

Digital Strategies for Breaking Barriers: How Promoters Drive Engagement with Intangible Cultural Heritage among Diverse Consumer Groups

Mengfan Li

School of Journalism and Information Communication, Huazhong University of Science and Technology, Wuhan, China

Email: limengfan0824@163.com

How to cite this paper: Li, M. F. (2026). Digital Strategies for Breaking Barriers: How Promoters Drive Engagement with Intangible Cultural Heritage among Diverse Consumer Groups. *Literature, Language and Cultural Studies*, 4(1), 93 - 101. ISSN Print: 3079-5095; ISSN Online: 3079-5109.

<https://doi.org/10.63313/LLCS.9130>

Published: 2026-01-30

Copyright © 2026 by author(s) and

Erytis Publishing Limited.

This work is licensed under the Creative

Commons Attribution International

License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Abstract

With the rise of social media, more and more intangible cultural heritage pro-moters use the network to spread intangible cultural heritage, but the scope of accessible consumer groups is gradually limited. This study innovatively focuses on the information interaction network between “promoters” in social media. For the first time, it is found that the key reason for the poor promotion effect of intangible cultural heritage on Weibo is the lack of cooperation among promoters, so as to form an information islands. By analyzing the information interaction network between promoters, it is found that the key to expand the coverage of intangible cultural heritage to play the leading role of high-impact bloggers and break the barriers of small groups. This study provides a feasible path with net-work collaborative optimization as the core for the promotion of digital business in intangible cultural heritage and other fields.

Keywords

Intangible cultural heritage; information interaction; information islands; social network analysis; reach obstacle

1. Introduction

Nowadays, society is inseparable from the Internet, and the new dissemination mode of modern mobile media brings more possibilities to cultural dissemination (Van Dijck & Poell, 2013). More inheritors and disseminators of ICH choose to promote it on social media. The openness, interactivity and rapid spread of social media can break the limitation of region and time, and make the emergence of derivative products and services related to ICH reach a wider range of consumer groups (Zheng, 2023). However, in the process of using social media to promote the commercialization of ICH, it is gradually exposed that the promotion of derivative products and services related to ICH are facing the problem of “information

islands” . The lack of effective communication and cooperation among different promoters leads to the dispersion and repeated dissemination of information, and it is difficult to form a strong communication force (Zhang & Xu, 2024). These “information islands” limit the scope and effect of the dissemination of information related to ICH, hinder consumers' comprehensive understanding and cognition of derivative products and services related to ICH, and thus affect the expansion and development of ICH market. Therefore, a prominent issue in using social media to promote ICH is how to expose these promoters to different and updated consumer groups to enhance the effectiveness of promoting ICH.

Social media has strong social attributes, and promoters enhance their influence on social media by posting posts that are liked, commented on, and forwarded (Hughes et al., 2019). They can attract followers and form a social network of mutual attention to achieve information exchange (Qin, 2020). On social media, social networks focused on the promotion of ICH have a high density, in which the large-scale and stable interconnection of opinion leaders helps to increase the activity of followers. (Wang & Li, 2016). Moreover, the main theory of community consciousness has pointed out that the interaction between members of the community contributes to the maturity of the community. It has supported the information interaction between promoters is conducive to sharing resources to form a more smooth social network. Social network analysis can quantitatively analyze the structure of the network and study the interaction between members (Scott et al., 2008). Many studies from different directions have applied it to analyze interactive relationships on social media and achieved good results. This also indicates that we can apply it to the information interaction network between ICH promoters.

This study aims to deeply analyze the structural characteristics of social networks of Weibo promoters, and to reveal the internal mechanism of the formation of the “information islands” phenomenon faced by the derivative goods and services related to ICH in the process of Weibo promotion. Based on this, this study puts forward a feasible way to break the situation, so as to improve the promotion effect of derivative products and services related to ICH on Weibo platform and promote the spread and inheritance of ICH. This study complements the mechanism of promoting ICH on social media from the perspective of information interaction, and also provides a new reference for the perspective of other commodity promotion effects.

2. Literature Review

2.1. The “information islands” of ICH

Difficult to reach a wider range of consumer groups is one of the most significant problems in the promotion of derivative goods and services related to ICH (Zihao,

2022). The hobbies of the followers attracted on social media are generally similar, which can easily form small groups and fail to expand the scope of influence. Social media has a strong community effect and is known as the "strong glue" that enhances user stickiness (Goh et al., 2013). The efficiency of information interaction within the community is extremely high, and posts posted by members within the community are more likely to be viewed and recognized by other members within the community. Moreover, the "leader" blogger who primarily outputs and shares content has a strong ability to influence other members of the community (Uzunoglu & Kip, 2014). These communities can be seen as networks in the field of intelligence science, where members are all nodes of the network (Ahajjam, 2018). But even though the nodes of these individual small networks are closely connected, it is difficult for nodes of different networks to exchange information. In fact, "hub" promoters play an important role in it, serving as important bridges connecting different networks and exchanging information with nodes in different networks (Rehman et al., 2023). The types of nodes in different networks have certain differences. Therefore, information interaction between promoters on different networks helps to expand their audience.

Unfortunately, most of the existing research focuses on the innovation and effectiveness of the content and methods of ICH promotion on social media, but often ignores the influence of promoters themselves and the interaction between them. The information exchange among promoters on Weibo explored in this paper can supplement this aspect.

2.2. Information interaction network analysis of ICH promoters

Social media realizes the information interaction between users. These information interactions gradually weave a huge network of relationships. These networks have great potential in social interaction and as an information channel (Fox & McEwan, 2017). When studying the information interaction between promoters on social media, social network analysis provides several noteworthy advantages.

Firstly, social network analysis, as a unique method of social structure research, can map, measure and analyze the social relations between people, teams and organizations. It helps to explore patterns and types of relationships between participants. For example, Zhu (2024) has deeply analyzed the scientific community on Twitter through analysis methods including centrality analysis, and revealed the important role of celebrities and opinion leaders in maintaining network integrity and promoting information flow. Moreover, social network analysis can provide precise quantitative analysis of various relationships. Alsamadani (2013) and his co authors have used social network analysis to obtain metrics for secure dissemination, intuitively depicting dissemination patterns within effective and ineffective secure networks. In addition, social network analysis can also identify key members of the network and their status related to the issue of interest. Zedan

and Miller (2018) have used social network analysis methods to analyze, compare, and quantify the relationships between housing stakeholders to determine the most influential stakeholders in the energy-efficient housing procurement process.

These advantages are beneficial for studying the information interaction network between ICH promoters on social media. However, focusing too much on the structural patterns of social networks to some extent neglects the motivations of network entities, making it difficult to conduct in-depth analysis of phenomena such as network establishment, maintenance, and resource mobilization (Kolleck, 2013). In this study, this may lead to a lack of in-depth analysis of promoters' motivations and difficulty in proposing more practical improvement suggestions. Anyway, social network analysis plays a commendable role in studying the information interaction between ICH promoters on social media. Moreover, this study is innovative and has not been explored before.

3. Materials and Methods

Using Python to crawl the data of ICH promoters on Weibo, 6402 Weibo users were obtained using "ICH" as the keyword. Considering that promoters with certain influence have stronger researchability, a filter with over 10000 followers was used to ultimately select 54 Weibo promoters. Only 0.84% of the total number of ICH promoters have more than 10000 followers. It can be seen that the influence of ICH promoters on Weibo, a social platform, is still relatively weak and in the stage of development and construction.

According to Weibo's settings, only when both parties "follow" each other can they obtain the blog posts sent by each other on the "follow" page of Weibo, and other link relationships cannot allow both parties to obtain each other's information. Therefore, this article takes mutual "attention" as the standard for information interaction between both parties. Due to privacy protection, Weibo cannot obtain all the following data of each blogger, but it can display "My and the blogger's common followers". So we registered an account and followed all 54 promoters to get their interaction information.

In the study, "1" represents the mutual "attention" among promoters, "0" represents the lack of mutual "attention" among promoters, and finally a 54×54 "0-1" matrix is constructed as shown in Table 1 to represent the information exchange relationship among ICH promoters. It is worth noting that all charts presented in this article are anonymized using ICHn instead of the blogger's username to avoid risks related to account information.

Table 1. Part of the 0-1 matrix data of the information interaction relationship of ICH promoters.

	ICH1	ICH2	ICH3	ICH4	ICH5	ICH6	...	ICH54
ICH1	0	1	1	1	1	1	...	0

ICH2	1	0	0	0	1	1	...	0
ICH3	1	0	0	0	0	0	...	0
ICH4	1	0	0	0	1	1	...	0
ICH5	1	1	0	1	0	1	...	0
ICH6	1	1	0	1	1	0	...	0
...	...	...	...	...	...	...	...	...
ICH54	0	0	0	0	0	0	...	0

Social network analysis has a relatively complete theoretical system and involves numerous indicators. According to research needs, this study analyzes the overall and local status of the information exchange network among ICH promoters on Weibo from basic indicators and centrality.

4. Results

4.1. Basic Indicators Analysis

The values of the basic network indicators measured by UCINET software were shown in Table 2. The density of the information interaction network of promoters in the file of ICH was 0.092, the average distance was 2.755, and the clustering coefficient was 0.529. To further analyze the meaning of these values, this study used the research data of several representative user circles on Weibo to intuitively compare them.

Table 2. Basic indicators and comparison of information interaction networks in the field of ICH on Weibo.

Measure indexes	This network value	Comparison network 1	Comparison network 2
The Number of Nodes	54	44	30
Density	0.092	0.1596	/
Average Distance	2.755	/	1.369
Clustering Coefficient	0.529	/	/

Wei et al. (2013) studied the social network in the educational technology community on Weibo with a density of 0.092. In contrast, the density value of the information interaction network in the field of ICH was only 0.1596, which showed that the promoters were not closely related. The clustering coefficient of the network was not low, with a certain small-world effect, indicating that the information interaction between ICH promoters is relatively smooth. However, the average distance of the network was 2.755, about twice that of the academic network on Weibo studied by Bi et al. (2015), indicating that the interaction of ICH promoters needs to be improved.

4.2. Centrality Analysis

We use three kinds of network centrality as the conditions for optimizing the network, and use Geiph software to visualize the results of network centrality analysis. The results are shown in Figure 1. In Figure 1 (a), the nodes with high degree centrality are relatively large and have more connections with other nodes.

These promoters have a large number of friends in the circle and are in the "leader" position in the field of ICH on Weibo. As the official operating account of Weibo ICH, "ICH1" has the highest number of fans in the field of Weibo ICH, and its influence can be seen. In addition, the degree centrality of Weibo accounts of many provincial ICH institutions is also in the forefront, which shows that the degree centrality is consistent with the real influence of promoters.

As shown in Figure 1(b), the highest degree of betweenness centrality is "ICH6", which holds the core "hub" position in controlling network interactions in the network. Promoters with higher betweenness centrality have more overlaps with promoters who have higher degree centrality. It shows that most of the "core" promoters in the network are not only in the position of opinion leaders, but also have strong network control abilities. Combined with Figure 1(a), it can be seen that "ICH6" with a low degree centrality has high betweenness centrality, which shows that although this blogger has no strong influence, it can play an important role as the "hub" for information interaction between different user circles.

In order to achieve effective operation of the network, higher closeness centrality is important (Rodrigues, 2018). Figure 1(c) shows that the closer to the edge of the network, the lower the closeness centrality. It indicates that promoters at the edge of the network are more difficult to be affected by the network, and it is more difficult to interact with other promoters. For example, "ICH48" is located in the upper left corner of the network diagram, and relies solely on "ICH18" to maintain contact with the network. Other promoters such as "ICH29" and "ICH36" are also generally in this state.

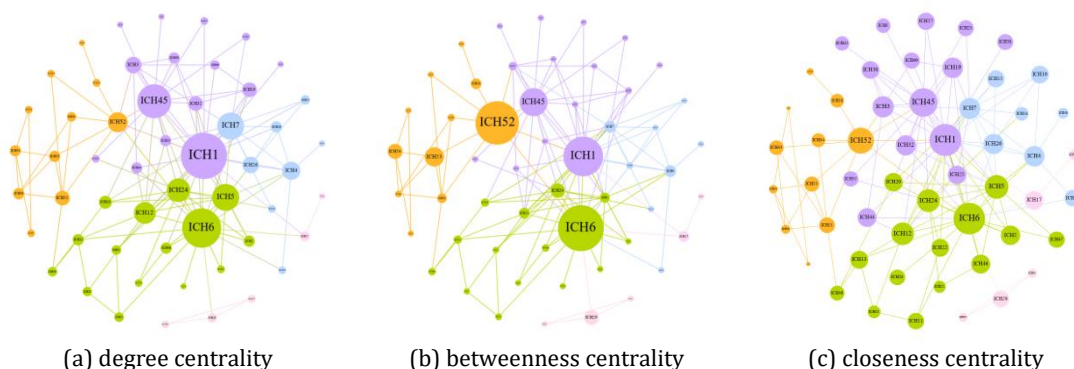


Figure 1. Social network diagrams with three types of network centrality layouts.

Network centralization is an evaluation index of the overall social network. The degree centralization of the interactive network in the field of ICH is 37.66%, and the network concentration is not high. Betweenness centralization is 30.08%, indicating that although "ICH1", "ICH6" and other promoters in the "core hub" status have a certain ability to control the network. But the network interaction rights have not been monopolized by them and the overall network control is still at a low level. In addition, closeness centralization is 40.75%, which indicated that there are some

differences between promoters.

From the above three indicators, it is concluded that the interactive network of promoters in the field of ICH on Weibo show a certain concentration trend and difference. Although there are promoters with "core hub" status, the overall is relatively loose.

5. Discussion and Conclusions

Due to its special form, although stakeholders in the field of ICH have made some achievements in using social media to promote ICH in recent years, they have encountered bottlenecks. The consumer groups they can reach on social media has reached its limit now. In order to find ways to let them break through the existing small circle to contact more users on social media, this study takes Weibo as an example and uses a social network analysis approach to study the information interaction network between ICH promoters.

The results of social network analysis reveal that the average distance of the network is 2.755, which is about twice as long as the academic network on Weibo studied by Bi and his co-authors (2015). It can be seen that the degree of information interaction between ICH promoters on Weibo was not high. In the network, there were highly influential "leader" promoters and "hub" promoters in the field of ICH on Weibo, such as Weibo official accounts. They made great contributions to the interaction of information in the network and were the main force connecting promoters in the core and periphery areas. It is worth special attention that there were prominent independent small groups in the blogger circle in the field of ICH on Weibo. The members of small groups were in a relatively blocked state of information interaction in the whole network.

In summary, the advantages and disadvantages of the entire network are clear. This study emphasizes that ICH promoters should break through the existing small circle to reach more users. This effect can be achieved by optimizing the information interaction in the network under the role of "leader" promoters and "hub" promoters. This study is the first to study the promotion effect of ICH on social media from the information interaction between "promoters", while previous studies paid attention to the content and form of promotion (Xue et al., 2019; Huang & Song, 2022). This study innovatively focuses on the information interaction network between "promoters" in social media, and for the first time attributes the accessibility obstacles of consumer groups of ICH on Weibo to the lack of coordination of promotion subjects. By analyzing the information interaction mode of the promoters of derivative products and services related to ICH, this paper reveals the restriction mechanism of "information islands" on the coverage of consumer groups, and fills the theoretical gap in the dimension of "intersubjectivity" in the research of social media ICH promotion.

References

- [1] Van Dijck, J., & Poell, T. (2013). Understanding social media logic. *Media and communication*, 1(1), 2-14.
- [2] Zheng, S. (2023). Safeguarding food heritage through social media? Between heritagization and commercialization. *International journal of gastronomy and food science*, 31, 100678. <https://doi.org/10.1016/j.ijgfs.2023.100678>
- [3] Zhang, J., & Xu, C. (2024). A grounded theory - based model of information communication in cultural heritage digital reading on the social media from the perspective of the embodied theory. *Herit Sci*, 12, 208. <https://doi.org/10.1186/s40494-024-01313-2>
- [4] Hughes, C., Swaminathan, V., & Brooks, G. (2019). Driving brand engagement through online social influencers: An empirical investigation of sponsored blogging campaigns. *Journal of marketing*, 83(5), 78-96.
- [5] Qin, Y. S. (2020). Fostering brand-consumer interactions in social media: the role of social media uses and gratifications. *Journal of Research in Interactive Marketing*, 14(3), 337-354. <https://doi.org/10.1108/JRIM-08-2019-0138>
- [6] Wang, Y., & Li, Y. (2016). Proactive engagement of opinion leaders and organization advocates on social networking sites. *International Journal of Strategic Communication*, 10(2), 115-132.
- [7] Scott, N., Baggio, R., & Cooper, C. (2008). Network analysis and tourism: From theory to practice. <https://doi.org/10.21832/9781845410896>
- [8] Zihao, Z. (2022). Living Inheritance and Dissemination of Intangible Cultural Heritage in the Context of New Media: A Case Study of Yugur Intangible Cultural Heritage. *International Journal of Frontiers in Sociology*, 4(13). <https://doi.org/10.25236/IJFS.2022.041314>
- [9] Goh, K. Y., Heng, C. S., & Lin, Z. (2013). Social media brand community and consumer behavior: Quantifying the relative impact of user-and marketer-generated content. *Information systems research*, 24(1), 88-107. <https://doi.org/10.1287/isre.1120.0469>
- [10] Uzunoğlu, E., & Kip, S. M. (2014). Brand communication through digital influencers: Leveraging blogger engagement. *International journal of information management*, 34(5), 592-602. <https://doi.org/10.1016/j.ijinfomgt.2014.04.007>
- [11] Ahajjam, S., El Haddad, M., & Badir, H. (2018). A new scalable leader-community detection approach for community detection in social networks. *Social Networks*, 54, 41-49. <https://doi.org/10.1016/j.socnet.2017.11.004>
- [12] Rehman, A. U., Jiang, A., Rehman, A., Paul, A., Din, S., & Sadiq, M. T. (2023). Identification and role of opinion leaders in information diffusion for online discussion network. *Journal of Ambient Intelligence and Humanized Computing*, 1-13. <https://doi.org/10.1007/s12652-019-01623-5>
- [13] Fox, J., & McEwan, B. (2017). Distinguishing technologies for social interaction: The perceived social affordances of communication channels scale. *Communication Monographs*, 84(3), 298-318.
- [14] Zhu, M. (2024). Exploring Influencer Dynamics and Network Resilience: A Deep Dive into Science-Related Subgraph of Twitter Ego Networks. *Procedia Computer Science*, 242, 280-287. <https://doi.org/10.1016/j.procs.2024.08.236>
- [15] Alsamadani, R., Hallowell, M., & Javernick-Will, A. N. (2013). Measuring and modelling safety communication in small work crews in the US using social network analysis. *Construction management and economics*, 31(6), 568-579. <https://doi.org/10.1080/01446193.2012.685486>
- [16] Zedan, S., & Miller, W. (2018). Quantifying stakeholders' influence on energy efficiency of housing: development and application of a four-step methodology. *Construction management and economics*, 36(7), 375-393. <https://doi.org/10.1080/01446193.2017.1411599>

-
- [17] Kolleck, N. (2013). Social network analysis in innovation research: using a mixed methods approach to analyze social innovations. *European Journal of Futures Research*, 1, 1-9. <https://doi.org/10.1007/s40309-013-0025-2>
 - [18] Wei, X. (2013, April). Educational technology circle: Social network analysis on Sina Micro blog. In 2013 8th International Conference on Computer Science & Education (pp. 1169-1174). IEEE. <https://doi.org/10.1109/ICCSE.2013.6554094>
 - [19] Bi, Q., Zhao, Y., & Guan, J. (2015). Empirical analysis of micro-blog academic information exchange from the perspective of social network analysis. *Library Science Research*, 26-34. (In Chinese)
 - [20] Rodrigues, F. A. (2018). Network centrality: an introduction. In *A mathematical modeling approach from nonlinear dynamics to complex systems* (pp. 177-196). Cham: Springer International Publishing.
 - [21] Xue, K., Li, Y., & Meng, X. (2019). An evaluation model to assess the communication effects of intangible cultural heritage. *Journal of Cultural Heritage*, 40, 124-132. <https://doi.org/10.1016/j.culher.2019.05.021>
 - [22] Huang, L., & Song, Y. (2022). Intangible cultural heritage management using machine learning model: A case study of northwest folk song Huaer. *Scientific Programming*, 2022(1), 1383520. <https://doi.org/10.1155/2022/1383520>