

The Role of Social Media Functions in Enhancing Knowledge Sharing with User Engagement and Information Quality

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ABSTRACT

Keywords: social media-enabled knowledge sharing, social media platforms, knowledge sharing.

In today's digital age, social media has become the main platform for sharing information and knowledge. However, the main challenges faced are ensuring the quality of information shared and increasing user engagement on these platforms. This research aims to investigate the functions of social media platforms that support effective knowledge sharing, with a focus on user engagement and information quality. The method used is a Systematic Literature Review (SLR) to analyze relevant studies related to social media functions and their impact on knowledge sharing. Data was collected from databases such as ACM Digital Library, IEEE Xplore, ScienceDirect, and Scopus, with analysis using a thematic analysis approach. The results show that various functions, such as content creation and curation tools, user interaction and feedback mechanisms, community development and gamification elements, and knowledge filtering and recommendation systems, contribute significantly to the creation of a positive knowledge-sharing environment. This research highlights the great potential of social media in improving the quality of information shared. However, it was also found that the effectiveness of these functions may vary depending on the type of platform and the characteristics of the audience using the platform. For future research, it is recommended to further investigate the functions that are most influential in specific contexts, as well as how the interactions between these functions, user behavior, and information quality are interconnected.



Introduction

In today's digital age, social media has become one of the most important platforms for sharing information and knowledge. It serves as a powerful tool that facilitates communication and knowledge exchange, ranging from personal to organizational levels. Knowledge sharing through social media offers various benefits that can enhance effectiveness and efficiency in an organization. Organizational stakeholders are

progressively adopting social media as the primary channel for knowledge-sharing interactions (Yaqub & Alsabban, 2023). Millions of users around the world now rely on social media to get the latest news, interact with others, and share experiences.

Statistics show that as of January 2020, there were 4.54 billion active Internet users, accounting for 59% of the global population. Social media use has become an integral element in the lives of many people around the world. In 2019, there were 2.95 billion active social media users, and this figure is expected to increase to nearly 3.43 billion by 2023. This data highlights the significant role social media plays in facilitating knowledge and information sharing, as well as its impact on the daily lives of modern people (Dwivedi et al., 2021).

The emergence of social media platforms has opened up new avenues for knowledge exchange, overcoming geographical and temporal boundaries that previously hindered communication. Through knowledge sharing, these platforms facilitate users to eliminate time and space limitations, create multimedia-based content, and provide a simple interface. In this way, even non-specialized individuals can share information and connect easily. (Kwayu et al., 2021).

However, behind this convenience, there are significant challenges regarding the quality and credibility of the information being shared. (Ali Adeeb & Mirhoseini, 2023) Suggests that the increasing volume of information in circulation makes it difficult for many users to distinguish between accurate and inaccurate information. This situation can lead to the spread of misinformation and reduce the level of trust in various information sources. (van der Meer & Hameleers, 2024). Therefore, the effectiveness of knowledge sharing on social media platforms depends not only on user behavior but also on the functions offered by the platform itself.

This research aims to investigate a literature review of the functions on social media platforms that are most effective in enhancing knowledge sharing. There is previous research presented by (Ahmed et al., 2019), which conducted a systematic review of the use of social media in knowledge sharing. This research shows the importance of analyzing and categorizing published papers, covering a wide range of research topics, including user behavior in knowledge sharing, the utility and benefits of social media, and the various platforms and tools used. The main focus of the reviewed studies is how social media affects user behavior in knowledge sharing, which in turn indicates the direction of further research needed in this area.

The novelty of this study lies in its focus on knowledge sharing through social media by considering two crucial elements, namely information quality and user engagement. In this regard, information quality is crucial as accurate and reliable information supports better learning and decision-making processes. On the other hand, user engagement, measured through participation and interaction, plays an equally important role. This engagement not only encourages knowledge exchange but also helps validate the information being shared. (Atallah et al., 2023).

By exploring the functions that can improve information quality and user engagement, this research aims to contribute to a deeper understanding of the role of

social media in knowledge management. Understanding these functionalities is crucial for designing more effective social media platforms, to support better knowledge sharing within organizations and online communities. This research is expected to provide valuable insights for social media platform developers, policymakers, and researchers interested in the dynamics of knowledge sharing in the digital age. Therefore, the main objective of this research is to investigate the role of social media functions in promoting effective knowledge sharing, by placing a focus on information quality and user engagement.

Method

In this study, a Systematic Literature Review (SLR) method has been used to deeply investigate meaningful studies related to functionalities of different social media and knowledge sharing as well as the positive impact of the social media functionalities on knowledge sharing. The SLR will take a systematic and explicit approach, thus enabling us to amalgamate the results from current research and address gaps in the knowledge domain of interest. We will conduct a systematic review of the literature by searching relevant digital databases, including the ACM Digital Library, IEEE Xplore, ScienceDirect, and Scopus. Create a research string including social media, knowledge sharing, and platform features-related keywords. The research question of this research is:

“What functionalities on social media platforms are most effective for knowledge sharing in terms of information quality and user engagement?”

A two-step selection process will be implemented. Two independent reviewers will initially screen the search results based on titles, abstracts, and keywords. Any disagreements will be resolved through discussion or by consulting a third reviewer. Following this initial screening, the full text of shortlisted articles will be reviewed for final inclusion based on the defined criteria.

To analyze the data, we will employ a thematic analysis approach. This approach allows us to identify recurring themes and concepts related to functionalities that promote information quality and user engagement in knowledge sharing. Qualitative data analysis software or a manual coding approach will be used to categorize and synthesize findings from the included studies. Through this SLR, we aim to identify and categorize the functionalities on social media platforms that most effectively contribute to knowledge sharing in terms of information quality and user engagement.

Table I
Journals Being Used for SLR Analysis

No	Title	Year	Authors
1	Measuring the Use of Social Media Networks (SMNs) in Knowledge Sharing, by Using Social Cognitive Theory (SCT) A Study Conducted in Some Iraqi Universities (Jader, 2021)	2021	Ahmed Muyasser Abed Jader

2	Knowledge management and its use in an industrial enterprise	2023	Erika Skvarekova
3	Linearization and discretization risks in knowledge management (Klemichen et al., 2022)	2019	Constantin Bratianu
4	Uninformed or Misinformed in the Digital News Environment? How Social Media News Use Affects Two Dimensions of Political Knowledge (Haugsgjerd et al., 2023)	2023	Atle Haugsgjerd, Rune Karlsen, Kari Steen-Johnsen
5	Impact of Social Media Education on Antimicrobial Stewardship Awareness among Pharmacy, medical, and nursing Students and Residents [11]	2023	Hanine Mansour, Hani Dimassi, Wissam K Kabbara
6	Enhancing Organizational Performance through Social Media Use and Knowledge Management (Mehmood et al., 2020)	2020	Khawaja Khalid Mehmood, Farkhandah Batool, Nadeem Ahmed Sheikh
7	The Effect of Knowledge Management on the Sustainability of Technology-driven Businesses in Emerging Markets: The Mediating Role of Social Media (Tajpour et al., 2022)	2022	Mehdi Tajpour, Elahe Hosseini, Maliheh Mohammadi, Behrooz Bahman-Zangi
8	The Use of Social Media as a Source of Religious Knowledge Among Doctors in Makassar, Indonesia Click or tap here to enter text.	2019	Mahmuddin, Abdul Halik
9	Innovations in Human Resource Management: Impact of Social Media Use on Employees' Performance[15]	2020	Maan Ali Alkhateeb, Rania Ahmad Abdalla
10	The Mediating Role of Knowledge Creation Processes in the	2022	Ignacio Cepeda-Carrión, Jaime

	Relationship Between Social Media and Open Innovation (Cepeda-Carrion et al., 2023)		Ortega-Gutiérrez
11	Awareness, knowledge, attitude, and use of social media among librarians and in libraries of medical colleges of Punjab: A study[17]	2020	Shinderpal Kaur, Rajeev Manhas
12	Factors That Influence Employees' Intention to Use Enterprise Social Media as Knowledge Sharing Media[18]	2019	Jeanifer Gunawan, Fergyanto E. Gunawan
13	Association between exposure to social media and knowledge of sexual and reproductive health among adolescent girls: evidence from the UDAYA survey in Bihar and Uttar Pradesh, India[19]	2022	R. Saha, Pintu Paul, Sanni Yaya, Aduragbemi Banke-Thomas
14	Knowledge Sharing through Social Media Platforms in the Silicon Age[20]	2023	Muhammad Zafar Yaqub
15	Overview of knowledge management in EURAD[21]	2022	T. M. Beattie, Niels Belmans, P. Carbol
16	Increasing biodiversity knowledge through social media: A case study from tropical Bangladesh[22]	2023	Shawan Chowdhury, Upama Aich,
17	Knowledge and awareness of the role of social media in managing COVID-19 among the general population questionnaire study[23]	2020	S. B. Shankari, Leslie Rani, Brundha, Somasundaram, J.
18	Internal Medicine Physicians and Social Media: Knowledge, Skills, and Attitudes.[24]	2020	Mohammed Nadir Bhuiyan, Jose R. Medina-Inojosa,
19	Linking ict in knowledge management in organizations[25]	2023	Diana Mireya Cuéllar Sánchez

20	Social network sites and acquiring current affairs knowledge: The impact of Twitter and Facebook usage on learning about the news[26]	2019	Mark Boukes
21	Effect of Social Media on Learning Effectiveness: Examining the mediating role of the Socialization, Externalization, Combination, Internalization, and Knowledge sharing.[27]	2021	R Hemalatha
22	Social Media Analysis to Enhance Sustainable Knowledge Management: A Concise Literature Review[28]	2023	Ahmad Alghamdi, Salvatore F. Pileggi, Osama Sohaib
23	The Impact of Social Media on Knowledge Creation, Innovation, and Performance in Small and Medium Enterprises[29]	2020	Merry Mita Moy, Eko Ruddy Cahyadi, Elisa Anggraeni
24	Social media as a source of knowledge about health nursing students[30]	2022	Iwona Oskędra, Katarzyna Wojtas
25	Social media affordances in sense-making and knowledge transfer[31]	2022	Fradreck Nyambandi, A. C. de la Harpe

Results and Discussion

Social media has now developed into a highly effective platform for information and knowledge dissemination. With easy and quick access, users can access a wide range of information from around the world, which facilitates them to discover, collect, and share knowledge according to individual interests. However, for this knowledge sharing to be effective, social media needs to offer functions that support information quality and user engagement.

There are several systematic literature reviews (SLRs) that have identified various functionalities on social media platforms that can improve knowledge sharing in terms of information quality and user engagement. The first is on Content Creation and Curation Tools. Social media platforms that offer these tools help users to curate knowledge in a structured and informative format. Features such as text editors, multimedia upload options, and tagging capabilities give users the necessary tools to create content that is accessible to a wide audience. Tagging, for example, helps categorize content by certain

keywords, which makes it easier for other users to find and understand the information. In addition, reputation systems, such as badges or award points, provide incentives for users to produce high-quality content. When users' contributions are recognized through such tokens of appreciation, they are more encouraged to create accurate and informative posts.

Another crucial function is user interaction and feedback mechanisms. Social media that facilitate users to interact through comments, ratings, and discussions create a space for collaboration and a sense of community. Comment fields, for example, provide opportunities for users to ask questions, provide additional insights, or correct errors in disseminated information. In addition, the rating system helps users to assess the credibility of content based on feedback from others. The discussions and debates that take place within these platforms allow knowledge to be continuously refined and updated, creating a dynamic information-sharing ecosystem where content is constantly evaluated and enriched.

Third, social media functions in Community building and Gamification. Social media platforms that provide features such as groups and forums create spaces for users with similar interests to have more in-depth discussions on certain topics and learn from each other's experiences. These groups and forums become community platforms where the interactions tend to be more active and fruitful, strengthening the sense of community and enriching collective knowledge. In addition, the implementation of gamification elements such as points, badges, and leaderboards brings excitement and healthy competition, encouraging users to more actively participate in knowledge sharing. Users who are rewarded for their contributions are more encouraged to continue sharing quality information and take part in discussions.

Another important function is knowledge filtering and recommendation systems, which play a major role in helping users sift through the overwhelming amount of information on social media. Platforms that provide the option to filter content help users to personalize the display based on their chosen topics or trusted sources, so that individuals only get information that is relevant to their interests and needs. In addition, recommendation systems powered by algorithms can analyze user behavior and preferences, and then suggest content that is deemed useful and relevant. This way, the knowledge-sharing experience becomes more targeted and tailored to individual interests, creating a more productive environment for learning and sharing information on social media.

The impact of features on social media platforms on information quality and user engagement is significant, as highlighted in several studies. The features available on these platforms are proven to improve the quality of information and encourage active user engagement in knowledge sharing.

Information quality improves on platforms that provide various tools for content creation, user interaction, as well as knowledge filtering mechanisms. These content creation tools help users to share information in a clear and structured manner, which in turn helps to improve information quality standards. Interaction between users through

comments or discussions provides an opportunity to conduct fact-checking, identify reliable sources, and refine knowledge collaboratively. In addition, the knowledge filtering function within the platform helps users avoid information overload and find more credible sources of information.

On the other hand, user engagement also increases with features that support social interaction, community building, and gamification elements. Interaction mechanisms such as comments, discussions, and Q&A forums create a dynamic environment, which encourages users to be active in sharing and exchanging knowledge. Features that support community building reinforce a sense of belonging and motivate users to contribute with their insights and expertise. Meanwhile, gamification elements add a fun competitive aspect, providing more incentive for users to actively engage and share valuable insights.

It follows from these findings that social media has great potential to create a positive knowledge-sharing environment through the various functionalities available, such as content creation tools, curation, interaction, feedback, community building, gamification, knowledge filtering, and recommendation systems. These features significantly contribute to improving the quality of information shared and encouraging user engagement, thereby enriching the process of collaboration and sharing reliable and useful insights on social media platforms.

Conclusion

Social media platforms have the potential to be powerful tools for knowledge sharing. This SLR identified various functionalities that can significantly enhance knowledge sharing in terms of information quality and user engagement. These functionalities include content creation and curation tools, user interaction and feedback mechanisms, community building and gamification elements, and knowledge filtering and recommendation systems.

By providing users with the means to create well-structured content, engage in meaningful discussions, and discover trustworthy information, social media platforms can foster a dynamic knowledge-sharing ecosystem. However, it is important to acknowledge the limitations of this research. The effectiveness of these functionalities can vary depending on the specific platform and its audience. Additionally, factors beyond functionalities, such as user demographics and content domain, can influence information quality and user engagement.

Bibliography

- Ahmed, Y. A., Ahmad, M. N., Ahmad, N., & Zakaria, N. H. (2019). Social media for knowledge-sharing: A systematic literature review. *Telematics and Informatics*, 37, 72–112.
- Ali Adeeb, R., & Mirhoseini, M. (2023). The Impact of Affect on the Perception of Fake News on Social Media: A Systematic Review. *Social Sciences*, 12(12), 674.
- Atallah, S., Mansour, H., Dimassi, H., & Kabbara, W. K. (2023). Impact of social media education on antimicrobial stewardship awareness among pharmacy, medical, and nursing students and residents. *BMC Medical Education*, 23(1), 446.
- Cepeda-Carrion, I., Ortega-Gutierrez, J., Garrido-Moreno, A., & Cegarra-Navarro, J.-G. (2023). The mediating role of knowledge creation processes in the relationship between social media and open innovation. *Journal of the Knowledge Economy*, 14(2), 1275–1297.
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., & Krishen, A. S. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168.
- Haugsgjerd, A., Karlsen, R., & Steen-Johnsen, K. (2023). Uninformed or misinformed in the digital news environment? How social media news use affects two dimensions of political knowledge. *Political Communication*, 40(6), 700–718.
- Jader, A. M. A. (2021). Measuring the use of social media networks (SMNs) in knowledge sharing, by using social cognitive theory (SCT) a study conducted in some Iraqi universities. *Journal of Economics and Administrative Sciences*, 27(127), 63–74.
- Klemichen, A., Peters, I., & Stark, R. (2022). Sustainable in Action: From Intention to Environmentally Friendly Practices in Makerspaces Based on the Theory of Reasoned Action. *Frontiers in Sustainability*, 2(February), 1–15. <https://doi.org/10.3389/frsus.2021.675333>
- Kwayu, S., Abubakre, M., & Lal, B. (2021). The influence of informal social media practices on knowledge sharing and work processes within organizations. *International Journal of Information Management*, 58, 102280.
- Mehmood, K. K., Sheikh, N. A., & Batool, F. (2020). Enhancing organizational performance through social media use and knowledge management. *IBT Journal of Business Studies (JBS)*, 16(1), 193–210.
- Tajpour, M., Hosseini, E., Mohammadi, M., & Bahman-Zangi, B. (2022). The effect of knowledge management on the sustainability of technology-driven businesses in

emerging markets: The mediating role of social media. *Sustainability*, 14(14), 8602.

van der Meer, T. G. L. A., & Hameleers, M. (2024). Perceptions of misinformation salience: a cross-country comparison of estimations of misinformation prevalence and third-person perceptions. *Information, Communication & Society*, 1–22.

Yaqub, M. Z., & Alsabban, A. (2023). Knowledge sharing through social media platforms in the Silicon Age. *Sustainability*, 15(8), 6765.