# The "Datafication" of Fan Culture in the New Media Environment

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Abstract: In the context of new media, fan culture exhibits significant characteristics of datafication. Fan activities, behaviors, preferences, and interactions are transformed into quantifiable and analyzable digital data. This includes various forms of user-generated content, engagement metrics, and the digital footprint of fan communities. Behind this data lies valuable information that can help people better understand and analyze fan culture. However, attention should be given to the trend of excessive commercialization and profit-driven motives. This paper proposes an in-depth exploration and reflection on the impact of the datafication of fan culture and idol data in the new media environment, on individuals, society, and the economy. Therefore, it is necessary to not only pursue datafication but also pay attention to the problems it may bring, such as excessive competition and commercialization. At the same time, it is important for the public to value the diversity and individual needs of fan communities, to uphold respect for the authenticity and purity of fan culture, and to establish interactions between idols and fans based on respect and sincerity. It is necessary to moderately regulate the datafication of fan culture and avoid the negative impact of commercial interests on the healthy development of fan communities.

**Keywords:** fan culture, new media, fandom

### 1. Introduction

With the widespread use of social media and the rapid development of global information communication, fan culture in the new media era has exhibited unprecedented characteristics of datafication. On digital platforms, fan communities engage in massive interactions and exchanges, resulting in a large amount of data resources. These data resources manifest in various forms such as fan perspectives, behavioral habits, and preferences. Moreover, the datafication of fan culture has opened up new avenues for its development, providing unprecedented possibilities for research in related fields and understanding fan culture. A deep analysis and understanding of the datafication of fan culture in the new media environment have profound significance for comprehending current social sentiment trends and media communication patterns. It can be said that as fan culture evolves, research in this area should delve deeper to provide new perspectives and analytical tools for uncovering its underlying characteristics and mechanisms. Therefore, this paper will delve into the datafication trends of fan culture in the new media environment, analyze the underlying meanings behind this data, and examine its impacts on the economy, society, and individuals. The research

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findings of this paper will contribute to a more comprehensive and in-depth understanding of fan culture, providing new ideas for academic and practical applications in related fields.

### 2. Key Definition

### 2.1. Definition of the New Media Era

The new media era refers to the period in which there is a fundamental change in media forms, communication methods, information reception, and processing, driven by the development of the internet, digitization, and media convergence technologies. In this era, the generation, dissemination, and reception of information have become more diversified. Interaction and participation have been enhanced, gradually transforming users from passive receivers to active creators of information [1]. New media not only encompasses new media tools but also represents a brand-new information dissemination mode. Through digital technologies, information is highly integrated, enabling realtime, bi-directional, and interactive global dissemination [2]. The application of new media technologies such as virtual reality, big data, and cloud computing has made information acquisition and processing more efficient and convenient. In the new media era, the boundaries of media are gradually blurred, leading to a deep integration of traditional domains such as news, advertising, entertainment, and education, forming a new media environment. This environment has profoundly reshaped the ways in which the public accesses and receives information, significantly improving the efficiency and impact of information dissemination. At the same time, new media has had farreaching impacts on various aspects of society, including the socio-economic, cultural, educational, and political spheres. It has propelled the processes of societal informatization and network transformation, reshaping the information ecology of modern society. In summary, the core features of the new media era include the digitization of information, the internet-based nature of media, and the media orientation of the public. It is not only an era of technological revolution but also an epoch of profound information transformation in society.

### 2.2. Definition of Datafication Fan Culture

The data-driven aspect of fan culture in the era of new media is a new and unprecedented phenomenon. This phenomenon primarily refers to the process of transforming fan behavior, activities, preferences, and interactions with media, celebrities, and other fans into quantifiable and analyzable data. The realization of this process is facilitated by the closeness and interactivity of new media. In this context, fans' actions, whether it is commenting, liking, sharing, participating in discussions, or even clicking and browsing, can be recorded and transformed into corresponding data. This data serves as a tangible reflection of fan behavior, showcasing their behavioral patterns and preference trends, enabling a better understanding of fan behavior and needs. Moreover, the acquisition and recording of this data are real-time, allowing the general public to quickly grasp and respond to changes in fan demands. Therefore, the data-driven aspect of fan culture can also be used to visualize fan behavior and provide a basis for strategic decision-making. Furthermore, the data-driven aspect of fan culture is also evident in the digital footprints of fan community dynamics and characteristics. Every fan joining, every community activity, every content release, and even the interactions between fans leave a digital footprint in the online world. Analyzing and studying these footprints can provide insights into the changes within the fan community and a deeper understanding of fan behavior and psychology. This represents a new form of fan culture in the context of the new media environment and is an important tool for understanding and researching fan culture. The data-driven fan culture reveals the characteristics of information dissemination in the era of new media, which is of significant importance in grasping the dynamics of media communication and formulating effective communication strategies.

### 2.3. The Importance of Datafication Presentation of Fan Culture

As mentioned earlier, with the popularity of the internet and social media, fan behaviors and interactions on these platforms can be recorded and analyzed. This means that the manifestation and impact of fan culture can be quantified and visualized through data, providing a more objective and concrete way to observe and understand fan interactions. In today's world, the data-driven presentation of fan culture can help businesses and brands better understand their audience. By analyzing fan interaction data, brands can have a more accurate grasp of audience preferences, interests, and behavioral habits, enabling them to develop targeted marketing strategies and launch products or services. At the same time, data-driven fan culture also provides fans with more customized content and interactive experiences, further enhancing their sense of participation and loyalty. Therefore, data-driven presentation of fan culture is of great significance for both brand marketing and fan engagement.

### 3. Idol Data in the New Media Environment

# 3.1. Contrasting Behavior of Fans in Idol Fandom Before and After the Advent of New Media

The advent of the new media era has significantly transformed the behavior of fans in idol fandom, creating a stark contrast to the pre-new media era. Prior to entering the new media era, the behavior of fans in idol fandom mainly revolved around activities such as watching television, buying magazines, purchasing CDs, and collecting posters. These activities were mostly one-way in nature, with fans passively receiving information from the media and not having timely access to the latest updates about their idols. Moreover, interactions among fans were relatively closed, mainly confined to small-scale discussions and exchanges. However, with the onset of the new media era, characterized by widespread internet access and the emergence of social media platforms, the behavior of fans in idol fandom underwent a major transformation. Firstly, information accessibility became significantly more convenient. Fans could now use their smartphones or computers to instantly access the latest updates from their idols, such as by following them on social platforms like Weibo, Instagram, and Twitter, and even engaging in real-time interactions with them. Secondly, the level of fan engagement increased substantially. For instance, fans now participate in discussions on fan forums, vote to determine the outcomes of music programs, and contribute to crowdfunding events for idol debuts or comebacks. On one hand, fans transitioned from being passive recipients to active participants. On the other hand, fan interactions became more open, moving beyond smallscale exchanges to encompass a wider range of social media platforms, leading to the formation of tighter fan communities. Additionally, the new media era empowered fans with the power to evaluate idols and their products. In the past, the portrayal and evaluation of idols largely relied on the media, whereas in the new media era, fans can express their opinions and engage in discussions about idols and their works through social media platforms, greatly influencing idol market reception and image shaping [3]. However, the new media era has also intensified the tendency towards extreme fan behavior. In this era, obsessive fan behaviors, such as stalking known as "sasaeng" and excessive interference in idols' personal lives, have drawn widespread attention and discussion. These behaviors pose challenges to both the privacy rights of artists and the healthy development of fan culture. Overall, the new media era has shifted fans' idol fandom behavior from passivity to proactivity, from closed to open, while also expanding fan behaviors from a localized scale to a global one, providing greater market space for the idol industry.

### 3.2. The Purpose of Idol Data

The data of idols serves multiple purposes, such as demonstrating their popularity, fan engagement, and social influence. Both fans and businesses place great importance on this data, as it allows for the quantification of an idol's impact and commercial value, enabling decisions regarding promotional activities and endorsement collaborations. Fans value idol data by focusing on metrics such as the number of social media followers, frequency of interactions, and the popularity of topics surrounding the idol. They also maintain a skeptical attitude towards data manipulation and actively supervise the authenticity of the data. Similarly, businesses analyze fan behavior, the image of the idol, and the trends of popular topics through data analysis, in order to provide decision support for commercial collaborations.

### 4. The Economic Impact of Fan Culture Data

In the rapidly evolving digital era, the datafication of fan culture has had profound economic impacts. Firstly, the datafication of fan culture provides new opportunities for advertising and marketing activities in the economic realm. By utilizing big data, organizations and companies can gain a precise understanding of fan behavior patterns and develop targeted marketing strategies based on this information. For example, the commercial companies behind idols can select suitable endorsers or brand partnerships based on fan feedback data, resulting in significant economic benefits. In other words, datafication allows idol groups or individuals to gain deeper insights into fan preferences and demands, enabling the customization of more targeted products and services, thus enhancing the accuracy and effectiveness of marketing. Secondly, the classification and positioning of datafied fan groups have also enabled unprecedented business models, resolving the ambiguity in cooperation between brands and idols and providing them with clearer action guidelines. As a result, commercial activities become more transparent and efficient. Moreover, from an investment perspective, the datafication of fan culture plays an important role. Through the analysis of various data, such as fan numbers, interaction frequency, purchasing power, etc., investors can predict the market value of idols or groups, making precise investment decisions.

However, despite the various benefits of datafying fan culture in the economic realm, it is crucial to consider the issues it brings about . Firstly, excessive commercialization may lead to the blind pursuit of economic interests, overlooking the consumer rights of fans and even causing so-called "cabbage-cutting" in the sense that short-term profit gains may harm long-term fan relationships. This not only risks diminishing the market value of idols but also affects brand image [4]. Secondly, although data-driven decision-making can provide more accurate predictions and decision-making, there are potential problems of misinterpretation and misuse of data, as fan behaviors cannot always be fully predicted by data alone. For example, data may overlook the influence of fan emotions, which is a critical factor determining fan behavior [5]. Additionally, over-reliance on data can result in fans being manipulated, which is detrimental to the healthy development of fan culture. If companies, brands, and other commercial organizations excessively utilize fan data, they may turn fans into passive consumers, thus compromising their rights [6].

In light of the datafication of fan culture, it is necessary to fully explore its economic potential while taking precautions against potential issues. On one hand, striking a balance in commercialization is crucial in maintaining good fan relationships, as it not only yields economic benefits but also helps preserve the image of idols and brands. On the other hand, proper use of fan data is essential to maximize its benefits while preventing misinterpretation and misuse. Lastly, respecting and protecting the rights of fans allows them to actively participate in economic development while enjoying fan culture.

## 5. The Societal Impact of the Datafication of Fan Culture

The datafication of fan culture has brought about various positive impacts on the societal level. Firstly, the dissemination and analysis of datafied fan culture have provided new opportunities for the development of the cultural industry, promoting innovation and injecting vitality into social development. Furthermore, datafication has strengthened fan engagement and loyalty, fostering social cohesion and interaction [7]. Most importantly, datafication has also provided fans with more opportunities for participation and interaction, promoting socialization and a sense of community [8], further driving social interactions. Overall, the datafication of fan culture has brought about multiple benefits on the societal level, including precision marketing, cultural innovation, and social interaction, injecting new momentum into the cultural industry and social development. However, excessive focus on idol data has also brought about some negative impacts. For example, the extensive promotion of idol information by fans may occupy the push channels of other information on social platforms, affecting the dissemination and promotion of other content [9]. This can result in the ineffective transmission of information from other creators or the general public, exacerbating the monoculture and imbalance of information. Over-reliance on data can also lead to excessive commercialization and a profit-oriented mindset, disrupting the originally pure fan emotions and cultural pursuit.

### 6. The Impact of the Datafication of Fan Culture on Fans

The datafication of fan culture has had various effects on fans. One major advantage of datafication is that it enhances interaction and communication among fan communities. The data-driven features on social platforms, such as likes, comments, and shares, allow fans to intuitively perceive their status and influence within the community. This perception can motivate fans to engage in discussions, share content, and interact with others [10]. In the internet era, fans are no longer passive recipients of information but rather producers of information and data. Fan interactions and communication are no longer limited by time and space, and the content they engage with is no longer solely focused on idol fandom. The range of content shared by fans has become more diverse, such as fans showcasing their talents to support their idols. While the goal may be to boost idol data, fans also achieve self-expression and self-fulfillment in this process. This positive atmosphere promotes group activity and cohesion, and fan communities in the future will have more opportunities to form powerful collectives.

However, some fans may excessively pursue success and recognition in terms of data, seeking value solely within data and finding it difficult to break free from this cycle. This may lead to blind comparison and excessive competition among fans. Fans often use follower counts, likes, and shares as a measure of their standing within the fan community, which drives them to showcase themselves and prove their worth [10]. This not only puts pressure on themselves but may also impact the harmonious development of the entire fan community. It is also worth noting that datafication has facilitated commercial activities targeting fan communities. Analyzing the big data generated by fans and utilizing user profiles allows for the depiction of accurate fan characteristics, interests, and behaviors, enabling precise identification of the needs and preferences of fan communities. This achievement provides more accurate marketing strategies and opportunities, meeting the diverse demands of brands and marketers. In this process, fans themselves become economic assets actively analyzed and manipulated within the entertainment industry, to a certain extent losing their subjectivity under the influence of data.

### 7. Conclusions

In conclusion, the datafication of fan culture in the era of new media has various manifestations. It has brought about wide participation and interactive experiences, competition and comparison

phenomena, as well as precise marketing and business opportunities, which have profound effects on the overall social and cultural environment. These are the powerful forces of data that cannot be ignored when studying fan culture.

Datafication is deeply transforming the interaction patterns, competitive environment, and operational strategies of fan communities. This study has revealed some characteristics and dynamics of fan communities under this transformation, exploring their impacts on the economic, social, and fan dimensions. The analysis indicates that the datafication of fan communities presents significant business opportunities and broad prospects for precision marketing and fan-related commercial activities. At the societal level, datafication can stimulate cultural industry development and hence social progress, but it can also result in the appropriation of public resources.

Additionally, datafication provides fan communities with a broader interactive space and greater influence but also brings issues of excessive competition and comparison among fans, reflecting the challenge of maintaining healthy development while pursuing personalized expression and fulfilling emotional needs. The main contribution of this study lies in deepening the understanding of fan communities in the era of datafication, revealing a new business model, and enhancing the awareness of fan behavior dynamics and their commercial value.

However, there are limitations to this study. Firstly, the analysis of specific behaviors and dynamics of fan communities under datafication is not extensive enough. This study does not provide clear answers to conflicts and contradictions among fan communities and how to address these issues. Secondly, the research perspective of this study is not focused enough, neglecting behavioral patterns influenced by factors such as gender, age, and platforms when discussing the impacts of datafication on the economy, society, and fans themselves. There are still many possible research directions for more comprehensive and in-depth exploration. For example, targeting the specific behaviors and dynamics of fan communities under datafication and attempting to provide more targeted solutions. Additionally, research can consider a wider range of factors related to fan behavior, such as social media environment and cultural differences.

Finally, considering the universal trend of datafication and the potential of fan communities in commercial activities, both theoretical and empirical research can delve deeper into this emerging field. Moreover, how to use this data to better understand fan culture in a more profound and scientific manner and how to effectively manage fans and obtain meaningful information from massive data are key issues that need to be addressed.

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