EXPLORING AGE FACTOR AND NETWORK EFFECTS IN SOCIAL MEDIA USE

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ABSTRACT

Online social media use has experienced tremendous growth and penetrated into people’s life. The internet users are no longer the passive information receivers. Rather, they are the active Web participators. This paper proposes a research model to depict how age differentiating social media use based on social capital theory and network effects.

Keywords: Network Effects, Social Capital Theory, Social Media Use, and Social Network Sites

INTRODUCTION

To understand how social media penetrate into people’s life, we can look how a social media site, such as Facebook, grows. Facebook started in year 2004 and its users has grown to exceed 1 billion in October, 2012. (Smith et al., 2012). Figure 1 displays the phenomenal growth of Facebook. If Facebook is a country, in term of the size of number of users, it is the third largest country in the world. Its population size is only behind China and India (Internet World Stats, 2013). The size of the world population is approximately 7 billion. This also means 1 in 7 people in world owns a Facebook account. The phenomenal growth of social media sites makes us wonder who the users of social media sites are, why social media sites grow so fast, and what the impacts of increasing use of social media are.

The exponential growth of the use of social media sites can be attributed to two major factors: (1) the maturity of technology, and (2) social network effects. Since the dot com bust in early 2000, Internet technology has been evolved to enable users to create their own contents and share those contents with other Internet users. The newly added functionalities of online social Medias suddenly set the Internet users free and further ignite their creativity sparks. The internet users are no longer the passive information receivers. Rather, they are the active Web participators. With the enhanced Internet platform, which Tim O’Reilly coins the term as “Web 2.0” (O’Reilly & Battelle, 2009), Internet users are able to create the information on the Web in the form of photos, videos, blog entries, product reviews, and service reviews. Every time when Internet users share photos with friends, add a blog entry, tag a bookmark, or swap comments with friends on the social media sites, they enrich the contents of the Web. The enriched Web contents will further attract more users to use the social media sites. Thus we see the social network effects kick off. The more Internet users use the social media sites, the better contents of Web
will be. On the other hand, the better contents of the web will attract more internet users to use the social media sites.

![Figure 1: Number of Users of Facebook 2004-2012 (Source: CNN Money)](image)

Online social media has deeply integrated into people’s daily life. It affects how we learn, where to buy our next air ticket, to find the next good book to read, to share our exciting experience with our friends or even with the entire world, to form our political opinions, and more. Anecdotal evidences suggest that the privilege of the using the online social media belongs to “Net Generation,” the generation grew up with the information technology. Tapsoott and Williams (2006) stated that the Web is not merely an information repository or a place to do catalog shopping to this net generation. Rather, the Web is the new glue that binds their social networks. Is the privilege of using online social media sites truly belong to this net generation?

The rest of this paper would like to discuss the social network effects and who the social media users are. Further, a research model is proposed to depict the factors that affect usage of social network sites and the social network effects.

**SOCIAL NETWORK EFFECTS**

A social network can be viewed as a set of people or organizations connected by a set of meaningful social relationship (Garton et al., 1997). Usually, these individuals or organizations are bonded by common interests, share values, ideas, and friendship. A social network provides participants with the opportunities of finding social support, establishing new contacts (Lea et al., 2006), increasing collaboration (Cross et al., 2006), enhancing creativity (Fleming and Marx, 2006) exchanging information, sharing experience, facilitating communication (Coyle & Vaughn, 2008), and accumulate social capital (Lizardo, 2006).
Network effect simply put is the degree of the influence of a network member to the other members that connect to him/her. When network effect is present, the value of a product or service depends on the number of users using it. For a social network site to sustain, the number of users has to reach a point called critical mass. Critical mass is the point where enough users have adopted an innovation so that an acceleration of adoption of that innovation can continue until it becomes self-sustaining (Von Slyke et al., 2007). It would be useless for a user if none of his/her friends are using the same social network site. For a new user to join social network site, he/she has to perceived the critical mass point of this particular SNS has reached so that his/her network influence can reach to satisfactory level. Although SNS service providers may claim the number of users of their sites has reach millions, the perspective users may not feel the same way since there may not have enough active users or enough persons for him/her to associate with (Sledgianowski & Kulviwat, 2009).

SOCIAL MEDIA USERS

Internet usage has been increase rapidly since year 1995. The number of Internet users worldwide was 16 million in December 1995 and was 2,405 million in June 2012 (Internet World Stats, 2012). With this remarkable growth of Internet usage, it makes us wonder what most people do when they access Internet. Based on the Oxford Internet survey in 2011 with 1,498 Internet users, the activities engaged by percentage of Internet users ranking from high to low are: visit social networking sites, post photos, post on message board, upload files, own a personal website, write a blog, and post creative work (Blank & Reisdorf, 2012). More than 50% of Internet users engage more than 2 of the above activities.

Although the majority of social media users are young adults, statistics shows that number of order social media users are picking up. According Pew Internet research on older adults between April 2009 and May 2010, social networking use among internet users ages 50-64 grew by 88%—from 25% to 47%. During the same period, use among those ages 65 and older grew 100%—from 13% to 26%. By comparison, social networking use among users ages 18-29 grew by 13%—from 76% to 86% (Madden, 2010). As a matter of fact, according the Key eMarketer Statistics on US Seniors (Feb-Mar 2013), a significant portion of senior population (age 65 or order) is not shy away from Internet and social network use. The percentage of the senior population use Internet and social network is display on Table 1.

<table>
<thead>
<tr>
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<th>Internet Users as % of Population</th>
<th>Social Network Users as % of Internet Users</th>
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<tbody>
<tr>
<td>Total</td>
<td>76.9%</td>
<td>67.2%</td>
</tr>
<tr>
<td>Senior (age &gt;= 65)</td>
<td>52.0%</td>
<td>36%</td>
</tr>
</tbody>
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Table 1: KEY eMarketer STATISTICS ON US SENIORS (Feb-Mar 2013) (Source: NewMedia TrendWatch)
RESEARCH MODEL OF SOCIAL MEDIA USAGE

Social media researchers have conducted empirical researches to understand the reasons that motivate people to use online social media. Some studies focused on the demographic difference such as age and gender (Lennon et al., 2012; Pfeil et al., 2009; Smith, 2001). Some studies focused on user’s intrinsic and extrinsic motivation (Ellison et al., 2007; Lin & Lu, 2011). In this study, we intend to propose a research model that integrates both the demographic factors and user’s motivation to depict social media use. The research model is displayed in Figure 2.

Figure 2: Research Model of Online Social Media Use

CONCLUSION

This paper explores the demographics of social media users and social network effects. A research model is proposed to depict how age difference could have direct effects on the number of peers in online social network and social technology capability. Younger SNS users tend to have more friends in their social network than older SNS users. Compared to older SNS users, younger SNS users are more comfortable to use social web technologies to navigate through social network site. The number of peers in an individual’s online social network and an individual’s skills to navigate social web could have direct effects on the level of social capital built in his/her online social network. An individual with larger social network tend to have more connection to acquire information and hence build higher level of social capital. High confidence in using social web technologies enables people to use different ways to reach out the contacts in his/her social network and hence building higher level of social capital. Eventually, the level of social capital will have direct effects on the usage on social network sites. If an individual perceives that he/she could accumulate significant amount social capital from his/her social network (information sharing, satisfaction from emotional support, fun, etc.), he/she would be more likely to use or continue to use a social network site.

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Despite the phenomenal growth of online social network sites, the intergenerational digital divide exists. According to the Pew Internet Survey about the Demographics of Social Media Users in year 2012 (Duggan & Brenner, 2013), Internet users under 50 are particularly likely to use a social networking site of any kind (Facebook, Twitter, Pinterest, Instagram, Tumblr), and those 18-29 are the most likely of any demographic cohort to do so (83%). While less online users above 65 would use a social networking site (32%).

As baby boomers reaching their retirement age, older online users can use SNS to reconnect people from their past. These renewed connections can provide a powerful support network when people near retirement (Madden, 2010). For the older adults with a chronic disease, SNS could be a powerful platform for them to reach out support online. In the future, SNS service provider should consider easier and friendlier user interface design to encourage older users to use social network site to improve their social benefits.

REFERENCES


