A motives framework of social media website use: A survey of young Americans

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Abstract

Social media is increasingly important in daily life and is an especially important social interaction mechanism for young people. Although research has been conducted evaluating user types based on motives for using social media, no such framework has been extended to social media websites. We extend previous research by evaluating the underlying structure of social media website usage motivations using a 13 item survey and evaluations from 19 different social media websites administered to 1686 young Americans. Using a multidimensional scaling approach, we uncover 2 major motive dimensions underlying social media website use: fun-related and content-specific. Based on the derived dimensions, we generate a graphical “quadrant” system for classifying social media websites and depict all 19 social media sites based on their quadrant. We propose that our quadrant system can be used by other researchers to further refine understanding of social media website usage motives.

1. Introduction

The use of social media (SM) has grown immensely over the past decade, with technological and Internet innovations like Facebook, Twitter, and YouTube achieving massive adoption in a few years (e.g., Brenner, 2013). Although many age groups use SM, young people are adopting at the fastest rate (Brenner & Smith, 2013). In 2013, 85% of young adults ages 18–29 reported using social networking sites, while only 78% of 30–49 year olds, 63% of 50–64 year olds, and 45% of adults over the age of 65 reported SM use (Brenner & Smith, 2013). Consequently, young peoples’ experience of social relationships, information gathering, and interaction with the world is increasingly being shaped through SM (e.g., Correa, Hinsley, & De Zuniga, 2010).

SM includes countless sites with very different functions or uses that fulfill different personal needs (Brandtzæg & Heim, 2009). For example, it may seem obvious that specific SM fulfill specific needs (e.g., YouTube as an entertainment site); yet many SM ultimately develop uses that are perhaps unexpected (e.g., YouTube as a learning tool or messaging platform). Hence, it is important to understand how young people use and conceptualize SM to fully understand how various sites fulfill personal needs and affect how they interact with the world.

Toward the end of understanding how young adults conceptualize SM, many attempts have been made to categorize SM users into representative typologies. For example, Brandtzæg and Heim (2011) found five user types in a large-scale Norwegian survey. Similar efforts have found that Internet use more broadly has a similar dimensionality (e.g., Brandtzæg, Heim, & Karahasanovic, 2011; Johnson & Kulpa, 2007). By contrast, there is a dearth of peer-reviewed literature attempting to represent SM sites. Although the practitioner literature is full of attempts to represent SM sites, with taxonomies varying in the number of dimensions from 4 (e.g., Tuten, 2012) to as many as 26 types (Solis, 2013), the vast majority of such research describes SM from a specific-functional perspective, often including an organizing framework that is created solely for the purposes of the study at hand. Moreover, existing frameworks are usually populated by SM archetypes such as blogs and wikis, are subjective, and lack rigorous empirical foundations.

The purpose of the present work is to expand upon previous work that attempts to derive a framework for young adult SM usage in terms of over-arching functions and between-user interaction. We began the current work by conducting an extensive literature review to form a clear, representative definition of SM (see Romano Bergstrom et al., 2012). Stemming from our definition, literature review, and preliminary qualitative research, we developed and administered a survey to young adults to learn about their
perceptions of SM usage and functionality. Our study contributes to the literature on SM usage by evaluating SM sites according to how young users interact with them. Our findings show the underlying dimensionality of SM site usage and produces a model which allows for emerging social media to be added according to the users’ experience.

In each distinct definition of SM, common characteristics persist, including a network of online applications, platforms, and technologies that allow for user-generated and controlled content to be shared and altered, as well as environments for participation, collaboration, conversation and identity creation (e.g., Boyd & Ellison, 2008; Green, 2011; Henderson and Bowley, 2010). With the above characteristics in mind, we define social media as:

> Internet communications where more than one user can publish or post information within a community of users.

Our definition both allows for many different organizational and user goals to exist, and does not assume specific goals, such as building relationships or demonstrating authenticity, as do other definitions.

Additionally, our definition focuses on the concept of interaction (i.e., “Internet communications where more than one user...”) which can vary in intensity from consumer to creator to exchanger. SM users are free to choose to be only consumers of SM; however, the opportunity to interact within the community must be present, separating SM from “push-only” websites (i.e., where information is pushed to the user with no opportunity for interaction).

Finally, our definition implies that there is a public or semi-public (depending on security settings) aspect of SM (i.e., “...publish or post information within a community of users”). The public or semi-public nature of our definition is a critical distinction that separates SM from other Internet-based communication, such as email and instant messaging. The public or semipublic environment also excludes other online activities where multiple users/administrators can post on a private website.

Owing to the broadness of the definition of SM, we attempt to develop a SM framework which is an organizing structure that identifies various SM types by uncovering commonalities between reported usage of SM sites. An important goal of the present study was to allow our framework to be applied despite the rapidly changing nature of SM, readily encompassing current SM platforms while maintaining the flexibility to accurately represent future developments.

In attempting to create a framework of SM sites, we sought to define how, why, and where users interact with each other via the SM, without assuming it is known or that there is a singularity of purpose for a social medium, as many other frameworks assume. We began by examining existing research on why users interact with each other through SM. As with the definition of SM, previous literature provides a multitude of distinct attempts to couch SM in a framework that is all encompassing, while being simultaneously adaptable and intuitive. Schultz (2007) provided one of the earliest and more representative attempts at SM classification in which she attempted a visual representation of SM as an ecosystem consisting of functional and application-specific clusters. Others provide SM classifications that are primarily function-based (i.e., blogging, sharing, archiving, community creation, identity creation, and networking; e.g., Brandtzæg & Heim, 2009; Green, 2011; Kietzman, Hermkens, McCarthy, & Silvestre, 2011). Others utilize organizational structures that blend functions together with more site-, application-, or tool-specific categorization, such as aggregators, multimedia sites, simple notification services, forums, wikis, mash-ups, and folksonomies (e.g., Beer, 2008; Chung & Austria, 2010; Constantines & Fountain, 2008). Yet others include specific media vehicles as individual SM categories, like videos, photos, text, and podcasts (e.g., Joos, 2008).

In perhaps one of the most comprehensive accounts of SM motives to date, Brandtzæg and Heim (2009) found that the 5 major reasons for SM use include (a) making new friends; (b) connecting with old friends; (c) socializing, often in terms of sharing ongoing updates; (d) obtaining information from others, and (e) debating with others about specific topics—such findings mirror those found for motives to use the internet broadly (e.g., Papacharissi & Rubin, 2000).

Deriving from research on motives, the extant literature also contains several frameworks for SM users. The best documented and most comprehensive effort was undertaken by Brandtzæg and Heim (2011), who found 5 types of SM users. The first of the types were known as sporadics who use SM, but do not use SM very much. The second type lurkers tend to use SM more than do sporadics but generally just watch others’ content for entertainment but do not post their own. The third type socializers are very active and use SM to keep in touch by viewing others’ content as well as posting their own—with their main focus of SM usage being for socializing and connecting with others. Socializers are also active in seeking out new contacts. The fourth group was labeled debaters who were much more practical in their SM usage, focusing their use on obtaining information and activity on discussion boards. Finally, actives were engaged in a lot of activities for all sorts of purposes (information, debate, socialization, etc.).

Unfortunately, extant research on SM sites lacks the breadth observed for SM users in terms of capturing how SM sites fulfill SM user needs and, consequently, lack flexibility and generality. In the next section, we describe the development of a survey and data collection effort intended to discern the underlying structure of SM websites, based on 19 of the most commonly used SM sites or SM clusters currently on the Internet. In an effort to maintain our framework’s generality, our survey is based on SM motives, but channels such motives into appraisals of SM sites—thereby overcoming the specificity of previous frameworks and maintaining a structure that can apply to any SM site current or future.

2. Method

2.1. Survey development process

In order to generate our motives-based SM site framework, we developed a survey that included questions that follow both from research from (Brandtzæg and Heim 2009, 2011) findings regarding SM motives and user types as well as the authors’ own qualitative research (Carroll, Romano Bergstrom, & Fischer, 2013). In particular, our 13 SM questions assessed various aspects of SM usage being for socializing and connecting with others. Socializers are also active in seeking out new contacts. The fourth group was labeled debaters who were much more practical in their SM usage, focusing their use on obtaining information and activity on discussion boards. Finally, actives were engaged in a lot of activities for all sorts of purposes (information, debate, socialization, etc.).

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Games (MMORPGs; e.g., World of Warcraft, RuneScape, etc.), (18) Social Rater Sites (e.g., Yelp, Rate My Professors, etc.), and (19) YouTube.

2.2. Survey administration and participants

The SM survey was a stratified, mail-based survey fielded to respondents who indicated that they use SM on a previous large scale survey fielded by the US Department of Defense. The fielding period was approximately three months in the summer of 2012. The data were probability weighted to represent the American young adult population (ages 16–24), adjusted for non-response and ineligibility. Stratification was based on respondent age, gender, and Census Division. The final AAPOR unweighted, eligible response rate (#3) was 47.91% for the survey. The AAPOR response rate #3 is the ratio of eligible respondents to the sum of eligible respondents (N = 1686), refusals (N = 50; number of people who return the survey refusing to answer the questions), non-contacts (N = 91; mail returned from postal service), eligible non-respondents (N = 1,692; non-respondents who are of known eligibility to the study population) and the estimated proportion of eligible respondents among individuals with unknown eligibility (in this case, was assumed to be 1—all unknown eligibility cases were assumed eligible). Average age of respondents was 19.7 (SD = 2.4), and 49.9% of the sample was male. The geographic representation (by U.S. Census Region) was as follows: Northeast 27.7%, Midwest 23.3%, South 26.8%, and West 22.7.

To minimize respondent burden, the survey was programmed so that respondents randomly received question sets for up to five SM sites or SM clusters that they reported using. Respondents who indicated using more than five SM sites or SM clusters were randomly assigned to respond to the analysis questions for only five of the SM they indicated using. Fifty-eight percent of the sample received 5 SM sites, 21% received 4 SM sites, 12% received 3 SM sites, 7% received 2 SM sites, and 2% received only 1 SM site to rate. No differences in terms of age, gender, or Census Region were found in terms of the number of SM sites rated.¹

2.3. Analysis

The data were analyzed using a classical Multi-Dimensional Scaling (MDS) approach. MDS is commonly used in marketing literature to discern underlying characteristics of brands, for instance in terms of their likability, quality, pricing, etc. (e.g., Cooper, 1983). Our focus was similarly on comparisons of the different characteristics of various SM on various usage dimensions; thus, the MDS approach allowed us to discern how and why different SM are similar or different on underlying dimensions.

The analysis proceeded in two steps. First, we calculated probability-weighted means for the 13 SM items for each of the 19 SM. The sample size from which each item mean differed across each SM site as respondents only responded about those sites they used. The means and sample sizes for each item and SM are presented in Table 1.

Second, the mean values obtained for each of the 13 analysis items for each SM were compiled into a matrix (i.e., with utility items as columns, and SM as rows, as shown in Table 1). The constructed matrix was then analyzed using a Euclidian distance-based MDS analysis. MDS is a dimension-reduction technique that seeks to describe the similarities (i.e., the Euclidian distances) between rows of the matrix (i.e., SM) based on the patterns of similarities/distances between the entries in the columns (i.e., SM items) by a smaller set of variables. Specifically, the distances between each of the items is compiled and summed across the different SM. The sums of the distances then form their own matrix of similarities/distances, which is subjected to eigenvalue decomposition to discern the number of underlying variables that can be used to describe the different SM, as well as their eigenvectors. Following the MDS, we computed correlations between the scores each SM site obtained on each of the MDS dimensions with each question's mean, which describe how each item "loads" onto each underlying variable. The dimension-question correlations are useful for interpretation of the dimensions formed by the MDS analysis.

3. Results

The MDS analysis results are presented in Table 2. The analysis identified 2 underlying dimensions that explained the majority of the variability in the similarities/distances between the ratings for each of the SM. As is depicted in Table 2, the 2-dimension solution explained 65% of the total eigenvalues extracted when considering the absolute values of the eigenvalues (i.e., the matrix analog of a single item variance) and 95% of the total eigenvalues extracted when considering the squared eigenvalues. We chose these two dimensions based on their performance (i.e., in terms of being attributed eigenvalues) and interpretability (i.e., correlations with items).

The first dimension had strong performance, explaining 51% of the eigenvalues (81% of the squared eigenvalues). It correlated strongly (i.e., r ≥ 0.6) with giving updates, fun, entertainment, and sharing/teaching about information. Consequently, the first dimension had a clear interpretation related to fun and information sharing. The first dimension was also associated strongly with SM that have a strong sharing and entertainment component, such as Facebook, Instagram, Pinterest, and Twitter.

The second dimension was relatively less important in that it only explained 17% of the eigenvalues (10% of the squared eigenvalues). It correlated strongly (i.e., r ≥ 0.6) with getting better at something, learning something new, (not) sharing personal information, and (not) giving updates. Thus, the second dimension was focused more on content, skills, and information/knowledge building in a general sense—but not engaging in social contact. The SM associated most strongly with this dimension were YouTube, MMORPGs, and Wikipedia.

Although the third dimension extracted would have increased total amount of eigenvalues, the third extracted dimension was defined based on seeking information about people, places, things (like places to eat) and explained relatively less in terms of eigenvalues (13%; 5% of squared eigenvalues). Moreover, the third dimension only really distinguished MMORPGs (low score) from social rater sites (high score). As a consequence, we did not retain this dimension, for the sake of parsimony.

3.1. Defining the framework model

We examined the model and defined dimensions and segments. We divided the depiction into four quadrants with a middle zone comprised of SM that did not strongly associate with either of the dimensions. See Fig. 1 for a graphical representation of the model.

3.1.1. Dimension I: fun-related

The first MDS dimension was most strongly associated with fun, laughing, entertainment, and providing updates throughout the day. Owing to its sharing and fun-related content, we call the first dimension fun-related. The fun-related theme is represented hori-
3.1.2. Dimension II: content-specific

The second MDS dimension was most strongly associated with getting better at something, as well as with not sharing personal information or providing updates. Taken together, the pattern appeared to be one of a set of focused, content-specific or information/knowledge-building behaviors, which we named, content-specific. The content-specific theme is represented vertically in Fig. 1. As shown, a user’s behavior is more likely to focus on specific content as you move in an upward direction. Toward the lower end, information is sought from one’s network (e.g., Yelp, Foursquare, Twitter). At the higher end, information is sought from SM in a less network-dependent manner, where the skills, information gathering, or knowledge-building elements supersede the network (e.g., Pinterest, YouTube, and Wikipedia).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Means for social media usage items by social medium.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Find out more about something or someone</td>
</tr>
<tr>
<td>Blogs</td>
<td>3.23</td>
</tr>
<tr>
<td>Discussion boards/forums</td>
<td>3.23</td>
</tr>
<tr>
<td>Facebook</td>
<td>3.70</td>
</tr>
<tr>
<td>Flickr</td>
<td>2.18</td>
</tr>
<tr>
<td>Foursquare</td>
<td>1.81</td>
</tr>
<tr>
<td>Google places</td>
<td>2.65</td>
</tr>
<tr>
<td>Google+</td>
<td>2.91</td>
</tr>
<tr>
<td>Instagram</td>
<td>2.97</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>2.73</td>
</tr>
<tr>
<td>MySpace</td>
<td>2.63</td>
</tr>
<tr>
<td>Pinterest</td>
<td>3.10</td>
</tr>
<tr>
<td>Social news sites</td>
<td>2.23</td>
</tr>
<tr>
<td>Second life</td>
<td>2.00</td>
</tr>
<tr>
<td>Tumblr</td>
<td>2.76</td>
</tr>
<tr>
<td>Twitter</td>
<td>3.22</td>
</tr>
<tr>
<td>Wikipedia</td>
<td>4.46</td>
</tr>
<tr>
<td>MMORPGs</td>
<td>1.75</td>
</tr>
<tr>
<td>Social rater sites</td>
<td>4.11</td>
</tr>
<tr>
<td>YouTube</td>
<td>3.01</td>
</tr>
<tr>
<td>See/hear something entertaining</td>
<td></td>
</tr>
<tr>
<td>Share ideas/information with peers to advance a topic</td>
<td></td>
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<tr>
<td>Teach others about something you have learned</td>
<td></td>
</tr>
<tr>
<td>Work together toward a shared goal</td>
<td></td>
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<tr>
<td>How much personal information do you share about yourself</td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td></td>
</tr>
</tbody>
</table>

3.1.3. Quadrant I: information seeking

Quadrant I is in the upper-left side of Fig. 1 and represents high-content specific/low-fun related site usage and, at present, is populated only with Wikipedia. The information seeking quadrant includes SM that provides users with information gathering not intended to entertain or engage youth in conversation or fun. American youth use Quadrant I SM to find information and to learn and are likely to find and attend to only the specific information they seek on this type of SM.

3.1.4. Quadrant II: focused entertainment

Quadrant II is in the upper-right side of Fig. 1 and represents high-content-specific/high-fun-focused site usage, and includes YouTube, MMORPGs, and Pinterest. American youth report using these sites to find information, to learn more about specific things, to get better at doing things, to teach others about things they have learned, to have fun, and to hear/see entertaining things. Thus, focused entertainment sites have dual purposes as youth are look-
3.1.5. Quadrant III: purpose driven

Quadrant III is in the lower-left side of Fig. 1 and represents low-content-specific/low-fun-focused site usage, and includes Social News (e.g., Reddit, Digg, Delicious), Social Raters (e.g., Yelp, Rate My Professor), LinkedIn, and Foursquare. Such SM tend to focus on non-knowledge and skills-related information that are used with a specific purpose in mind, rather than just for entertainment. The likely purpose of purpose driven SM is very transactional and specific, especially corresponding with Brandtzæg and Heig's (2009) "socializers" and "debaters." Whereas the correspondence between social media and users may not be strong, it is plausible accounting for the ways in which they actually use various SM sites.

3.1.6. Quadrant IV: socially-driven fun

Quadrant IV is in the lower-right side of Fig. 1 and represents low-content-specific/high-fun-focused site usage, and includes Myspace, Tumblr, Twitter, Facebook, and Instagram. American youth use socially-driven fun SM primarily to have fun and to share their life experiences with others. Socially-driven fun SM are used to laugh, to see or hear entertaining things, to post updates throughout the day about fun things they are doing, and to give updates about major events in their lives. Although the content of one user or set of users can be specific, the content across an entire SM is typically wide-ranging.

3.1.7. In the middle

Sites in this middle zone include blogs, discussion boards, Google Places, Google+, Flickr, and Second Life. These SM fall in the middle of the content-specific dimension and the fun-related dimension, when compared to the other SM. American youth use in the middle sites for various purposes, and such sites cover a range of content—from blogging to location-based services like Google Places. The mix of information provided, entertainment value, and opinions within these sites varies greatly. For example, the variety within blogs is vast—while some may focus more on entertainment, others may feature personal stories and engage an audience, and still others may serve as more of an informational/fact-oriented platform. Consequently, such SM may be most difficult to classify in an overarching framework.

4. Discussion

In the present study, we developed an organizing, non-site-specific SM framework in terms of over-arching functions based on young users’ motives. Although many attempts have been made to conceptualize SM and have succeeded in representing user typologies, previous attempts have failed to represent how SM sites are actually used. Our study is the first documented investigation to conceptualize SM sites from the end users perspective by accounting for the ways in which they actually use various SM sites.

SM is ever-changing as sites morph and adopt new capabilities, and this makes it difficult to categorize SM based on site-specific functions. SM encompasses countless sites with very different functions or uses that fulfill different personal needs (Brandtzæg & Heim, 2009). Our model is built upon the end users’ perceptions rather than the site’s intentions. Building based on end user perceptions is valuable because it is crucial to understand how users actually use SM sites in order to properly identify an underlying typology and then decide how to use SM to engage with users. SM site usage information is valuable to researchers in that it forms the “environment” in which SM users interact with and collect information from one another and, therefore, partly defines SM behavior. Additionally, our findings are useful to marketers and researchers who wish to understand how to use SM to reach out to American youth. By understanding how young adults interact with various SM sites, marketers can target specific sites for specific outcomes.

4.1. Limitations

The present work has several limitations that merit mention. In particular, the survey focused on American youth and as such, could be limited in generalizability to other countries with dissimilar usage patterns owing to local culture or to other age groups. However, even though our population was comprised of young Americans, our usage patterns for social media are congruent with various SM sites, marketers can target specific sites for specific outcomes.
that socializers tend to use fun-related websites more and that debaters use content-specific sites more. Future research is necessary to discern the correspondence between user profiles and site profiles.

Finally, we chose to use MDS as an analysis tool in lieu of other dimension reduction or classification methodologies such as factor analysis or latent class analysis—which would not have required collapsing all ratings into a single SM-level mean value for each SM item. Although other methods could represent the data structure differently, MDS is uniquely suited to the present task as it is arguably better at representing aspects of rating criteria (i.e., SM), than other methods which might also capture individual differences in raters (i.e., latent class analysis).

4.2. Conclusion

SM is increasingly becoming the medium of choice for collecting information and interacting with others among young Americans. Moreover, a successful SM marketing strategy will almost always depend on the functionality of the SM channel. The purpose of the present work was to expand upon previous work that attempted to derive a framework for young adult SM site usage in terms of over-arching motives. We provide a systematic mapping of SM types that is open to additions as new SM emerge, such that future research can apply our survey items to future renditions of SM sites to discern how and where any one medium falls in our typology. Moreover, the flexibility of our framework allows organizations to determine which SM is best to use for communication and easily select a proper channel.

To conclude, SM are in an ongoing state of flux owing to new sites, new technology, and constantly evolving youth culture. The current work is a step toward understanding the SM environment by constructing a non-site-specific framework for understanding how youth interact with SM. Our finding that SM can be classified along two dimensions simplifies and refines understanding of how SM are perceived and used. Using the results from the present work, we are confident that researchers can utilize our framework to classify SM now and as the SM landscape continues to change.

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Appendix A. Social media questionnaire items

Question stem: How often do you use [SM site] to _____?

1. Find out more about something or someone.
2. Find places to eat or services to use.
3. Get better at doing something.
4. Have fun.
5. Laugh.
6. Post about fun things you are doing.
7. See/hear something entertaining.
8. Give updates about major events in your life.
9. Give updates throughout the day.
10. Share ideas/information with peers to advance a topic.
11. Teach others about something you have learned.
12. Work together toward a shared goal.

Response scale is 5-point Likert-type scale with the options: Never (coded 1), Almost Never, Sometimes, Fairly Often, and Very Often (coded 5).

References