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Conference Paper

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8th International Telecommunications Society (ITS) Asia-Pacific Regional Conference, Taiwan, 26 - 28 June, 2011: Convergence in the Digital Age

Provided in Cooperation with:
International Telecommunications Society (ITS)

Suggested Citation: van Jaarsveldt, Leon (2011) : Are Social Networking Sites (SNS) effective platforms for political engagement?, 8th International Telecommunications Society (ITS) Asia-Pacific Regional Conference, Taiwan, 26 - 28 June, 2011: Convergence in the Digital Age, ITS, Taipei

This Version is available at:
http://hdl.handle.net/10419/52311

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Are Social Networking Sites (SNS) Effective Platforms For Political Engagement?

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Abstract

Based on a dataset by Pew Internet and American life project on the 2008 Post election results in the United States, this research aims to determine whether the frequency of SNS usage, the amount of SNS profiles, the number of SNS platforms and the use of SNS platforms for political purposes, especially through the ‘friend’ function, positively predict online political engagement and online political information seeking. The findings show that while the number of SNS profiles have no impact on either dependent variable, the number of SNS platforms plays a role in online political engagement while the frequency of use plays a strong role in both online political engagement and online political information seeking. The findings also indicate a strong relationship between using SNSs for political purposes, especially for finding campaign or candidate information on the site and for learning friends’ political interests or affiliation, and online political engagement and online political information seeking, as well as for starting or joining a cause and becoming a ‘friend’ of a political candidate.
Are Social Networking Sites (SNS) Effective Platforms For Political Engagement?

What can be seen as perhaps the first attempt at extensively using SNSs for political mobilization was the Howard Dean campaign’s successful usage of a site named meeting.com to mass mobilize a supporting public for his candidacy. Perhaps the strongest point of this campaign was that it was created by the people and was self-supportive and self-sufficient. As Wolf (2004) indicates, it had yet another point of strength: “Along comes this campaign to take back the country for ordinary human beings, and the best way you can do that is through the NET (Wolf, 2004).” It had become a tool for empowerment and mobilization, both for and against the political elite.

This makes it an exciting corner stone for a modern democracy, defined from its Greek origin as “dêmos”, which means "people", and “Kratos”, which means "power" (“Democracy”, 2011). A more specific focus is provided for under the Jeffersonian philosophy of representative democracy, where citizens have a civic duty to aid the state and resist corruption (“Jeffersonian Democracy”, 2011). Social Networking Sites provide exactly such a platform for individuals to unite their voice and achieve what van Dijk (2006) dubbed ‘Digital Democracy’.

Previous research indicates shortcomings in the use of this platform. For example, Hindman (2005) found that it was used primarily as a means of generating money, and that the interactive capabilities were largely ignored. The importance further increased during the 2008 election, when current US President, Barack Obama, began to make more use of the interactive capabilities to communicate with potential voters (Strait, 2008; Zube et al., 2009). The keyword has become interactivity, seen as important by Wang (2007) when he indicates that people are more likely to participate if they feel or believe that they are being listened to. The company, Blue State Digital, was founded on exactly this principle and focuses on providing customized interactive web2.0 applications for political campaigns like the Obama and Israeli Likud campaigns (D'Aprile, 2009).
An opposite movement is also visible in recent civil uprisings. Egypt, Libya and Yemen, for example, shut down all Internet access in an attempt to stop the spread of uprising from Tunisia (Gandelman, 2011; "Tunisian, Egyption, Yemeni, Libyan Revolutions," 2011).

The importance of SNSs for the field of politics has been growing from two major fronts. Firstly, political parties actively encouraging their members to actively engage the public on these platforms. Secondly, from the realm of the user, SNSs are increasingly used due to their unique ability to reach a large network of friends. This research argues that SNSs provides an effective platform for political engagement by focusing on the interactive capacity of these platforms through the ‘friend’ function, and adds to this field by arguing that an increase in profiles, frequency of use, using SNS to access candidate and campaign information as well as discovering friends’ political interests positively predict online political engagement and online political information seeking.

**SNS & Web2.0**

The strength of web2.0 applications lies in their ability to allow instant or almost instant interaction that can be simultaneous or one at a time, through a computer-mediated environment (O'Brien, 2009). As integrated web2.0 applications, SNSs thus become strong contenders in the field of political mobilization. Kluver and Soon (2005) also support this notion of interactivity and add to it the power of selectivity given to the user. This role is supported by Ellison, Steinfield and Lampe (2007) when they found that at the very least SNSs supports the argument that the informal nature of mediated communication is more capable of spreading a message of an educational\(^1\) or complicated nature (see also “Media Richness Theory”, Daft and Lengel,1986).

Social Networking Sites (SNSs) are furthermore seen as integrated web2.0 applications. This definition is based on its multiple platform capabilities. Heiberger and Harper (2008) defines the most-used SNS site Facebook:

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\(^1\) Education, as used here, means learning in an informal or formal environment and is not limited to the education field (O'Brien, 2009).
“Previously an individual would have to design and host a Web site, join a chat group, upload pictures to a separate site, form an online group, use instant messaging and email services, join listservs, and create a blog just to rival all of the features Facebook offers” (Heiberger & Harper, 2008).

SNS offers to the political world a communication platform that allows for increased participation, as it is a converged platform of popular and well-known web2.0 applications. Zube et al (2009) finds that young users are especially more willing to share political information on SNSs, but he also notes that attempts by political candidates to contact these younger people directly were largely ignored, which leads to the ‘friend’ feature to be discussed next.

Another characteristic of SNSs is the ability to have multiple profiles on the same platforms and across various SNS platforms. This research argues that it increases the likelihood of exposure to online political information and to an increase in online political engagement.

**Online ‘Friending’**

One of the major distinctions between SNSs and traditional blogging sites is the ‘friend’ function. The usefulness of this function relates to its high-level of unintentional exposure. Two-types of ‘friends’ are distinguished on SNSs, namely ‘strong’ and ‘weak’ ties. Weak ties are identified as those friends with whom one rarely interacts, while strong ties are those friends with whom one frequently interacts (Ellison, Steinfield, & Lampe, 2007; Gaines & Mondak, 2009; Haspels, 2007; Zube, Lampe, & Lin, 2009). In short, the majority of a friend list will consist of weak ties, which in accordance with this definition increases indirect unintentional exposure, which is a necessary first step in stimulating interest in politics. Also within this definition, is that strong ties will lead to increased political engagement.

**Online Political Participation**

Kluver and Soon (2005) argues that from the cyberlibertarian rhetoric, the internet acts as a decentralized technology that promotes participation. When considering the earlier discussion of the increasing use of SNSs by politicians, it becomes clear that traditional political participation has now also moved online. Gibson, Lusoli and Ward (2005) however extend on the traditional participation scale by indicating new possible dimensions such as e-postcards or...
political jokes. They then offers the following list of questions to determine online political participation: 1) Looking for political information on the web; 2) visiting a political organization's website; 3) signing up for an e-news bulletin; 4) discussing politics in a chat group; 5) joining an email discussion about politics; 6) sending an e-postcard from a political organization's website; 7) downloading software from a political organization's website; 8) signing an online petition; 9) sending an email to a politician; 10) sending an email to local or national government; 11) sending an email to a political organization; 12) donating funds online to a political cause; 13) volunteering online to help with a political cause; 14) joining a political organization online; 15) participating in an online question and answer session with a political official (Gibson, Lusoli & Ward, 2005).

While this list is extensive in coverage, it should be noted that the existing dataset limits the focus and specifically treats 1) looking for political information on the web, as a separate variable.

**Online Political Information Seeking**

Another important concept targeted by this research, is online political information seeking. Access in this area has increased with the spread of additional online tools such as YouTube, many of them integrated or ‘postable’ on SNS platforms. Again, as discussed above, the increased use of these platforms by politicians increased the amount of information available on them for political purposes. In addition, Sifry (2009) finds that more than half the American population used the Internet as a source of political information and participation. It becomes a point of interest for this research as to whether SNS plays a role in online political information seeking.

**Hypotheses**

The following hypotheses emerge:

H1a- The amount of SNS profiles positively predicts online political engagement.

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2 When updating ones status on a SNS or adding external content, videos or links, this is referred to as ‘posting’.
H1b- The amount of SNS profiles positively predicts online political information seeking. In addition to whether the number of profiles predict the above, it also becomes interesting to note whether the number of platforms used play any role:

RQ1- Do the number of platforms used play any role and which platforms are preferred?

The second set of hypotheses focus on the frequency of SNS usage:

H2a- The Frequency of SNS usage positively predicts online political engagement.

H2b- The Frequency of SNS usage positively predicts online political information seeking.

The third set of hypotheses focuses on the specific political use for SNS and test whether they affect engagement and information seeking:

H3a- The use of SNS for political purposes positively predicts online political engagement.

H3b- The use of SNS for political purposes positively predicts online political information seeking.

A specific area of interest is to whether or not the ‘friend’ function plays a specific role:

RQ2- Is there any role played by the ‘friend’ function?

**Methods**

This research is performed by means of secondary analysis on a dataset obtained from the May 2008 Spring Tracking Survey on Americans’ use of the Internet and Social Media, as provided by Pew Internet and American life project. The original data was collected via a telephone survey conducted by Princeton Survey Research Associates International between April 8 and May 11 in 2008. The data maintains that there is a 95% confidence that the error attributable to sampling and other random effects is plus or minus 2.4 percentage points, being 2 percentage points on results based on the total sample of N=2251 and 3 percentage points based on the results of internet users’ sample N=1553.

The sample was collected via random digit of telephone numbers from telephone exchanges in the United States. From the residential numbers 86 percent were contacted and 33
percent agreed to participate. From those 88 percent were found eligible and of those 89 percent completed the interview leaving a final response rate of 25 percent.

**Dependent Variables**

This research uses two dependent variables to test whether SNSs are effective contributors to political engagement. The importance of these two items is related to their ability to predict whether a person actively participates in online politics. Thus measuring them against the independent variables will make it possible to determine if SNSs are effective.

Online Political Engagement (M = .0953, SD = .16336, Cronbach’s alpha = .740), is an index constructed from 9 Yes-No items, asking respondents if: 1) they contribute money online; 2) Signed up to receive email from candidates or campaigns; 3) Posted political commentary or writing to an online news group, website or blog; 4) Forwarded or posted someone else’s political commentary or writing; 5) Created and posted their own political audio or video recordings; 6) Forwarded or posted someone else’s political audio or video recordings; 7) Created tags for news, information, or photos about politics or the election; 8) Signed an online petition; 9) Signed up online for any volunteer activities related to the campaign.

Online political information seeking (M = .2965, SD = .31176, Cronbach’s alpha = .815), is an index constructed from 7 Yes-No items, asking the respondents if they: 1) Watched campaign commercials online; 2) Watched video online of the candidate debates; 3) Watched video online of interviews with candidates; 4) Watched video online of candidate speeches or announcements; 5) Watched video online that did not come from a campaign or a news organization; 6) Read the full text of a candidate’s speech online; 7) Read a candidate’s position paper on an issue online.

**Independent Variables**

Two sets of independent variables will be used separately from each other. The first set aims to determine the effects of usage patterns, such as frequency of use, while the second set is
aimed at determining the effects of political usage habits, such as obtaining candidate or campaign information with the use of SNSs.

The number of SNS platforms used (M=1.62; SD=.835), was measured on a 4-point scale (1=1 to 4=4 or more) and asks the question: “How many social networking websites do you currently have a profile on?”

The total number of SNS profiles (M=1.95, SD=1.074), was measured on a 4-point scale (1=1 to 4=4 or more) and ask the question: “How many total profiles do you have online...?”

The most used profile (M=2.80, SD=3.235), was measured using a scale from 12 point scale (1=MySpace to 12=Classmates), and asks the question: “On which social networking site is the profile you update most often?”

The frequency of use (M=3.07, SD=1.421), was measured on a scale from 1 to 5 (1=Several times a day, 5=less often) and asked the question: “How often do you visit the social network website with the profile you use most often?” This item was recoded from low to high.

Obtaining candidate or campaign information on the site (M=1.78, SD=.413), is an agree and disagree scale and asks the question: “...have you ever gotten any campaign or candidate information on the sites?”.

Starting or joining a SNS political group (M=1.91, SD=.455), is an agree and disagree item and asks: “... have you ever started or joined a political group on a social networking site?”

Discovering friends’ political interests or affiliations (M=1.71, SD=.455), is an agree and disagree item and asks: “...have you discovered your friends’ political interests or affiliation on the site?”

Signed up as a friend of a candidate (M=1.90, SD=.300), is an agree and disagree item and asks: ‘... have you signed up as a ‘friend’ of any candidate on a social networking site?’

**Results**

The two dependent variables were separately tested using linear regression, to test the effects of the independent variables. In total four regressions were run, two for each dependent
variable, each with the two separate groups of independent variables. Demographic variables of age, income, race, sex and education were included as well as prior political interest as possible control variables. From the results, two tables were constructed.

From the results, the standardized Beta value is used in order to determine the strength with which it affects the dependent variable. In addition the R-square value is used to determine the degree of variance explained. In table 1 it is seen that the first group of independent variables account for 8.6 percent of total variance in the dependent variable online political engagement while the they account for 2.3% for the second dependent variable, online political information seeking.

Hypothesis 1a is found to be unsupported, with the total number of SNS profiles owned by the responded being statistically insignificant (p>.05). However, support is offered to the research question that the number of platforms used leads to significant interaction (B=.190, p≤.001). Similarly hypothesis 1b is found to be false, with the number of profiles owned by the individual being statistically insignificant (p>.05). In addition, the number of platforms is statistically insignificant (p>.05).

As expected, hypothesis 2a is supported, with frequency of SNS use significantly interacting with online political engagement (B=.115, p≤.001). Support is also found for hypothesis 2b, with frequency of SNS use significantly interacting with online political information seeking (B=.113, p≤.01). In other words there will be a .018 increase in online political engagement for every standard deviation increase in frequency of use, while there will be a .028 increase in online political information seeking. The more a person uses an SNS the more likely he or she to engage in online political engagement and online political information seeking.

In all instances, prior political interest plays a significant role in both online political engagement (B=.249, p≤.001) and online political information seeking (B=.385, p≤.000), suggesting that a significant level of prior interest is needed also in the world of social
networking sites. This supposedly weakens and argument that SNSs bridge the gap in engaging those not previously interested.

In online political engagement the user is more likely be a white, slightly older, male with considerable prior political interest, higher education and a preference for SNSs platforms MySpace, Facebook, LinkendIn and Tagged and slightly higher income. A similar situation is true for online political information seeking, with the exceptions that age and income play no role at all. This is perhaps reflective of the changing situation of access, with people of all ages being equipped with the technical skills to operate basic features of computers as well as the increased affordability of internet capable devices, such as mobile phones.

**Table 1**

<table>
<thead>
<tr>
<th>Predicting SNS usage effect on online political engagement and information seeking</th>
<th>Online political Engagement</th>
<th>Online political information seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.112**</td>
<td>-.023</td>
</tr>
<tr>
<td>Sex (Male)</td>
<td>-.185***</td>
<td>-.102**</td>
</tr>
<tr>
<td>Education</td>
<td>.177***</td>
<td>.255***</td>
</tr>
<tr>
<td>Income</td>
<td>.096*</td>
<td>-.029</td>
</tr>
<tr>
<td>Race (White = 0)</td>
<td>-.127***</td>
<td>-.103**</td>
</tr>
<tr>
<td>Incremental R² (percent)</td>
<td>9.3***</td>
<td>5.3***</td>
</tr>
<tr>
<td>Control Variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Political Interest</td>
<td>.249***</td>
<td>.385***</td>
</tr>
<tr>
<td>Incremental R² (percent)</td>
<td>6.6***</td>
<td>14.2***</td>
</tr>
<tr>
<td>SNS Usage Patterns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of SNS platforms</td>
<td>.190***</td>
<td>.056</td>
</tr>
<tr>
<td>Total SNS profiles</td>
<td>.077</td>
<td>.03</td>
</tr>
<tr>
<td>Preferred SNS platform</td>
<td>-.160***</td>
<td>-.092**</td>
</tr>
<tr>
<td>Frequency of SNS use</td>
<td>.115***</td>
<td>.113**</td>
</tr>
<tr>
<td>Incremental R² (percent)</td>
<td>8.6***</td>
<td>2.3***</td>
</tr>
<tr>
<td>Total R² (percent)</td>
<td>24.5***</td>
<td>21.8***</td>
</tr>
</tbody>
</table>

*Note: All Betas are after entry Betas. All Betas are standardized coefficients.

* p≤.05, **p≤.01, ***p≤.001

In table 2, for the dependent variable, online political engagement, the independent variables accounts for a very large portion of the variance at 29.9 percent, for the second dependent variable, online political information seeking, the independent variables account for 8.6 percent of the variance.
There is significant support for hypothesis 3a. The findings indicate that using SNS for campaign or candidate info ($B=0.099, p \leq 0.001$), started or joined a political group ($B=0.128, p \leq 0.001$) and discovering friends’ political interest ($B=0.406, p \leq 0.001$) are strongly predictive and have a significant impact on the dependent variable, while becoming a ‘Friend’ of a political candidate ($B=0.113, p \leq 0.001$) is also statistically significant. All variables are significant contributors to predicting online political engagement.

For hypothesis 3b, there is some evidence, with finding campaign or candidate information ($B=0.191, p \leq 0.001$) and discovering friends’ political interests or affiliations ($B=0.167, p \leq 0.001$) both highly significant and interactive with the online political information seeking. However, both started or joined a political group ($p>0.05$) and ‘friend’ a political candidate ($p>0.05$) are statistically insignificant. There is nevertheless considerable evidence that SNS is an effective platform for predicting online political information seeking.

For research question two, the answer appears to be yes under the dependent variable, online political engagement. Discovering friends’ political interests and affiliation has the strongest $B$-value increase of 0.406 for every standard deviation increase. This would provide support for the argument that indirect exposure through the ‘friend’ network can stimulate a respondent to be more likely to participate in online politics. In addition also has a significant effect leading to a 0.113 increase in online political engagement, providing further support for the ‘friend’ feature. For dependent variable two, online political information seeking, this is also true. Once again discovering a friends political interests and affiliations on their SNS profile leads to a highly significant increase of 0.167 in online political information seeking, for every one increase in standard deviation. However, this time ‘friend’ a political candidate is insignificant and has no interaction at all. This provides some additional support for the indirect exposure argument through the friends’ function on SNSs.

Once again, in both cases, prior political interest plays a very strong role. However, the demographic variables play a very inconsistent role. In online political engagement education
and race plays no role (p >.05) as does race (p>.05). However, the participant in online political engagement is still likely to be older, with a higher income and male with a prior political interest (B=.119, p≤.001). In online political information seeking age, income and race plays no role, with the participant likely to be male with a higher education (B=.156, p≤.001) and prior political interest (B=.312, p≤.001).

Perhaps the most interesting to note for demographics, is that race is statistically insignificant in both findings.

### Table 2

<table>
<thead>
<tr>
<th>Demographics:</th>
<th>Online political Engagement</th>
<th>Online political information seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.144***</td>
<td>-.012</td>
</tr>
<tr>
<td>Sex (Male)</td>
<td>-.125***</td>
<td>-.097***</td>
</tr>
<tr>
<td>Education</td>
<td>.030</td>
<td>.156***</td>
</tr>
<tr>
<td>Income</td>
<td>.068**</td>
<td>.002</td>
</tr>
<tr>
<td>Race (White = 0)</td>
<td>-.002</td>
<td>-.048</td>
</tr>
<tr>
<td>Incremental R² (percent)</td>
<td>7.0***</td>
<td>5.0***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Variable</th>
<th>Online political Engagement</th>
<th>Online political information seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Political Interest</td>
<td>.119***</td>
<td>.312***</td>
</tr>
<tr>
<td>Incremental R² (percent)</td>
<td>4.9***</td>
<td>12.7***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SNS for political use</th>
<th>Online political Engagement</th>
<th>Online political information seeking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campaign or candidate info</td>
<td>.099***</td>
<td>.191***</td>
</tr>
<tr>
<td>Started or Join political group</td>
<td>.128***</td>
<td>.033</td>
</tr>
<tr>
<td>Friends’ political interests</td>
<td>.406***</td>
<td>.167***</td>
</tr>
<tr>
<td>‘Friend’ political candidate</td>
<td>.113***</td>
<td>-.030</td>
</tr>
<tr>
<td>Incremental R² (percent)</td>
<td>29.9***</td>
<td>8.6***</td>
</tr>
<tr>
<td>Total R² (percent)</td>
<td>41.8***</td>
<td>26.3***</td>
</tr>
</tbody>
</table>

*Note:* All Betas are after entry Betas. All Betas are standardized coefficients.

* p≤.05, **p≤.01, ***p≤.001

### Discussion

An increase in the frequency of using SNS results in both an increase in online political engagement and online political information seeking, while an increase in the number of different platforms used results in an increase in online political engagement. However, and perhaps logically so, an increased number of total profiles has no impact on either. One can argue that having your attention split between too many profiles results in a lack of time to
participate in serious political engagement and hinders the search for more knowledge, it thus then possible to understand why hypotheses 1a and 1b are found to be not supported.

Using SNS for political purposes leads to a strong increase in online political engagement and to a lesser degree in online political information seeking. This impact on online political engagement is worth a special notice due to the large proportion of variance explained (R-square=41.8%). A particular point of interest is the clear role played by discovering friends’ political interests and affiliations. This provides strong support for the argument at the start that indirect exposure through the ‘friend’ network will result in an increase for online political engagement. This also holds true for online political information seeking, suggesting that respondent become curious after being exposed to their friends’ political interest. It would be interesting to see if the respondents follow the same political course as their friends to whose interests they were exposed, as this would result in an argument for political polarization.

Further inspiration for increasing online political information seeking is derived from visiting the SNS profiles of candidate or political campaigns. The respondent appears dissatisfied with the information provided alone on the profile of the candidate and searches for more. This is a healthy sign, as the respondent does not seem accept everything he/she hear on face value.

While demographic values seem to indicate the familiar patterns, it is worthwhile noting that at least in this research they appear worn down, with race almost entirely eliminated. This bodes well for a democratic system that there is now, at least online, a more equal racial representation in terms of access to online political engagement. There could be several mitigating factors, with the most obvious the election of the first African-American president of the United States, Barack Obama, who undoubtedly inspired thousands of African-Americans to participate in politics. Furthermore, the more extensive access to the internet, or more specifically Social Networking Sites, via mobile devices could also be a mitigating factor. It is no longer as expensive to have access. It would be worth taking further note of Demographic variable changes in future research related to this field.
Conclusion

In conclusion, it appears that social networking sites play a significant role in online political engagement and information seeking, in that it not only provides a platform for political candidates to reach the public, but more so because it provides a platform to stimulate the interest of thousands of people through indirect exposure. It is thus a promising platform for both engagement and information seeking and appears to hold the potential to overcome traditional social economic status limitations.

Interesting topics for future research include the possibility of political polarization through the ‘friend’ function. Another suggestion is whether traditional SES factors affecting access and participation are being overcome by SNSs, as appears to be the case here.

Acknowledgements

This research was done using a secondary dataset obtained from the Pew Internet and American life project. Any opinions, findings and conclusions expressed herein are the findings of this author and do not necessarily reflect the opinion of the dataset authors.
References


Tunisian, Egyptian, Yemeni, Libyan Revolutions. Retrieved March 10, 2011, from
http://forums.zybez.net/topic/1468707-tunisian-egyptian-yemeni-libyan-revolutions/


Political Information. [Article]. Conference Papers -- National Communication
Association, 1.