소셜미디어에 대해 던지는 열가지 질문

2010년 12월

한상기 (@steve3034)
문화기술대학원 교수

KAIST
I. 소셜미디어의 문화적 차이에 얼마나 존재하는가?

Social Networking – Global Phenomenon, Facebook Leading, Though Many Regional Strongholds

Global Social Networking Web Sites*
859MM Unique Users, +32% Y/Y; 232B Total Minutes, +50% Y/Y, 1/10

- Facebook 471MM users, +100% Y/Y
- MySpace 120MM users, +2% Y/Y
- Twitter 74MM users, +1197% Y/Y
- Hi5 47MM users, +22% Y/Y
- Orkut 52MM users, +6% Y/Y
- Skyrock 20MM users, +9% Y/Y
- Baidu Space 54MM users, +30% Y/Y
- Renren 34MM users, +1% Y/Y*
- Friendster 13MM users, -4% Y/Y
- QQ (Alumni + Mini) – Tencent 47MM users, +65% Y/Y
- CyWorld 19MM users, -12% Y/Y
- Mixi 14MM users, +14% Y/Y

Note: “Global social networking” not available. United Arab Emirates data not available. Hungary data not available.

Social Networking – Global Phenomenon, Facebook Leading, Though Many Regional Strongholds

Global Social Networking Web Sites*
859MM Unique Users, +32% Y/Y; 232B Total Minutes, +50% Y/Y, 1/10

- Facebook 471MM users, +100% Y/Y
- MySpace 120MM users, +2% Y/Y
- Twitter 74MM users, +1197% Y/Y
- Hi5 47MM users, +22% Y/Y
- Orkut 52MM users, +6% Y/Y
- Skyrock 20MM users, +9% Y/Y
- Baidu Space 54MM users, +30% Y/Y
- Renren 34MM users, +1% Y/Y*
- Friendster 13MM users, -4% Y/Y
- QQ (Alumni + Mini) – Tencent 47MM users, +65% Y/Y
- CyWorld 19MM users, -12% Y/Y
- Mixi 14MM users, +14% Y/Y

Note: “Global social networking” not available. United Arab Emirates data not available. Hungary data not available.

Social Networking – Global Phenomenon, Facebook Leading, Though Many Regional Strongholds

Global Social Networking Web Sites*
859MM Unique Users, +32% Y/Y; 232B Total Minutes, +50% Y/Y, 1/10

- Facebook 471MM users, +100% Y/Y
- MySpace 120MM users, +2% Y/Y
- Twitter 74MM users, +1197% Y/Y
- Hi5 47MM users, +22% Y/Y
- Orkut 52MM users, +6% Y/Y
- Skyrock 20MM users, +9% Y/Y
- Baidu Space 54MM users, +30% Y/Y
- Renren 34MM users, +1% Y/Y*
- Friendster 13MM users, -4% Y/Y
- QQ (Alumni + Mini) – Tencent 47MM users, +65% Y/Y
- CyWorld 19MM users, -12% Y/Y
- Mixi 14MM users, +14% Y/Y

Note: “Global social networking” not available. United Arab Emirates data not available. Hungary data not available.

Social Networking – Global Phenomenon, Facebook Leading, Though Many Regional Strongholds

Global Social Networking Web Sites*
859MM Unique Users, +32% Y/Y; 232B Total Minutes, +50% Y/Y, 1/10

- Facebook 471MM users, +100% Y/Y
- MySpace 120MM users, +2% Y/Y
- Twitter 74MM users, +1197% Y/Y
- Hi5 47MM users, +22% Y/Y
- Orkut 52MM users, +6% Y/Y
- Skyrock 20MM users, +9% Y/Y
- Baidu Space 54MM users, +30% Y/Y
- Renren 34MM users, +1% Y/Y*
- Friendster 13MM users, -4% Y/Y
- QQ (Alumni + Mini) – Tencent 47MM users, +65% Y/Y
- CyWorld 19MM users, -12% Y/Y
- Mixi 14MM users, +14% Y/Y

Note: “Global social networking” not available. United Arab Emirates data not available. Hungary data not available.

Social Networking – Global Phenomenon, Facebook Leading, Though Many Regional Strongholds

Global Social Networking Web Sites*
859MM Unique Users, +32% Y/Y; 232B Total Minutes, +50% Y/Y, 1/10

- Facebook 471MM users, +100% Y/Y
- MySpace 120MM users, +2% Y/Y
- Twitter 74MM users, +1197% Y/Y
- Hi5 47MM users, +22% Y/Y
- Orkut 52MM users, +6% Y/Y
- Skyrock 20MM users, +9% Y/Y
- Baidu Space 54MM users, +30% Y/Y
- Renren 34MM users, +1% Y/Y*
- Friendster 13MM users, -4% Y/Y
- QQ (Alumni + Mini) – Tencent 47MM users, +65% Y/Y
- CyWorld 19MM users, -12% Y/Y
- Mixi 14MM users, +14% Y/Y

Note: “Global social networking” not available. United Arab Emirates data not available. Hungary data not available.

Social Networking – Global Phenomenon, Facebook Leading, Though Many Regional Strongholds

Global Social Networking Web Sites*
859MM Unique Users, +32% Y/Y; 232B Total Minutes, +50% Y/Y, 1/10

- Facebook 471MM users, +100% Y/Y
- MySpace 120MM users, +2% Y/Y
- Twitter 74MM users, +1197% Y/Y
- Hi5 47MM users, +22% Y/Y
- Orkut 52MM users, +6% Y/Y
- Skyrock 20MM users, +9% Y/Y
- Baidu Space 54MM users, +30% Y/Y
- Renren 34MM users, +1% Y/Y*
- Friendster 13MM users, -4% Y/Y
- QQ (Alumni + Mini) – Tencent 47MM users, +65% Y/Y
- CyWorld 19MM users, -12% Y/Y
- Mixi 14MM users, +14% Y/Y

Note: “Global social networking” not available. United Arab Emirates data not available. Hungary data not available.
• How we rank real-time data and combine with social circles?

Social Relevancy Rank

- Friends and Following
- Taste Neighbors
- Friends-of-Friends
- Influencers
- The Crowd (Aggregate)

Alex Iskold for ReadWriteWeb
By Ravi Kumar, Jasmine Novak, Prabhakar Raghavan, and Andrew Tomkins

STRUCTURE AND EVOLUTION OF Blogspace

A critical look at more than one million bloggers and the individual entries of some 25,000 blogs reveals blogger demographics, friendships, and activity patterns over time.

Blogs constitute a remarkable artifact of the Web. Most people think of them as Web pages with reverse chronological sequences of dated entries, usually with sidebars of profile information and usually maintained and published with the help of a popular blog authoring tool. They tend to be quirky, highly personal, typically read by repeat visitors, and interwoven into a network of tight-knit but active communities. We refer to the collection of blogs and all their links as blogspace. By analyzing the structure and content of more than one million blogs worldwide, we’ve now unearthed some fascinating insights into blogger behavior.
5.4 Active Period of Trends

(a) # of active periods / topic  
(b) Duration of active period

Figure 17: Time lag between a retweet and the original tweet

Figure 4: Degree of separation

Figure 12: Cumulative fraction
한국 트위터의 구조적 특징

Twitter Activity

Time Lag between a retweet and the original tweet

Time Lag between a retweet and the original tweet

그림 19 Retweet Time Lag CDF ($\Delta t = 1$ week)

그림 20 Retweet Time Lag CDF ($\Delta t = 60$ min)

Topic Distribution

Technology 67.9%

Business 11.7%

Society 11.5%

Entertainment 2.1%

Etc 5.1%

Technology

Business

Society

Entertainment

Etc
Discover how online human interactions are driven by and can change social conventions

Social drivers—goals, desires, interests and attitudes—are fundamental aspects of how links are made

Understanding the Web requires insights from sociology and psychology every bit as much as from mathematics and computer science

In order to increase and enhance user-generated content contributions, it is important to understand the factors that lead people to freely share their time and knowledge with others.

**What Motivates Wikipedians?**

The last few years have seen a substantial growth in user-generated online content [7, 11] delivered through collaborative Internet outlets such as YouTube, Flickr, or Slashdot.org, as well as more traditional media outlets such as BBC News.com [6]. Consistent with the Open Information Society's vision of decreasing restrictions on the creation and delivery of previously protected information goods [1], user-generated content marks a new way for information to be created, manipulated, and consumed.

Wikipedia, the Web-based user-created encyclopedia, is a prominent example of a collaborative, user-generated content outlet [11]. With more than 1.9 million articles created by users in English alone, it is among content outlets, since the content is contributed by contributors, and identify which motivations are as values viewed favorably by important others. Given the among contributors will positively relate to the extent of collaborative knowledge sharing [5].

<table>
<thead>
<tr>
<th>Motivation</th>
<th>Question example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective</td>
<td>&quot;By writing/editing in Wikipedia I feel less lonely.&quot;</td>
</tr>
<tr>
<td>Values</td>
<td>&quot;I feel it is important to help others.&quot;</td>
</tr>
</tbody>
</table>
| Career     | "I can make new contacts that might help my business or career."
| Social     | "People I'm close to want me to write/edit in Wikipedia."
| Understanding | "Writing/editing in Wikipedia allows me to gain a new perspective on things." |
| Enhancement | "Writing/editing in Wikipedia makes me feel needed." |
| Fun        | "Writing/editing in Wikipedia is fun." |
| Ideology   | "I think information should be free." |

*significant at 0.05 level
**significant at 0.01 level
***significant at 0.001 level
By Bonnie A. Nardi, Diane J. Schiano, Michelle Gumbrecht, and Luke Swartz

Bloggers are driven to document their lives, provide commentary and opinions, express deeply felt emotions, articulate ideas through writing, and form and maintain community forums.

Why We Blog

Blogging is sometimes viewed as a new, grassroots form of journalism and a way to shape democracy outside the mass media and conventional party politics [3]. Blog sites devoted to politics and punditry, as well as to sharing technical developments (such as www.slashdot.org), receive thousands of hits a day. But the vast majority of blogs are written by ordinary people for much smaller audiences. Here, we report the results of an ethnographic investigation of blogging in a sample of ordinary bloggers. We investigated blogging as a form of personal communication and expression, with a specific interest in uncovering the range of motivations driving individuals to create and maintain blogs.

• Documenting one’s life
• Blogs as commentary: providing commentary and opinions
• Blogs as catharsis: expressing deeply felt emotions
• Blog as muse: articulating ideas through writing
• Blogs as community forum: forming and maintaining community forums
5. 소셜미디어에서 여러개의 디지털 아이덴티티를 어떻게 관리 운영할 것인가?
6. 소셜미디어는 사회적 혁명을 가져올 수 있는가?

**OCTOBER 3, 2010**

**THE POLITICAL SCENE**
Steve Coll and George Packer on the Middle East peace process.

**ASk the Author**
Malcolm Gladwell answers readers’ questions about Twitter and social media.

**NEWS DESK**
John Cassidy: Ryder Cup Day
Owen Walsh Washout 0/0 7:30 AM

**ANNALS OF INNOVATION**

**SMALL CHANGE**

*Why the revolution will not be tweeted.*

by Malcolm Gladwell

**OCTOBER 4, 2010**

At four-thirty in the afternoon on Monday, February 1, 1960, four college students sat down at the lunch counter at the Woolworth’s in downtown Greensboro, North Carolina. They were freshmen at North Carolina A. & T., a black college a mile or so away.

“I'd like a cup of coffee, please,” one of the four, Ezell Blair, said to the waitress.

“We don’t serve Negroes here,” she replied.

The Woolworth’s lunch counter was a long L-shaped bar that could seat sixty-six people, with a standup snack bar at one end. The seats were for whites. The snack bar was for blacks. Another employee, a black woman who worked at the steam ironing department, was sitting there.

Social media can’t provide what social change has always required.
7. 소셜미디어에서 누가 더 영향력 있는 사람인가?

\[ r(\tau_p) = \sum_{j=1}^{n} M_j(i, \tau_p, \Delta t) \times \Delta V_j(i, \tau_p, \Delta t) \]

\[ \Delta V_j(i, \tau_p, \Delta t) = \frac{D_{agg}(j, \tau_p, \Delta t)}{\Delta t} \]

\[ r(\tau_p) : \tau_p \text{ 영역에서 User i의 정보 확산 지수} \]
\[ \tau_p : \text{Topic p } (\tau_p \in T, T = \{\tau_1, \tau_2, \cdots, \tau_k\}) \]
\[ T : \text{Web 분류에 사용되는 13가지 Topic 집합} \]
\[ j : \text{Tweet j with url} \]

```
<table>
<thead>
<tr>
<th>Technology</th>
<th>Society</th>
<th>Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>clien_net (2948.99)</td>
<td>Chmynews_Korea (752.51)</td>
<td>wiktree (695.11)</td>
</tr>
<tr>
<td>estima7 (3177.54)</td>
<td>hantweet (612.47)</td>
<td>estima7 (508.12)</td>
</tr>
<tr>
<td>betanews_kr (2853.3)</td>
<td>meesarang (575.36)</td>
<td>hiconcept (458.43)</td>
</tr>
<tr>
<td>xguru (2387.30)</td>
<td>twt_korea (684.50)</td>
<td>twt_korea (373.25)</td>
</tr>
<tr>
<td>hiconcept (2216.34)</td>
<td>yonhaptweet (399.03)</td>
<td>betanews_kr (216.70)</td>
</tr>
<tr>
<td>oojoco (1644.72)</td>
<td>mediamongu (297.43)</td>
<td>Fotokdi (206.43)</td>
</tr>
<tr>
<td>twt_korea (1356.51)</td>
<td>wiktree (244.43)</td>
<td></td>
</tr>
<tr>
<td>leeji (1165.55)</td>
<td>social_holic (224.12)</td>
<td></td>
</tr>
<tr>
<td>kwang82 (1062.08)</td>
<td>hicroh (187.20)</td>
<td></td>
</tr>
</tbody>
</table>
```

그림 25 Technology Topic 영역에서의 정보

그림 26 Society Topic 영역에서의 정보 영향력자 그룹 순위 변화 그래프

영역별 정보 영향력자

Social Computing Lab

2010년 12월 27일 월요일
8. 소셜미디어에서 누구를 신뢰할 것인가?
9. 소셜미디어는 사회적 자본을 증가시키고 있는가?
10. 우리는 새로운 프라이버시 시대를 맞이하고 있는가?
Thank you and meet me at

:stevehan

: @steve3034

Blog: socialcomputing.tistory.com