

Understanding Social Media Phenomenon, Diversity and Research

Yogesh Somwanshi
Deptt. Of MCA
Central university of Karnatka
Gulbarga. (India)

Vrashali Salegaonkar
Deptt. Of Computer Sci.
L.S.K.J.M.M
Parbhani (India)

Sarika Sharma, PhD
Director
J.S.P.M
Pune
(India)

ABSTRACT

In recent year the social media are very famous and widely use in an internet world, especially in youth users. Social media provides an online digital tool (platform) or websites for users create online communities to share information, experience, ideas, vent emotions, opinions and other user generated data usually for social purpose in among the people. Social media are granted freedom to share anything with online communities. The social media sites such as Twitter⁴, Facebook³, LinkedIn⁵, Google+¹⁰, Youtube⁹, and MySpace. Observe when I talk to internet users about social media use, the overwhelming majority of users only thinks about Facebook³. They understand Facebook³ is equal to Social media. Very less people know the exact meaning of social media. Social media has proliferated and evolved into many shapes and forms. That's why need to study the different social media and how to classify and understand social media research. Most of researcher not aware to exact phenomenon of SM and how to face research problems in SM. This research paper highlights the social media phenomenon, classification and SM research.

General Terms

Social Media, Divesity.

Keywords

Social media, Literature review, Classification, Functional building block.

1. INTRODUCTION

Social Media (SM) is very famous in the utmost few years for sharing user generated content on the network. The use of social media increases significantly day by day. SM is introducing in 2003-04 [2], the rapid changes in technologies and divided in to various forms/ platforms SM has been beyond belief. The previous researcher defines SM term in various ways:

Authors	Definitions
Kaplan and M. Heinlein [1]	“A group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and allow the creation and exchange of user generated content”
Merriam-Webster dictionary ¹	“Forms of electronic communication through which users create online communities to share information, ideas, personal messages, and other content”
Wikipedia ²	“Social media are media for social interaction, using highly accessible and scalable communication techniques. It is the use of web-based and mobile technologies to turn communication into interactive dialogue.”

Moturu [6]	“Social Media is the use of electronic and Internet tools for the purpose of sharing and discussing information and experiences with other human beings in more efficient ways.”
Jacka and Scott [14]	Contend that it ‘can be said that social media is the set of web based broadcast technologies that enable the democratization of content, giving people the ability to emerge from consumers of content to publishers’.

The Social Media Guide website (2011) has listed approximately 50 definitions that it supposes it has gathered from various other sites. In its terms, ‘social media is user generated content that is shared over the internet via technologies that promote engagement, sharing and collaboration.

2. FUNCTIONALITIES OF SOCIAL MEDIA

Understanding the functionality of social media is a very important task for researchers. There are seven functional blocks of social media [7] are Identity, Conservation, Sharing, Presence, Relationship, Reputation, and Groups: framework is called social media Honeycomb Model [6]. This model provides lenses of how different levels of social media functionality can be set. The honeycomb model show in fig 1.

2.1 Identity

This function block represents the extent to which user reveals their identities in a social media setting [6]. Identity provide the user identification (uniqueness) mean while identify user his name, age, gender, profile, and location and also more subjective information that reveals users through the conscious or unconscious ‘self-disclosures’ of personal information or social media data [1,7,9,10]. Individuality is a central or basic unit to many SM tools, this introduces some fundamental implementation to acquire their own social media sites or strategies for engaging with other sites [6]. SM should insist on profile that are complete or exact. But here some research question arises one is how to identify user? Or How to provide identity to SM users?.

2.2 Presence

This function block is presence represents the extent to which users can know if other users are accessible [6,7]. In the social media the perception of presence can vary depend on the SM tools. Here present the importance of virtual or physical (reality) availability and location for SM within and across different SM tools [11]. In other words reduce the gap between physical and virtual world and provide high connectivity between them.

2.3 Sharing

This building block represents the extent to which users exchange, disseminate, and receive content [6, 7]. Sharing means exchange the user generated digital contents and information (e.g. Comments & Photos for Facebook³, Videos from Youtube⁹, Tweet, for Tweeter) among the SM users. Honeycomb focuses on two motivations in Sharing; first is intrinsic motivation driven by interest and involvement in the activity itself. Second extrinsic motivation is driven by the desire to attain some extra reward that is aside from the activity itself.

2.4 Conversation

This block represents the extent to which users communicate with other users in social media setting [7]. Conversation block is providing the communication tool setting between the two different SM user or groups (communities [1]). On SM platforms Facebook³ and LinkedIn⁵, member's create relationships and conversation that may be embedded in trust, similar choice, and viewpoints and other cases of chemical attraction. The diversity conversation that can take place in a SM setting means that there are protocol, format and tools.

2.5 Groups

This functional block represents the extent to which users can form communities and sub communities [6]. SM groups, mean creating homogeneous characteristic communities. There are two types of communities [6]; first, self-created group (InGroup [7]) based on friends, fans, and followers. Second, SM administrator created a group (Out Group [7]) based on user behaviors, manage the group, approve applicants, and invite others to link.

2.6 Reputation

This block represents the extent to which user can identify the standing of others, including themselves, in a SM setting [6]. Reputation is tool measure the SM users' characteristics and past activities to anticipate behavior. The SM user's reputation comparative other users are positive or negative behavior. Reputation can have different meanings on social media platforms, but at its heart, it's a sense of identifying the status of others and yourself in a societal mesh.

2.7 Relationship

This function block represents the extent to which SM users can be connected to other SM users [6]. Mean while the more than one user have form of association that guides them to converse, share content, meet up each other's as friend, followers and fan. The first two function block is directly impacted by the relationship that exists within SM platforms. The intensity of a relationship where strong the tie relationship is long lasting and affect laden [7]. Relationship represents a connection between more than one user through conversation, sharing information, meeting up, or just listing each other as a follower or friend.

3. DIVERSITY OF SOCIAL MEDIA

SM users to ask to know the functionality of each block feature and diversity of social media. SM have different way to classify depend upon the SM use, users and its feature.

The social media are the assorted types of media offering that surrounds social network to give it life and substance. The content is image, text, picture, sound, and so along. A bit of online forum classify the types of social media as shown in figure 2.

SM have six basic categories and additional categories increase day by day. Thus, discuss only six categories of SM.

3.1 Collaborative Projects

collaborative projects are grouped project online forum. A collaborative project is defined as a social media application that enables the joint and simultaneous creation of knowledge-related content by many end users [1,11]. The primary aim of the collaborative project is the number of end user work together to better effect than any end user achieves individually. Ex. Wikis site a piece of software or content that permits for group collaboration and redaction.

3.2 Blogs

Blog is self defined page to share user view and information and update day by day. Blogs, which represent the earliest form of Social Media, are special types of websites that usually display date-stamped entries in reverse chronological order (OECD, 2007) [1]. Ex Twitter⁴- This site allows to end user to post a short message is called tweets. The message size is only 140 characters allow for each tweet.

3.3 Social Network Site

This is very famous social media than among social media. Social networking sites are applications that enable users to connect by creating personal information profiles, inviting friends and colleagues to have access to those profiles, and sending e-mails and instant messages between each other. Ex Facebook³: Facebook³ is a very famous networking site in nowadays. FB that allows end users to create personal profiles, upload images, photos, music and video, send messages and keep in touch with friends, family and colleagues.

3.4 Content communities

In Content communities the end user search communities by searching keyword, subscribe to individual users and share multimedia data. The main objective of content communities is the sharing of media content between users. Content communities exist for a wide range of different media types, including text, photos videos, and PowerPoint presentations. Ex You tube share video, Fliker share photos and images, and slide share PPTs.

3.5 3.5.Virtual game worlds

Virtual world is 3D logical world similar to the real world in which users can appear in the form of personalized avatars and interact with each other as they would in real life [1]. This world creates 3D logical 3 dimension game for the end users. The example of Virtual game is world of warcraft.

3.6 Virtual Social Word

The virtual world is a second life of an internet user. Virtual worlds can even refer to all computer based environments such as the Internet. According to Wikipedia defines the concept of virtual worlds appropriately for this study and reflects the common view of the definition of virtual worlds. Most virtual worlds have a three- dimensional environment [13]. The second group of virtual worlds, often referred to as virtual social worlds, allows inhabitants to choose their behavior more freely and essentially live a virtual life similar to their real life. As in virtual game worlds, virtual social world users appear in the form of avatars and interact in a three-dimensional virtual environment [1]. The Habbo Hotel, for example, is a two dimensional environments that visually resemble a three-dimensional environment.

SM is more complex media. Sm understand is a very difficult task for researchers. SM have lots of research challenges and problem. The research problem discusses in the next section.

4. SOCIAL MEDIA RESEARCH PROBLEM

In this section, introduce some representative research issues in Social media.

4.1 Sentiment Analysis and Opinion

It is a computational technique for identifying and categorizing opinions expressed information in the materials. In social media, more information, such as emotion, hashtags and network structure is available, which provides fresh thought for sentiment analysis [16]. Sentiment analysis is real hard because natural language use to create a content is ambiguous. Problems in sentiment analysis are finding related/relevant document, obtaining the relevant part, getting the overall sentiment, quantifying the sentiment and aggregating all sentiment to form an overview. And in Opinion task can be executed at the document level, sentence level, and feature level. Opinion problems are an object of which opinion is stated, an opinion expressed an object, and the opinion holder [15].

4.2 Social influence modeling

The social influence modeling objective is to find influence and homophily in network node such as authorities, opinion leaders, gatekeeper, which could activate other nodes in the social network as much as possible [16,15]. It is rattling important to experience whether the identifying social network is influenced or hemophilia driven [15]. The majority of the social networks has a mixture of both influence and homophily. Hence distinguish them are challenging. Some scientist given the resolution of this problem, but it doesn't fulfill solved.

4.3 Recommendation Sysytem

Recommender systems suggest a few item suggestions like rating, friends, books, social tag, trust and location from many possible choices to the user by learning their profiles [16]. Online recommendation systems are vulnerable to a malicious user who inject bias ratings to manipulate online items recommendations, i.e. shilling attacks or profile injection attacks [16]. The intent of the recommendation systems is to ameliorate the quality of recommendation and alleviate the problem of information overload [15].

4.4 Community detection

a community is organized by individual such that those inside a group interact with each other more frequently than those outside the group. Ex. Group, cluster, module, etc. [15]. And community detection is finding a group in social networks where individual. Group memberships are not explicitly granted. Users within group usually have similar notions, have common interest and exert more influence to each other [16]. Social Media enables people to unite friends and find new users of similar pursuits. Community detection refers to the discovery of implicit groups in the network. The main challenges and problems of community detection are the definition of a community can be subjective, and the lack of ground truth makes community evaluation difficult [15]. The aims to discover the pattern of the community over time with the presence of dynamic network interaction [15]. The social

networks are extremely active nature. Hence the community detection is a real large problem with social media.

4.5 Information diffusion and Provenance

Information diffusion is the process by which a segment of information is spread and reaches individual through interaction. And Information provenance refers to identification of the source(s) or history of information present on the social network [17]. The two major problems in information diffusion and provenance one is how to information spreads in a social media network and which factor affect the spread. Second, what the possible sources are, given some information to social media. Many researchers have attacked the first problem (information diffusion), but a little work has been performed on the second problem (information provenance). All social networking services, lack an effective solution to information provenance. Hence, it remains an open research problem [17].

4.6 Security, trust and Privacy

Nowadays social media arise security, privacy and trust related issues. Social media have a dynamic nature. Hence SM poses new security challenges to feed off security threats to users and organizations. SM main challenge is how to handle security problem, privacy problem and trust problem[16]. Social media has been the object of numerous passive as well as active attacks, including stalking, cyber bullying, malvertizing, phishing, social spamming, scanning, and clickjacking [16].

5. CONCLUSION

This review, it can be reasoned that the functionalities of social applications are based on the characteristics of the social media application itself. Essentially, the principal features of social media are focused on the user profile, online connections and online community. The functionality of social media application is created from the features itself based on users understanding and how they apply it in their fashion.

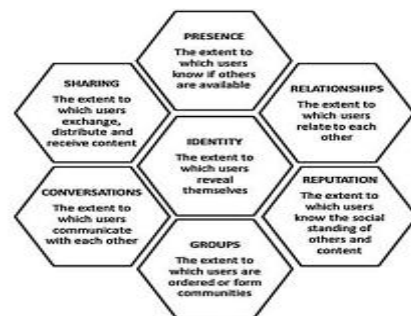


Figure 1. A honeycomb model for Social Media [7]⁶

		Social presence/ Media richness		
		Low	Medium	High
Self- presentation/ Self- disclosure	High	Blogs	Social networking sites (e.g., Facebook)	Virtual social worlds (e.g., Second Life)
	Low	Collaborative projects (e.g., Wikipedia)	Content communities (e.g., YouTube)	Virtual game worlds (e.g., World of Warcraft)

Figure 2: classify the types of social media[1]

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