

Communication Strategies and User Behaviors of Esports Online Games Across Multiple Social Media Platforms

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Abstract. This study examines cross-platform communication patterns of mainstream esports titles through literature review, case analysis, and user behavior observation. It maps the overall communication ecology across Douyin, Bilibili, Xiaohongshu, and Weibo, summarizing differentiated practical strategies in content creation, topic operations, community marketing, and online trend amplification. This paper further analyzes user behavioral characteristics from multiple dimensions, including engagement patterns, content preferences, participation motives, and information-sharing habits. Findings indicate that platform affordances largely determine suitable communication strategies, while audience age, daily usage scenarios, and diverse social needs produce obvious user behavioral divergence. Although cross-platform esports communication faces persistent challenges, including content homogenization, community silos, and sensationalist marketing practices, it benefits from strong community stickiness, a large young user base, and remarkable cross-boundary diffusion potential. This paper puts forward targeted recommendations for refined cross-platform audience targeting, effective user retention, and cultivating a healthier public discourse environment. It hopes to provide practical references for standardized and nuanced new-media operations within the domestic esports industry.

Keywords: Cross-platform communication, esports, social media, user behavior, communication strategy

1. Introduction

The spread of mobile internet and new media technology has put esports into high gear, making it a central piece of the digital cultural industry. Unlike traditional sports, competitive online games are digital and entertainment-driven by nature, highly interactive, fast-moving, and perfectly suited to social media. Through these platforms, esports content can spread virally and break out of niche circles into the mainstream. They are building presence across multiple platforms, aligning with each site's traffic logic and user makeup, and crafting platform-specific strategies. The aim is to expand a game's reach, build loyal core communities, and raise brand value.

Platform ecosystems differ sharply. Weibo's strength lies in public discourse and trend amplification, making it the natural choice for official tournament announcements and hype-building. Bilibili centers on mid-to-long video, in-depth content, and tight-knit youth communities, serving as the main hub for tutorials, match analysis, and derivative fan creations. Douyin and

Kuaishou rely on short, fragmented, high-traffic clips to push esports entertainment to mass audiences. Xiaohongshu leans toward lightweight photo-and-text posts and strategy guides, attracting casual players who want to share and connect. Due to each platform has its own positioning, recommendation algorithm, and user profile, esports communication has shifted from blanket publishing to refined, platform-by-platform operations. Esports users are not a monolith. They range from pro-scene followers and veteran gamers to casual players and passive spectators. Each group behaves differently depending on the platform. Hardcore players seek out vertical communities for professional match coverage and advanced strategy guides, engaging in deep discussion. Casual audiences mostly come across esports through short videos and trending topics, stopping at a quick like or browse. This behavioral split reflects how cross-platform communication is currently performing, but it also exposes real pain points: content that poorly fits the platform, weak precision in audience targeting, and communities that remain heavily siloed from one another.

Existing domestic research offers solid coverage of esports industry development, single-platform communication, and broad audience characteristics. Yet most studies focus on one platform in isolation or treat all esports viewers as a single, undifferentiated group. Systematic comparison of how strategies vary across platforms, and analysis of what drives divergent user behaviors, remains thin. That gap is significant because the industry has already moved into full-scale multi-platform media operations.

This study addresses that gap by grounding itself in multi-platform communication scenarios and focusing on two core dimensions: communication strategy and user behavior. Through comparative analysis of platform models and user traits, this study identifies what works and what does not in current cross-platform esports communication, and this study proposes practical optimization strategies. The findings should help clarify how esports content travels through new media and why users act the way they do, filling in details that prior research has overlooked. For game operators, the study offers hands-on guidance for social media strategy and community management. More broadly, it carries weight for fostering a healthy esports culture and pushing the industry toward more standardized development.

2. Literature review

2.1. Research on cross-platform communication strategies

Studies have compared the sustainable communication practices of Twitter and Facebook, and found that the platform architecture will fundamentally shape user expectations: short picture content has a better communication effect on Twitter, while longer and positive content is more likely to get attention on Facebook [1]. In the field of e-sports, short video platforms such as TikTok and Kuaishou are more suitable for fragmented and impactful clips, giving priority to highlighting entertainment attributes rather than information density [2]. Some studies have pointed out that TikTok anchors, an overseas short video platform, mainly rely on interesting game clips, plot clips, and hot topics to attract new audiences, so the short video platform has become a key traffic entrance in the e-sports ecology [2]. In contrast, long content platforms such as Bilibili rely on complete event replays and community co-creation of content to achieve a higher degree of user participation [3]. An analysis of a total of 2.48 billion video data from Kuaishou and Bilibili confirmed that there are essential differences in the content operation logic of short video platforms and long video platforms: successful content on one platform is likely to have little effect on another platform [3].

2.2. User participation and behavior pattern

Except for content consumption behavior, the participation mode of users will be obviously different depending on the platform [1]. Existing research has explored the gamified live broadcast service and found that gamified mechanisms such as real-time voting, gift rewards, and event guessing can significantly improve audience participation and value output, and gender will play a regulating role in this effect [4]. Some scholars have analyzed the e-sports live bullet screen, believing that the audience's real-time comments are not only to respond to the game screen, but also to build a sense of common existence and gain a common emotional experience [5]. The above studies show that e-sports users do not passively receive information, and the platform's exclusive interaction function will shape users' active participation behavior [4, 5].

2.3. Theoretical framework: self-determination theory

In order to systematically explain the intrinsic reasons why users show differentiated behavior on different platforms, this study uses self-determination theory as a theoretical tool. Self-determination theory proposes that human behavioral motivations come from three basic psychological needs: independent needs, competent needs, and belonging needs [6]. This theory has been applied to the relevant research of Korean e-sports players. The study confirms that the satisfaction of basic psychological needs can generate endogenous motivation and alleviate professional burnout [6]. In the context of cross-platform communication, different platforms have different degrees of satisfaction for the three types of psychological needs: Bilibili bullet screen culture relies on community interaction to meet the belonging needs of users [5]; TikTok algorithm recommendation mechanism allows users to independently screen viewing content to meet independent needs [3]; all kinds of gamification in the live broadcast of the event The interactive function allows users to gain a sense of ability through skill-related participation [4].

3. Research approach and findings

3.1. Method

This study adopts the qualitative comparative case study method and selects the four mainstream social media platforms in China: TikTok, Bilibili, Xiaohongshu, and Weibo as cases to analyze the ecology of domestic e-sports communication.

The research data includes three parts: (1) published academic literature, covering cross-platform user behavior [1, 3], live broadcast participation behavior [2, 4, 5], and research related to e-sports motivation [6]; (2) public platform statistics and industry reports; (3) e-sports on various platforms in June-August 2025 First-hand observation data obtained by active community observation.

The analysis is divided into two steps: first, combine the content form, algorithm logic, and community norms to sort out the exclusive communication strategies of each platform; second, divide user behavior according to the depth of participation (passive browsing, active interaction, content creation), and carry out analysis in combination with the theory of self-determination [6].

3.2. Findings and discussions

3.2.1. Exclusive communication strategies for each platform

TikTok and Kuaishou are the high-traffic entrances of the e-sports ecology. Consistent with the relevant research conclusions of TikTok, the e-sports content of this kind of platform tends to be fragmented entertainment materials, including interesting clips, teaser clips, and hot challenges, rather than complete event reports [2]. The platform algorithm focuses on the completion rate and forwarding rate, and prefers content that can create emotional shock in the first three seconds.

In contrast, Bilibili is a content knowledge position that favors community attributes. Past studies have pointed out that the bullet screen system transforms single-person viewing into a group experience [5]. The dissemination of e-sports on this platform needs to rely on long content, such as complete game replays, player interviews, and a series of teaching videos, so as to support in-depth viewing and bullet screen interaction.

Weibo assumes the function of a public opinion field, with short pictures and texts on hot topics to amplify the relevant public opinion of the event; Xiaohongshu focuses on lightweight life-oriented content, such as cosplay display and novice game strategy. The above differences prove that cross-platform communication must adapt to the native content preferences of the platform [1].

3.2.2. User behavior pattern and intrinsic motivation

With the help of the three psychological needs put forward by the self-determination theory, the behavioral logic of different platform users can be understood [6]. In Bilibili, the high-density bullet screen and comment area interaction environment mainly meets the needs of users, forming a close fan community around the team and anchor [5]. TikTok's infinitely declining browsing mode and personalized recommendation algorithm give users the right to choose content to meet their independent needs [3].

In the live broadcast of major events, game-oriented functions such as guessing and gift rewards allow the audience to show game cognition and express support to meet the needs of competencies [4]. At the same time, there are gender differences in the participation effect brought about by gamified interaction [4], which shows that the platform operator should design a refined interaction mechanism instead of using a unified gamified mode.

Although each platform has its unique advantages, there are still real problems in the existing communication ecology: the operator directly carries the same clips to all platforms, ignoring the logical differences in the content of different platforms, resulting in content homogeneity [3]; Bilibili hardcore players and TikTok pan-user circles are separated, forming barriers between communities; cross-level It is difficult for Taiwanese users to convert. If people want to solve the problem, they need to not only adjust the content form, but also adapt the algorithm to plan the content release, and build a connection channel for different communities.

3.2.3. Causes of the long-term existence of community barriers

Content homogenization and community separation are not new problems, but most e-sports operators do not pay enough attention to them. Short video platforms seem to be able to obtain traffic at a low cost, which causes cognitive misunderstandings to a certain extent. Su et al. studied that during the epidemic period, athletes used 15-second short videos to maintain the popularity of fans, and many e-sports teams directly copied this model to operate TikTok [7]. However, the

misunderstanding is that high exposure does not mean effective user participation. The 15-second stalker clip can gain plays, but it cannot establish fan stickiness, and it is difficult to encourage users to subscribe to B-station accounts or buy event tickets. Santos et al. found that once the interaction cost required for users to participate in social platforms rose slightly, the participation of fans would decrease rapidly [8]. This is also the reason why TikTok's casual audience rarely turns into B-station in-depth comment participants - it is not user inertia, but a significant increase in the cognitive cost and social cost required to participate.

The deeper contradiction is that there is no unified content template to adapt to all games. Ma et al. studied the interaction between game categories, live broadcast types, and audiences: multiplayer online tactical competitive game audiences watch live broadcasts to pursue a sense of achievement and group belonging; collector card game audiences watch live broadcasts and are more inclined to acquire knowledge and aesthetic experience [9]. The two are not simply different in preferences, but completely different psychological expectations. The operator synchronously releases the same highlight playback to TikTok, Bilibili, and Weibo, which is not only inefficient, but also contrary to the psychological expectations of different audience groups. Although the characteristics of the platform are important, the matching of game categories and content forms is also crucial.

Moreover, it is difficult for existing academic research to provide adequate solutions. After sorting out the academic achievements in the field of e-sports, Pizzo et al. proposed that most of the existing studies are limited to a single platform, a single game, and a single audience group, and rarely build a comprehensive analysis framework for integrating platform availability, content form, and game category motivation [10]. The lack of theoretical research directly causes the lack of reference in industry practice, and the operation can only rely on experience and trial and error. This research tries to make up for this shortcoming.

4. Conclusion

This study adopts three research methods: literature review, case analysis, and user behavior observation. It explores the cross-platform communication of e-sports around the four platforms of Douyin, Bilibili, Xiaohongshu, and Weibo, and responds to the three major research gaps in existing academic research. First, most of the existing studies based on the experiential economy perspective and the participatory community framework are limited to single-platform analysis. The academic community has not yet built a unified theoretical framework to adapt to differentiated e-sports communication strategies in synchronous live broadcast, file-on-demand, and algorithm-oriented media environments. Second, a large number of existing studies regard e-sports users on different platforms as independent groups, which fails to completely sort out the cross-platform behavior path of users. The discussion on the behavioral triggers and user churn mechanism in the process of the audience from short video highlights to on-demand replay content and then entering the live broadcast scene is also relatively limited. Third, many academic papers often classify e-sports as a category of traditional sports or casual games, and rarely take the composite characteristics of e-sports as the core entry point to study its special characteristics of competitive sports attributes, digital interaction attributes, and multi-platform media attributes.

The results of this study confirm that the availability of the platform and the logic of the algorithm largely determine the dissemination effect of e-sports. Adopting a one-size-fits-all and homogeneous content release mode, the communication effect is poor. It is necessary to carry out customized content operation and community management to match the different participation modes of core players, casual audiences, and shallow participants. The behavioral motivations of the above groups mainly include information acquisition, entertainment, and social needs. At the same

time, this study points out that there are very prominent practical problems in cross-platform communication of domestic e-sports, which are mainly reflected in the widespread homogenization of content, the division of community circles, and excessive reliance on eye-catching marketing. Of course, the industry also has the advantages of a large base of young users and relatively high community loyalty. Improving the accuracy of audience positioning and optimizing user retention is conducive to further improving the public opinion environment in the field of e-sports.

There are certain limitations in this study. The research object is limited to the four major social media platforms in China, and cross-sectional observation is used; the sample coverage is limited. Follow-up research can build a structured cross-platform communication analysis framework, track the complete cross-platform behavior trajectory of users, and supplement more empirical information based on the background of the Asia-Pacific e-sports industry, so as to make up for the above research gaps.

References

- [1] Jha, A. K., & Verma, N. K. (2024). Social media platforms and user engagement: A multi-platform study on one-way firm sustainability communication. *Information Systems Frontiers*, 26(1), 177–194.
<https://doi.org/10.1007/s10796-023-10376-8>
- [2] Mastiņš, A. (2024). *TikTok's effect on the growth of live streamers* [Bachelor's thesis]. Theseus.
<https://www.theseus.fi/handle/10024/865840>
- [3] Chen, Z., Liu, P., Piao, J., Xu, F., & Li, Y. (2024). Shorter is different: Characterizing the dynamics of short-form video platforms. arXiv preprint arXiv:2410.16058. <https://doi.org/10.48550/arXiv.2410.16058>
- [4] Qian, T. Y., Matz, R., Luo, L., & Xu, C. (2022). Gamification for value creation and viewer engagement in gamified livestreaming services: The moderating role of gender in esports. *Journal of Business Research*, 145, 482–494. <https://doi.org/10.1016/j.jbusres.2022.02.082>
- [5] Jiang, Y., Shen, X., Wen, R., Sha, Z., Chu, J., Liu, Y., Michael B., & Zhang, Y. (2024). Games and beyond: Analyzing the bullet chats of esports livestreaming. *Proceedings of the International AAAI Conference on Web and Social Media*, 18(1), 761–773. <https://doi.org/10.1609/icwsm.v18i1.31350>
- [6] Hong, H. J., Wilkinson, G., & Rocha, C. M. (2023). The relationship between basic needs satisfaction, self-determined motivation, and burnout in Korean esports players. *Journal of Gambling Studies*, 39(1), 323–338.
<https://doi.org/10.1007/s10899-022-10132-8>
- [7] Su, Y., Baker, B. J., Doyle, J. P., & Yan, M. (2020). Fan engagement in 15 seconds: Athletes' relationship marketing during a pandemic via TikTok. *International Journal of Sport Communication*, 13(3), 436–446.
<https://doi.org/10.1123/ijsc.2020-0238>
- [8] Santos, T. O., Correia, A., Biscaia, R., & Pegoraro, A. (2019). Examining fan engagement through social networking sites. *International Journal of Sports Marketing and Sponsorship*, 20(1), 163–183.
<https://doi.org/10.1108/IJSM-05-2016-0020>
- [9] Ma, S. C., Byon, K. K., Jang, W., Ma, S. M., & Huang, T. N. (2021). Esports spectating motives and streaming consumption: Moderating effect of game genres and live-streaming types. *Sustainability*, 13(8), 4164.
<https://doi.org/10.3390/su13084164>
- [10] Pizzo, A. D., Su, Y., Scholz, T., Baker, B. J., Hamari, J., & Ndanga, L. (2022). Esports scholarship review: Synthesis, contributions, and future research. *Journal of Sport Management*, 36(3), 228–239.
<https://doi.org/10.1123/jism.2021-0228>