DETERMINANT FACTORS OF TIME SPENT ON FACEBOOK: BRAND COMMUNITY ENGAGEMENT AND USAGE TYPES

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ABSTRACT

Online social networks have integrated into the computer mediated communication (CMC) environment in the past few years. Social Networks such as Facebook, Myspace, Bebo and Twitter are web-based services that allow people to create a public profile, share the connection with other users, and view and traverse their list of connections in common network. The aim of this study is to find factors affecting the amount of time users spent on Facebook. The Facebook was analyzed from the perspective of usage types, brand and advertising engagement. The results revealed that the main Facebook usage factors were "Social networking", "Writing on wall", "Entertainment", "Searching for friends" and "Free time". Another independent variable was Brand & Advertising engagement, which had three factors named as "Brand Community Engagement", "Brand Community Approach", and "Ad attitude".

Keywords: Social Networks, Facebook usage type, Social Network Marketing, Brand Communities, Advertising

INTRODUCTION

Computer-mediated communication (CMC) is an exchange or flow of information between a sender and a receiver, which much of our business and social interaction takes place (Indi, 2008; Walther & Burgoon, 1992). Rapid changes in information technology enabled CMC to integrate in our daily life more actively. CMC channels especially social network sites (SNSs) have become enormously popular since they have allowed their users to connect with people based on common interest (Acar & Polonsky, 2007; Guo, 2008). When computer networks link machines, naturally it links online people all around the world as well and becomes a social network (Wellman, et.al., 1996). Online social networks have integrated into the CMC environment in the past few years. These sites offer a combination of CMC applications like Instant Messages (IMs), blogs, classified listings, interest groups, music, public comments, images, videos, rankings, and e-mails (Wasserman & Faust, 1994).

Social Network Sites such as Facebook, Myspace and Bebo are web-based services that allow people to create a public profile, share the connection with other users, and view and traverse their list of connections in common network (Boyd & Ellison, 2007). SNSs have a mediating effect between individual and society in the virtual world (Wasserman & Faust, 1994).

Social networks are becoming a highly profitable marketing tool for the companies with the increasing number of users. Firms are recognizing the advantages of web-enhanced brand communities as a lever for relationship-marketing communication. Brand communities not only provide companies with an additional communication channel, but also allow the possibility of establishing linkages to devoted users. Researches on brand communities have shown that these communities have positive effects on consumers' brand attitude and attachment to a brand (McAlexander, Schouten and Koenig, 2002).

LITERATURE REVIEW

When computer networks link machines, naturally it links online people all around the world as well and becomes a social network (Wellman, et.al., 1996).Today, massive changes in the information technology enabled SNSs to integrate in our daily life more actively. Social networking have become enormously popular

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since people based on common interest all over the world can get connected (Acar and Polonsky 2007; Guo 2008).

A social network is made up of users and relations between them. People post profiles of themselves; they invite their friends to join, who in turn invite their friends, creating a complex virtual network of communication (Wasserman & Faust, 1994). Most sites support the maintenance of pre-existing social networks, but others help strangers connect based on shared interests, political views, or activities. Some sites cater to diverse audiences, while others attract people based on common language or shared racial, sexual, religious, or nationality-based identities. Sites also vary in the extent to which they incorporate new information and communication tools, such as mobile connectivity, blogging, and photo/video-sharing (Boyd and Ellison 2007). After joining a social network site, users are prompted to identify others in the system with whom they have a relationship. The label for these relationships, differs depending on the site-popular terms include "Friends," "Contacts," and "Fans.". Most SNSs require bi-directional confirmation for Friendship, but some do not (Boyd, 2006). The public display of connections is a crucial component of SNSs. On most sites, list of Friends is visible to anyone who is permitted to view the profile, although there are exceptions.

In this study a social networking term is used to define all activities that users perform for marketing and social purposes on the SNSs, namely Facebook. Even though social networks are no longer a new phenomenon, Facebook has created innovations to keep its user interested. Facebook is a unique social network that views itself as a social platform.

Facebook was founded by Mark Zuckerberg in 2004 which was originally restricted to college students by requiring users to register with e-mail addresses associated with their college institutions. In 2006, the service ranked as one of the top in things on campus along with iPods and text messaging. In that same year, Facebook decided to open its services to anyone thirteen years or older with an e-mail address. The move helped Facebook to increase new memberships. Today, the Facebook increases new memberships by 200,000 per day and causes average page views to swell to fifty-four billion each month (Guo, 2008). With the appealing quality of its nature, the Facebook is the subject of many researches by academicians from all fields. Hence, in this study the Facebook is analyzed from the perspective of usage types, brand communities and the amount of time spent on this platform.

Facebook is a website with a combination of many useful tools that users need on Internet. It allows users to do the things normally one can do on different, separate websites and software all at one place and in all these qualifications Facebook considers itself as a social platform. Facebook has a large variety of functions, which includes: private messaging; a "wall" where people can post public messages; one's personal information; photo albums with unlimited storage space; videos, groups; "notes" which functions like a blog; "events" which allows users to organize social gatherings; join the communities and lots of applications developed by third party developers (Hei-Man,2008).

When logged into Facebook, the first page users can see is what is called the "homepage". It contains all the "news feed" of friends on their friend list, status update ("status" is something people can fill in, usually in a sentence, about how they feel), "friend requests" and all kinds of application invitations. Then comes the "profile" page which is the page that can be seen by friends or other people depending on personal privacy settings (Hei-Man, 2008). When users are on Facebook generally they check if anyone has written on their wall (which is like a public message board); they send private messages, poke friends, "entertain" with applications, such as sending all sorts of gifts, sharing photos, videos, music and playing games (Hei-Man,2008).

Facebook users engage in ''searching'' for people with whom they have an offline connection more than they ''browse'' for complete strangers to meet (Lampe, Ellison, & Steinfield, 2006). Facebook members mainly engage in social searching. They use it as a "surveillance tool" to learn more about and maintain their existing relationships (Lampe Ellison, and Steinfield 2006). Some people use the search function of Facebook to search for their long lost friends. Users also use Facebook to make new friends in addition to using it as a tool to communicate with friends already known offline (Hei-Man, 2008).

In the business arena, the rapid adoption of the Internet as a commercial medium has caused firms to experiment with innovative ways of marketing to consumers in a computer mediated environments. Firms

use various media to communicate with their current and potential customers (Hoffman, Novak and Chatterge, 1995).

As a result of competitive structure of markets, SNSs have emerged as a new marketing environment for the firms recently. In order to gain competitive advantage and find cost effective solutions to reach customers, marketers have become more interested in learning about, organizing and facilitating online brand communities (Muniz and O'Guinn's, 2001). Brand communities are described as specialized, non-geographically bound communities based on a structured set of social relationships among brand admirers (Muniz and O'Guinn's, 2001). These communities are viewed as contributors to the brands' larger social construction, playing a vital role in the brands ultimate legacy. With different aspects customers get in relationship with a brand community influence their intentions and behaviors (Algesheimer, Dholakia, and Herrmann, 2005).

On-line brand communities play variety of roles for the members, such as providing easy access to information exchange and community participation unrestricted by time or space, as well as acquisition of useful information (Palmer and Koenig-Lewis, 2009). Companies start to recognize the significance of virtual communities and have actively utilized them for brand marketing activities as a means to maintaining close relationships with consumers (Palmer and Koenig-Lewis, 2009).

Facebook presents a number of opportunities for companies to get close to their markets, including observing and collecting information; hosting or sponsoring brand communities; providing content to these communities (such as music, information or entertainment); and participating as members of online communities (Lea, Yu and Maguluru 2006). Through the use of marketing tactics in the form of applications, social ads, brand communities, sponsored pages and sponsored apps, brands have opened up communication channels with their customers on this platform. No modern marketing plan targeting users online is complete without a social network marketing component. Company's involvement in social network sites can also result in strategic and operational benefits. By inviting feedback, or simply by observing conversations, a company can learn about customers' needs and inform its new product development policy. In the language of "service dominant logic", a company can involve members of the community in the co-creation of value through the generation of ideas (Palmer and Koenig-Lewis, 2009).

In recent years, advertising has become a major commercial activity on the Internet. Traditionally, advertisements are usually broadcast oriented, e.g. via TV or radio stations. With the development of Information technologies, new advertisement models emerge and blossom. Social networks offer another new model of performing advertisement. In social networks, if one user decides to purchase a product, he/she can influence his/her friends, and thereby increase the possibility of sales. With the success of online social networks such as Facebook , online social networking communities has caught the attention of advertisers who hope to find new ways to control these communities for their advertising purposes (Hart 2007).

On the other hand, the intrusive strategies advertisers employ when competing for consumers, attention can be annoying to the audiences (Sandage & Leckenby, 1980). Consequently, studies tend to show a generally negative public attitude towards online advertising (Alwitt and Prabhaker, 1994; Zanot, 1981). However, as the communities battle to gain long-term, sustainable advertising revenues, they encounter the severe risk that members will feel oppressed if the sites suddenly appear overrun with ads (Mesure and Griggs, 2007).

As the literature supports, in this research it is revealed that users generally ignore the ads on their profile page and moreover they don't want to be fun/friend of any brand community.

The aim of this study is to find factors affecting the amount of time users spent on Facebook. The Facebook was analyzed from the perspective of usage types, brand and advertising engagement. The results revealed that the main Facebook usage factors were "Social networking", "Writing on wall", "Entertainment", "Searching for friends" and "Free time". Another independent variable was Brand & Advertising engagement, which had three factors named as "Brand Community Engagement", "Brand Community Approach", and "Ad attitude". In depth analyses indicates that also demographic factors such as gender and marital status also have an effect on amount of time spent on Facebook.

METHODOLOGY

INSTRUMENT

In addition to demographic measures, the study relied on four sets of measures drawn from the literature. The instrument included three broad types of measures of "Facebook usage type", "Brand & advertising engagement", and "Time spend on Facebook", which served as our dependent variables.

Items related to attitudes toward Facebook usage were measured by forty-two questions and some items taken from (Ellison and Boyd, 2008 and Ross C. et al., 2009); brand and advertising engagement was measured by twelve items. Constructs used were measured with a five-point interval scale (1=strongly disagree to 5=strongly agree). Finally, time spend on the Facebook was measured by asking how long they spend daily on Facebook.

SAMPLING AND DATA COLLECTION

Data for the study has been collected from Facebook users via pen-and-paper questionnaire. The sample comprised of 199 females and 207 males. Participation in the study was completely voluntary. Age of the sample ranged between 18 to 58 with a mean of 28.42 and a standard deviation of 5.45.

FINDINGS

FACTOR ANALYSIS

To identify the underlying structure of the Facebook usage types scale exploratory factor analysis (EFA) was employed as the initial step. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996). Result of the tests (KMO=0.85, χ^2Bartlett test (153) =3425.35, p=0.000) were satisfactory. We then applied principal component factoring and varimax rotation to the data sets. Factors with eigenvalues over one were retained (Hair et. al., 2006; Netemeyer, Bearden and Sharma 2003). As a result of the EFA four dimensions were found. Findings of five factors with explained total variance of 69.41 % and factors explaining 9.66 % - 19.51 % of total variance were satisfactory.

Table 1. Exploratory Factor Analysis for "Facebook Usage Types"

Items	Factor Loadings	Variance Explained (%)	Reliability
F1: Social Networking			
Joining social activities	0.850		
Organizing social activities	0.848		
Creating social groups	0.756	19.51	0.793
Inviting friends to join social activities	0.666		
To be informed about social activities	0.645		
Joining social groups	0.535		
F2: Writing on wall			
Writing on my "wall"	0.869		
Reading my "wall"	0.830	17.94	0.900
Reading "wall" of my friend	0.818		
Writing on my friend's "wall"	0.789		
F3: Entertainment			
Watching Video	0.839		
Listening Music	0.775	11.91	0.763
Playing games	0.769		
F4: Free time			
To get away from the daily routine	0.873	10.39	0.827
To give a break to daily routine	0.805		
F5: Search for friends			
Search for friends from the search engine	0.812		
To meet new people	0.801	9.66	0.656
To check people already known	0.530		

Factors were named as "Social Networking", "Writing on wall", "Entertainment", "Free time" and "Search for friends". To test the internal consistency of factors, Cronbach's coefficient alpha reliabilities were estimated. Reliabilities for "Social networking", "Writing on wall", "Entertainment", "Free time", and "Search for friends" were (0.79, 0.90, 0.76, 0.83 and 0.66 respectively). The results of EFA, items under each factor and factor loadings are given in Table 1.

Analysis for Brand & Advertising engagement dimensions were named as "Brand Community Engagement", "Brand Community Approach", and "Ad attitude". To test the internal consistency of factors, Cronbach's coefficient alpha reliabilities were estimated. Reliabilities for "Brand Community Engagement", "Brand Community Approach", and "Ad attitude" were 0.89, 0.84, and 0.63 respectively. The results of EFA, items under each factor and factor loadings are given in Table 2.

Table 2. Exploratory Factor Analysis for "Brand & Advertising Engagement"

Items	Factor Loadings	Variance Explained (%)	Reliability
F1: Brand Community Engagement			
I become a fun of ads which I see on my profile	0.877	33.807	0.893
I become a fun of brand community if my friends are also the fun of the same community	0.823		
I bought a product/service from the ads that I saw on my profile	0.805		
I search for groups of brands that I accustomed to buy	0.769		
I am interested in the ads of brands that I am the fun of	0.702		
F2: Brand Community Approach			
I am interested in the brand announcements on my profile or on my wall	0.891	24.354	0.843
I feel the part of the brand communities that I joined	0.769		
I become a fun of brand and ads that waiting for friend request	0.695		
My friend's opinion about ads and groups is very important for me	0.647		
F3: Ad attitude			
I don't remain friends /fun of a brand if it continuously sends promotional info and ads	0.856	12.438	0.627
The ads on my profile are annoying	0.769		

REGRESSION ANALYSIS

Since one of objective of this study was to identify the determinants of time spend on Facebook multiple regression analyses were performed for Facebook users. "Facebook usage type" and "Brand & advertising engagement" were used as independent variables.

Table 3: The result of multiple regression analysis for time spend on Facebook

Dependent variable : Time spend on Facebook	β coefficients
Independent Variables : Entertainment	0.217
Brand Community Approach	0.171
Free time	0.165
r = 0.368 **r²** = 0.135 **F value** = 18.795 **p value** = 0.000	

The result of multiple regression analysis has shown that Entertainment, Brand Community Approach, and Free time increased time spend on Facebook (See in Table 3).

INDEPENDENT t TEST AND ONE-WAY ANOVA

To get more insight about Facebook users' profile, we analyzed factors with respect to demographical variables. Several analyses of t-tests and one-way-ANOVA's were conducted.

Table 5: The result of independent sample t test for Facebook users' gender

Dimensions	Groups	N	Mean	Standard Deviation	t	p
Brand Community Engagement	Female	197	1,82	,917	-2.260	0.024
	Male	201	2,05	1,101		
Brand Community Approach	Female	197	1,87	,984	-2.026	0.043
	Male	205	2,08	1,018		
Ad attitude	Female	197	2,75	1,152	-2.449	0.015
	Male	205	3,03	1,203		

Table 6: The result of independent sample t test for Facebook users' marital status

Dimensions	Groups	N	Mean	Standard Deviation	t	p
Entertainment	Married	129	2,85	1,074	-2.135	0.033
	Single	273	3,11	1,160		
Free Time	Married	128	2,90	1,166	-2,195	0.029
	Single	274	3,18	1,209		

The results of the independent sample t-test revealed that Brand Community Engagement, Brand Community Approach and Ad attitude dimensions depend on gender. These dimensions are more important for male Facebook users than females (See Table 5). On the other hand, Entertainment and Free Time dimensions are more important for single Facebook users than married ones (See Table 6).

The four dimensions of Facebook usage type and three "Brand & Advertising Engagement" dimensions did not have any other significant differences with respect to other demographic variables. Only, "Social Networking" has a difference in the age groups. Respondents who are 50+ of age doing "Social networking" more than others as a result of the one-way ANOVA analyses conducted in all age groups (X_{18-30}=2.09 and X_{30-45}=2.24 < X_{45+}=4.41 F=5.60, p=0.004).

CONCLUSION

As people are getting more addicted to Facebook, they spend considerable time posting their profiles, inviting their friends to join, and finally creating a complex virtual network of communication. In the new intensified competitive environment with higher customer expectations, rapid technological change, organizations must define different purposes to survive and to compete globally. That is why Facebook, besides being mainly a social networking platform, has become crucial to the competitive success of the organizations. Without a social network marketing component, modern marketing plan targeting users online is not complete. Social networks are perceived as a new marketing tool for the companies, however the amount of marketing activities performed by the users indicate that members still use these networks with social needs like, findings and communicating with friends, entertaining rather than marketing activities.

The results in this research obtained that the main Facebook usage factors were "Social networking", "Writing on wall", "Entertainment", "Searching for friends" and "Free time". Users on Facebook are spending most of their time with networking, writing on wall, sharing photos, videos and music and searching for friends. "Entertainment" in this study, defines the activities of watching video, listening music and playing games. These three activities as an entertainment tool are the most used forms of Facebook usage. On the other hand, our study also shows that single users are mostly using the entertainment tools. Meanwhile users, who want to get away from the daily routine and to give a break as a free time, are using Facebook more often. When in depth analyses are conducted, it is also revealed that single users are spending more free time on Facebook. When we combined these two results we can conclude that singles are using entertainment tools on Facebook in their free times. Interestingly, 45+ users are more eager to join social networking activities; also they create social groups; organize social events, invite their friends to join these activities.

With the increasing popularity of Facebook, companies have taken advantage of this platform as readymade communities to graph and build relationships with their consumers. Through the use of marketing tactics in the form of applications, social ads, brand groups, sponsored pages and sponsored apps, firms have opened up communication channels with their customers on this platform.

Another independent variable of time spend on Facebook was "Brand & Advertising Engagement" with three factors were named as "Brand Community Engagement", "Brand Community Approach", and "Ad attitude". Results indicate that users are usually interested in brand announcements on their profile page; they also feel the part of the brand communities they joined; they accept the friendship request of the brand community page and the opinion of a friend about a brand community and ad is very important. Users, who are more adopted to brand community approach, spend more time on Facebook. At the same time, males are more brand community oriented than females.

As it is supported by the literature, our research also revealed that users generally ignore the advertisements on their profile page and moreover they don't want to be fun/friend of any brand community if they continuously receive notifications from the community.

As a limitation of the study it has to be considered that in Turkey social network marketing concept is a newly developing area. As the social marketing phenomenon gets mature, further research has to be conducted in order to understand better the networking environment and consumer behavior.

We may conclude that Facebook users still use these networks with social needs like, findings and networking with friends, entertaining rather than brand engagement and advertising activities. There are several opportunities for future work on social networks. One of the important tasks for companies is to implement social network platforms in their marketing strategies and try to explore the relationship between Facebook use and brand community activities. Additionally, the ability to create applications within Facebook, offers opportunities for more experimental work related generation of brand awareness and loyalty. On the other hand, besides college students, 45+ users are getting more involved in social networking activities such as joining communities and creating social groups on Facebook, some applications and offers can be implemented for these older age groups on this platform.

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