

Analysis of the Knowledge Communication on Social Media

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Abstract: As an important public information in human society, knowledge is related to the inheritance of civilization and social progress. With the fast development of communications technology and the emergence of social media, the media that dominates society is also constantly changing. The changes in media have had a profound impact on the communication of current knowledge, which is often stored in various media, deconstructing and fragmenting the content of knowledge. This study mainly analyzes the behaviors of knowledge communication on current social media from the perspectives of Needs and Gratification Theory and Visibility Theory, discussing the underlying causes and future development. Within the burgeoning realm of social media, people can express their personalized needs and different opinions, and anyone with different interests can create their own virtual knowledge community to communicate and share all kinds of knowledge with others. Besides, the emergence of information cocoons has also become an undeniable issue, and how to face and solve this new problem has become an important topic, and it is crucial to rethink and explore the ways knowledge is communicated in today's society.

Keywords: Knowledge communication, social media, visibility.

1. Introduction

Knowledge is a relational (non-physical) existence, it must be carried through specific media for communication in public spaces, so knowledge and media have a natural and inherent connection [1]. Nowadays, social media provides a virtual platform for knowledge communication, allowing anyone who has the same interests to create a virtual knowledge community to communicate various knowledge. In real life, the target audience and purpose of knowledge communication are well-defined. However, in the virtual world, like social media and video platforms, the target audience of knowledge communication is uncertain, and its purpose, aside from sharing, is often unclear. The distinction between the two significantly influences the methods and content of knowledge communication. The content can be multi-media, filled with idiosyncratic expressions, loaded with a wide range of emotions and opinions, and defying the standard formal language and grammar. The reusing and diffusing of existing content created by other people or organizations is the norm, rather than exception [2]. This study mainly analyzes the behaviors of knowledge communication on current social media from the perspectives of Needs and Gratification Theory and Visibility Theory, and discusses the underlying causes and future development.

2. The Enhancement of the Visibility of Knowledge and Media

2.1. The Concept of Visibility Theory

Research recognizes social media as a platform that supports informal communication among specialists, offers a brainstorming space, and makes knowledge visible [3]. In the past, knowledge only exist in real life, such as teachers imparted knowledge to the students and someone gave a speech in the auditorium. For now, internet and social media is becoming the media that connect the knowledge owner and audience, which will get rid of the limitations of time and space. Everyone can find information to match their needs in social media at any time, which also proves that knowledge is becoming visible and it could be available for anyone. On the other hand, the ability of traditional media to set agendas is being undermined, individuals have their rights to express their opinion on the internet, because social media provides an easier way for individuals to express their opinion. The subjectivity of audience is also one of the symbols of Visibility Theory.

2.2. The Development of Visibility Theory in New Media Platforms

Compared to traditional knowledge communication, the interaction between people has had a big change, which is no longer limited by time and space. In the past, the interaction between knowledge contributor and audience is superficial, even if the audience had a lot of questions, which was not figured out, they may not ask someone who knew the answers due to many reasons, such as introversion and fear of being ridiculed by other people. This phenomenon caused lots of disadvantages, which could not be solved easily. Nowadays, interaction on social media base on varieties of communications technology, which has the cryptic feature to hide their real identity. These changes have had a big impact on the process of acquiring knowledge. Social media can reveal a variety of knowledge, from basic knowledge about politics and lifestyle to skills and competence regarding how to complete tasks connected to one's job. Every time, the information posted on social media has been explicitly represented, formalized, and rebuilt [4]. From the standpoint of knowledge contribution, visibility of knowledge makes knowledge visible to everyone else in the virtual community, even when it was previously visible only to the audiences involved in the communication [5-8].

Knowledge seekers, who are frequently third-party observers, engaging in activities to access and evaluate knowledge through their usage of social media, motivated by the need for knowledge (e.g., to complete work duties) [8-9].

3. The Deconstruction of Knowledge Content by New Communication Media

3.1. The Lifestyle of Knowledge Content

Evolution is explosive in that a wide range of difficulties characterize the present. As knowledge communication spreads through the media to an increasingly greater degree, it becomes more complex. By contrast, it does not benefit journalism as a specialized form of communication, because in the age of digital media, everyone can communicate, and professionalism is no longer a need but an option [10]. Despite professional educator, anyone who has the passion of a specific field of knowledge can deliver the videos and text online, breaking the boundaries of knowledge communication. Especially with the development of short videos, such as TikTok, the video producers only need one or two minutes to popular science knowledge to the audience. In such a short period of time, knowledge content must be closely related to daily life in order to enable people to understand it quickly. For another reason, short videos are filled with a lot of stimulating language and text to attract audiences, which also helps the process of popularizing science knowledge. In

addition, video producers' narrative perspectives on knowledge are increasingly leaning towards a more accessible and populist style, using real-life shooting scenes and practical topic selection to delve into knowledge narrative, which closes the gap between knowledge and audience. Furthermore, popular science short videos can keep up with hot events, integrating reality closely with knowledge, enhancing the practicality and entertaining as well.

3.2. Fragmentation of Knowledge Content

Nowadays, the pace of society is constantly accelerating, which has had a significant impact on the way people acquire knowledge. For those who have already graduated from school, it's difficult to have a complete amount of time to attend a lecture or watch a video, and most of their entertainment time is typically spent during their leisure moments while commuting or after work, which is separated into small pieces. So, the content of knowledge is becoming increasingly fragmented. Additionally, most of the knowledge is very abstract, which needs a lot of time to make the audience understand. The fragmentation of knowledge can better assist people in understanding the content of knowledge, using all kinds of patterns, such as pictures, 3D modeling and visual effects. Meanwhile, short videos have facilitated and popularized knowledge communication through oral speaking among the masses. The form of knowledge communication has reverted to the tradition of oral speaking, emphasizing visual and auditory reception. Short videos and live streams have made oral debates and conversations possible. In the communication of knowledge through short videos, it is shifting away from abstract, paper-based, and detached written forms, evolving towards a storytelling, flexible, and orally transmitted audio-visual format [11]. Also, most of the content of knowledge in short videos is independent knowledge points, rather than a complete knowledge framework from television or books.

Through oral presentation of knowledge points, making the content easier for audience to understand, promoting the fragmentation of knowledge as well.

3.3. The Enhancement of Audience Engagement

Social media has replaced books and television as the primary media for knowledge communication, which has had a big impact on the relationship between the knowledge owner and the audience. In the past, people acquired knowledge from books or television, and we can't ask questions to the knowledge owner directly because the limit of communications technology. The emergence of social media has changed everything, and the author thinks there are two main characteristics that reflect the enhancement of audience engagement. The first one is everyone can express their opinion through social media without any limitations. Secondly, the content of knowledge is open for everyone, including knowledge producers and audiences. Everyone can understand the knowledge from different perspectives and put them on social media to share with other people, even though maybe there are some mistakes in the content. The subject and the recipient of knowledge communication have flexible identities during that process, and the audience, acting as knowledge producers, gains knowledge and applies personal experience to engage in the critical and comprehensive construction of knowledge, thereby creating collective wisdom [10].

4. The Emergence of Virtual Knowledge Communities

4.1. The Reason of the Emergence of Virtual Knowledge Communities

From the past to the present, the primary reason driving people to access information is their need. In the past, people's needs would be strongly influenced by the people around them. People's needs for diverse information, to some extent, reflect their hobbies, while personal hobbies shape the topics

they engage in conversations with others during their daily lives. According to Noelle-Neumann's spiral of silence theory, interpersonal communication plays two crucial roles in people's tendency to voice their opinions: First, conversations with other individuals can be used to gather information on the general consensus. Second, the central silent process is most evident in interpersonal communication: People express their opinions in person when they believe they are in the majority and conceal them when they believe they are in the minority because they are mostly afraid of being rejected by and alone from others [12]. According to The Need Belonging Theory and the sense of belonging to be a member of a group, people innate motivation is naturally driven to create and sustain bonds. The need to belong pushes individuals to find out stable, long-lasting relationships with others, and this was described in Maslow's hierarchy of needs' belongingness that motivates human behavior. So, social media provides a platform for people to express their diverse needs, which is not limited by the people around them and help people creating bonds with other people who have the same interest. According to Figure1, knowledge enthusiasts, and fans are also forming online communities for knowledge production and communication. Knowledge producers from different fields spread knowledge to audiences. The articles, videos, and other forms of knowledge gather people related to a certain knowledge field to form online virtual knowledge communities. Meanwhile, knowledge communication can increase confidence and self-efficacy. In virtual knowledge communities, knowledge sharing can enhance status, respect, and reputation. Extrinsically motivated individuals join virtual knowledge communities to achieve personal goals, and knowledge seeking and sharing behaviors could be instrumental in achieving these goals. For example, members of knowledge communities may want the community to recognize them as knowledgeable and reputable. These goals drive extrinsically motivated members of knowledge communities to share and seek knowledge [13].

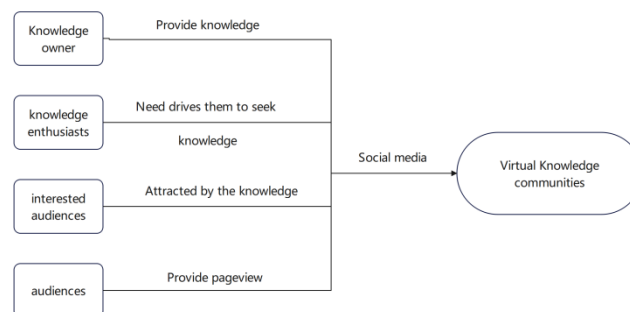


Figure 1: The formation of virtual knowledge communities.

4.2. The Risks of Virtual Knowledge Communities

Virtual knowledge communities do facilitate the communication of knowledge, but there are also some risks involved. Among all the existing risks, there are three types of risks that are crucial for us. The first risk is the increase in useless information caused by the excessive display of information. Nowadays, social media is filled with a lot of useless information, and we need to use our precious time to carefully select useful information from the vast amount of information available to us. Secondly, gathering a large number of people with similar hobbies together may result in unexpected outcomes. People will only encounter opinions that align with their own if they are regularly exposed to communications from like-minded others. This will prevent them from feeling compelled to hold back on their opinions. In these situations, users run the long-term risk of becoming entangled in a "spiral of self-reinforcing attitude polarization", in addition to echoing the consonant viewpoints already voiced by their network relationships [14]. At last, social media platforms use technologies such as AI and big data to analyze our behavior when using social media, giving us the content based

on everyone's different preferences. As a result, most ordinary people can only see what they like to see every day, ignoring the things that they did not pay much attention to but were very important. As time passes, our window for receiving information becomes increasingly narrow. Each small group with different interests is isolated from each other, which is extremely detrimental to the functioning of society.

5. Suggestions for Dealing with Risks in Virtual Knowledge Communities

First of all, the government and the owner of social media must take the responsibility of regulating the content of knowledge, which is important for suppressing illegal information that is still at the beginning of dissemination. On the other hand, the government should establish laws about the supervision of internet to make sure all kinds of information are as truthful as possible. Secondly, as the main participants in the online information society, the audience holds a very important position. The fundamental solution to ensuring a broad perspective and avoiding homogeneous information from entering the information cocoon lies in improving their own media accomplishments [15]. In the end, the audience needs to exert their subjective initiative, tries to find different content, engages in discussions about different topics and becomes an individual who has independent thinking ability and high media accomplishment.

6. Conclusion

In different historical periods, the level of development of media technology determines the form and dissemination of knowledge. Humans have different understandings of knowledge in different civilizations. This article studies the knowledge communication of the new generation from the perspectives of Visibility Theory, Needs and Gratification Theory, and Maslow's Needs Theory, and proposes hypotheses on the process of forming virtual knowledge communities. Nowadays, social media is one of the most important communication media, providing a new platform for knowledge communication, which has had a huge impact on the way and content of knowledge communication. How major social platforms can correctly guide the development direction of knowledge content and promote the continuous updating of knowledge content is still a question that needs to be considered. Besides, the dissemination subjects in virtual knowledge communities are mostly individual users, and how to ensure the authority and accuracy of knowledge content is still a problem that needs to be taken seriously. Additionally, the media in knowledge communication plays an important role in attracting users to browse. Whether people will ignore the essence and significance of knowledge when they overly focus on the forms of audio-visual expression is still a question that needs to be discussed. All kinds of communication media serve the theme of knowledge, and this issue cannot be ignored. However, this study is mainly based on major social media platforms in China. Considering that people from different regions and cultural backgrounds have varying needs for knowledge content, future research can incorporate comprehensive discussions on other social media platforms.

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