this unique social media channel.

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