

UNDERSTANDING BTS FAN LOYALTY: THE ROLE OF FAN VALUE PERSPECTIVE AND SENSE OF VIRTUAL COMMUNITY ON THE WEVERSE PLATFORM

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Abstract

This research aims to analyze the influence of the fan value perspective (functional value, emotional value, and social value) on BTS fan loyalty (ARMY), with sense of virtual community (SOVC) as a mediator. This research was suggested by the phenomenon of increasing use of virtual community platforms such as Weverse, which provides direct access for fans to access various contents, as well as interacting with idols and fellow fans. This research data is collected through an online questionnaire to ARMY who use and join BTS's Weverse, with a total of 400 respondents calculated using the Slovin formula. The data analysis method uses Partial Least Squares (PLS-SEM) with SmartPLS software. The results of this study indicate that the fan value perspective dimension has a significant influence on SOVC, which mediates the influence on fan loyalty. This study provides theoretical contributions to the development of literature related to virtual communities and fan loyalty, as practical implications for the entertainment industry, especially in building fan engagement and loyalty through digital platforms.

Keywords: Fan Value Perspective, Fan Loyalty, Sense of Virtual Community (SOVC)

1. BACKGROUND

The Korean Wave, Hallyu, has significantly influenced various sectors, including the K-Pop industry, which has expanded beyond Asia to establish a global presence. According to data from the Korea Customs Service, as reported by Yonhap News Agency, K-Pop exports reached an all-time high of 169 billion KRW (approximately 133 million USD) in the first half of 2023, marking a 17.1% increase from the previous year. Major markets include Japan and the United States, with the U.S. surpassing China as the second-largest market. Other countries such as Canada, Indonesia, the Netherlands, Taiwan, Hong Kong, and Germany also contribute to K-Pop's growing export market. This rise is largely driven by digital music consumption trends, including streaming and increasing physical album sales, facilitated by technological advancements.

The entertainment industry, particularly K-Pop, has embraced new technologies for marketing and audience engagement. Platforms like Spotify and YouTube provide accessibility for global audiences, contributing to K-Pop's rise. The International Federation of the Phonographic Industry (IFPI) reported that streaming accounted for 62% of the global recorded music revenue, including K-Pop. Over the past five years, K-Pop streaming has surged by 362% globally, as per data from Spotify. This growth underscores the industry's transformation in engaging with audiences, not only through music and visuals but also by fostering virtual communities that enhance fan interactions.

Virtual communities have become essential for engagement between consumers and brands, as well as between fans and idols. One prominent example is the BTS fan community,

known as ARMY, which actively engages on digital platforms like Weverse. Managed by HYBE Corporation, Weverse enables fans to access exclusive content, interact with BTS members, and connect with fellow fans, fostering a strong sense of community (SOVC). With over 26 million members worldwide, Weverse plays a crucial role in maintaining fan engagement and strengthening their emotional connection with BTS, thereby enhancing fan loyalty.

Fan loyalty is a critical factor in the success of K-Pop idols. Oliver (1999) defines loyalty as a deep commitment to repurchase or support a product or service despite external influences. Within ARMY, this is evident in their participation in streaming, merchandise purchases, concert attendance, and interactions on Weverse. Loyalty is not solely based on rational decision-making but is also shaped by emotional attachment and positive interaction experiences (Bennett & Rundle-Thiele, 2005).

A key factor influencing fan loyalty is customer value, which encompasses the perceived benefits of using a product or service. Sheth et al., (1991) identified five dimensions of customer value: functional, emotional, social, epistemic, and conditional. However, in the context of virtual communities like Weverse, only functional, emotional, and social value are relevant (Sweeney & Soutar, 2001). Functional value pertains to practical benefits, such as ease of access to content and direct interaction with BTS. Emotional value relates to the joy and pride experienced through engagement, while social value arises from the sense of belonging and shared interests among fans. The greater the perceived value, the stronger the fan loyalty toward BTS.

Sheth et al., (1991) and Sweeney & Soutar (2001) note that epistemic and conditional value are less relevant in virtual communities. Chen et al., (2008) argues that epistemic value is more applicable to hedonic contexts, while conditional value is insignificant due to the consistent and long-term nature of virtual community interactions.

In addition to customer value, SOVC plays a crucial role in fostering fan loyalty. Blanchard & Lynne Markus (2004) and Wang et al. (2023) identify four components of SOVC: feeling of membership, feelings of influence, fulfillment of needs, and shared emotional connection. These elements reinforce solidarity among fans and strengthen their attachment to BTS and the Weverse community.

Given the rapid expansion of the K-Pop industry as a global phenomenon, this study is highly relevant. According to Hye Ri Park (2024), the global K-Pop market revenue reached 1.23 trillion KRW in 2023, a 34.3% increase from the previous year, with album sales rising by 31.4%, global streaming by 21%, and international concert sales by 47.5%. This highlights the significance of virtual community engagement in fostering fan loyalty.

While previous research has explored key factors influencing customer loyalty, there is a gap in literature regarding the impact of functional, emotional, and social value on fan loyalty within virtual communities like Weverse. Chen et al., (2008) found that SOVC strengthens the relationship between customer value and loyalty in virtual communities, yet studies specifically on fandoms and virtual platforms remain limited. Therefore, further research is needed to examine how fan value perspective influences BTS fan loyalty, mediated by SOVC in Weverse. This study aims to contribute to the academic discourse on fan loyalty and virtual communities while providing insights for digital platform managers and entertainment agencies on enhancing fan engagement and value creation.

2. THEORETICAL FRAMEWORK

2.1 Customer Value

Zeithaml (1998) defines customer value as the benefits that customers perceive they receive in relation to the sacrifices they make, such as time, effort, or money. This was further developed by Sheth et al., (1991), who identified five key dimensions of customer value. Functional value refers to the practical benefits of a product, such as its quality and usability, which are essential for its perceived effectiveness. Emotional value, on the other hand, is the positive emotional response a customer has when using a product, such as feelings of satisfaction or joy. Social value emerges from the sense of belonging and connection that individuals experience through their interactions within a community, fostering social ties. Epistemic value is driven by the curiosity to explore new and innovative experiences, motivated by the desire for novelty. Finally, conditional value refers to the significance of a product depending on specific circumstances or situations, indicating that value can be context-dependent. These dimensions collectively shape how customers assess the value of a product or service, encompassing both practical and emotional aspects.

2.2 SOVC and Fan Loyalty

Oliver (1999) defines loyalty as a commitment to consistently support or repurchase a product despite any external influences.

Fan loyalty encompasses both behavioral and emotional dedication toward an idol. This goes beyond purchases to include participation in activities such as streaming, attending concerts, and engaging in online communities.

SOVC describes the sense of belonging and connection among members of a virtual community. Blanchard & Lynne Markus (2004) and Wang et al., (2023) highlight four key elements that shape this sense of community. First, feelings of membership refer to the sense of acceptance and inclusion within the community, where members feel they are an integral part of the group. Second, feelings of influence involve the perception that members have the ability to impact or contribute to the community, fostering a sense of empowerment. Third, fulfillment of needs emphasizes the satisfaction that comes from receiving support and resources from the community, which helps individuals feel valued. Lastly, shared emotional connection reflects the emotional bonds formed between members, strengthening their collective identity and deepening the sense of unity within the group. These elements collectively create a strong virtual community, where members feel emotionally connected and supported.

Chen (2008) found that SOVC mediates the customer value viewpoint in terms of user loyalty within virtual communities. Additionally, Moorthy (1997) stated in his study that the information and interactions among members of a virtual community not only enhance satisfaction but also strengthen their loyalty to the product or service. In the context of Weverse, fans that feel connected and have a sense of belonging inside the community are more inclined to demonstrate significant loyalty, such as by supporting the artists, among other actions.

2.3 SOVC and Fan Value Perspective

Fan value perspective is predicated on the notion of customer value, which is typically associated with price and quality in economics. The value that fans derive from their engagement/involvement with their idols or communities is known as the fan value perspective. There are three dimensions of customer value that can be applied to ARMY on Weverse. Firstly, functional value is achieved through easy access to information, content, and the ability to engage

with both idols and other fans. This convenience enhances the overall experience for fans, making it more enjoyable. Emotional value develops as fans establish strong emotional bonds during their interactions, whether with the artists or fellow community members, creating a sense of closeness and attachment. Lastly, social value is generated as fans exchange experiences, engage in conversations, and offer mutual support, thereby strengthening the sense of community and solidarity among fans. These elements combine to create an enriching environment that encourages both personal and collective engagement.

As discussed by Blanchard & Lynne Markus (2004) and Chen et al., (2008), functional value experienced by users within a virtual community strengthens their sense of attachment and connection to the community, which contributes to SOVC. Chen et al., (2008) also demonstrated through his research that the emotional satisfaction experienced by members through interactions within a virtual community can strengthen the emotional bonds within that community. The emotional value they feel, such as happiness and other positive emotions, fosters attachment and connection within the community, which aligns with the elements of fulfillment of needs and shared emotional connection in SOVC (Wang et al., 2023). Sheth et al., (1991) and Chen et al., (2008) also proved that social value and virtual communities play a significant role in enhancing SOVC. Through social relationships, members experience a sense of togetherness and solidarity.

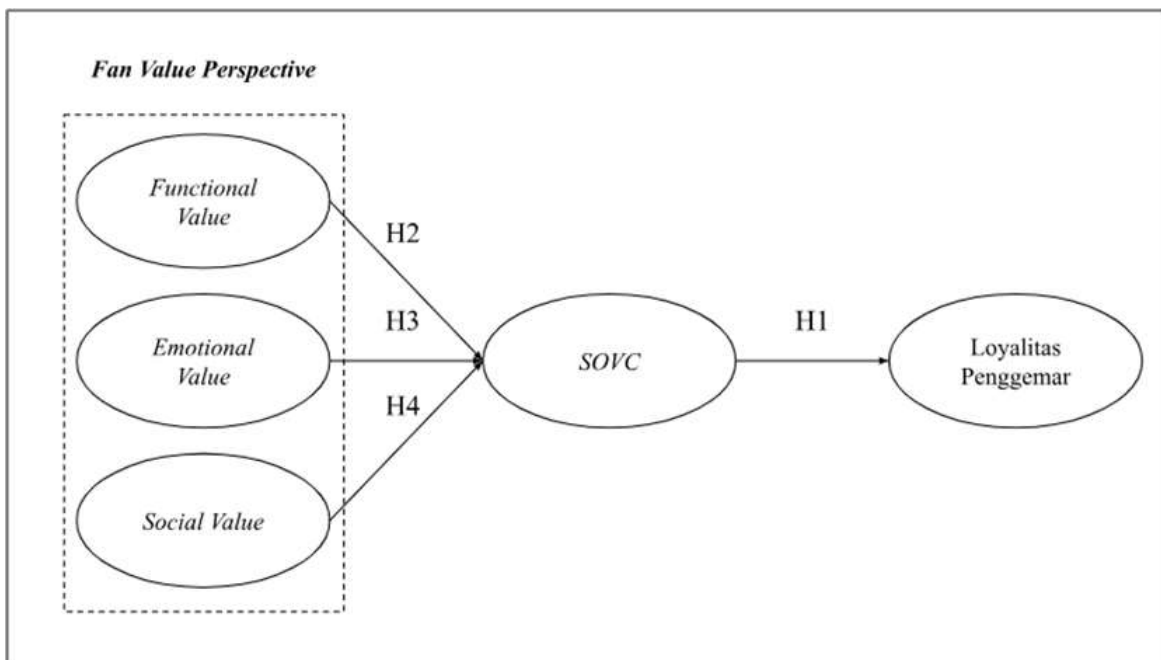


Figure 1. Research Model

Below are the hypotheses:

- H1. SOVC relates positively to fan loyalty
- H2. SOVC relates positively to functional value
- H3. SOVC relates positively to emotional value
- H4. SOVC relates positively to social value

3. RESEARCH METHOD

This research is using quantitative method by PLS-SEM. The sampling technique used is non-probability sampling with a purposive sampling method, in which participants are chosen based on specific criteria (Sugiyono, 2013). Purposive sampling is used to select individuals who meet particular characteristics, such as actively using Weverse to access BTS-related content and interact with other fans.

The sample size was determined using the Slovin formula, resulting in 400 respondents based on the total population of 26,000,000 ARMY members on Weverse. This approach ensures a representative sample of fans who are engaged in the virtual community, allowing for the accurate study of fan behavior and loyalty within the BTS fan base.

4. RESULT AND DISCUSSION

The demographic analysis indicated that respondents were primarily from India (19.8%), Indonesia (17.3%), and the United States (13.5%). A majority (98.3%) were female, with 34.3% aged 19-23 years, followed by 29.5% aged 14-18 years, and 14.5% aged 24-28 years. Additionally, 24.8% of respondents had been active on Weverse for over five years, emphasizing their long-term engagement/participation and loyalty.

4.1 Reliability and Validity Tests

The data on this study is conducted in two parts: scale validation and hypothesis testing.

Reliability and validity tests confirmed strong internal consistency among constructs, with Composite Reliability (CR) values exceeding 0.70 and Cronbach's Alpha larger than 0.60 (Ghozali, 2014). Functional value, emotional value, social value, SOVC, and fan loyalty exhibited high reliability, with CR values ranging from 0.812 to 0.887 and Cronbach's Alpha values between

Construct	Composite Reliability	Cronbach's Alpha
Functional Value	0.814	0.658
Emotional Value	0.865	0.689
Social Value	0.832	0.606
SOVC	0.887	0.852
Fan Loyalty	0.812	0.654

0.606 and 0.852.

Table 1. Reliability Tests

Convergent validity was accepted with Average Variance Extracted (AVE) values exceeding 0.50 and Outer Loadings above 0.70. Discriminant validity was also confirmed using the Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT < 0.90), ensuring that constructs remained distinct (Hair et al., 2014). Hence, the convergent validity and discriminant validity criterion were also met for the data sample.

Construct	Average Variance Extracted (AVE)	EV	FV	FL	SOVC	SV
Functional Value (FV)	0.595					
Emotional Value (EV)	0.763	0.684				
Social Value (SV)	0.713	0.495	0.530			
SOVC	0.529	0.760	0.824	0.813		
Fan Loyalty (FL)	0.590	0.601	0.507	0.523	0.768	

Table 2. Validity Tests

4.2 Hypothesis Testing

This study examined the main effects specified in hypothesis H1 through H4 by using PLS-SEM Algorithm and Bootstrapping.

Bootstrapping was done with the 400 samples collected. Thus, as shown in Figure 2, we found: (a) **Hypothesis 1 (H1)**: The path coefficient for SOVC to fan loyalty was 0.620 ($t = 12.261$, $p = 0.000$), demonstrating that a strong sense of community significantly enhances fan loyalty, (b) **Hypothesis 2 (H2)**: functional value had a positive effect on SOVC with a path coefficient of 0.381 ($t = 4.348$, $p = 0.000$), emphasizing that Weverse's usability strengthens members' sense of community, (c) **Hypothesis 3 (H3)**: emotional value positively influenced SOVC with a path coefficient of 0.281 ($t = 3.574$, $p = 0.000$), (d) **Hypothesis 4 (H4)**: social value also had a significant effect on SOVC (path coefficient = 0.327, $t = 5.291$, $p = 0.000$).

4.3 Discussions

The findings of this study confirm the significant role of the SOVC in fostering fan loyalty on Weverse. The results indicate that SOVC positively influences fan loyalty (H1), demonstrating that a strong sense of belonging, emotional connection, and shared identity within the community enhances commitment to BTS. This supports previous research by Blanchard and Lynne Markus (2004) and Wang et al., (2023), which emphasize that virtual communities strengthen engagement and loyalty through emotional and social ties. Fan with a heightened sense of community exhibit increased participation in activities such as content consumption, merchandise purchases, and event attendance/participation, reinforcing the argument that virtual platforms play a critical role in sustaining fan loyalty.

Furthermore, this study identifies functional value as the most influential factor in shaping SOVC (H2), as indicated by the highest path coefficient. The accessibility of Weverse, including official announcements, exclusive content, and direct interactions with BTS members, enhances users' feelings of attachment and togetherness. These findings align with Chen et al., (2008), who argue that digital platforms with high functional utility significantly contribute to fostering virtual communities. The study also finds that emotional value (H3) positively impacts SOVC, with fans experiencing joy, pride, and a sense of closeness through their interactions. Although emotional value has a slightly lower impact than functional value, it remains an essential component in community-building. This supports research by Wang et al., (2023), which highlights the emotional significance of fan interactions in virtual spaces.

Additionally, social value (H4) significantly contributes to SOVC, reinforcing that fans derive a strong sense of solidarity through Weverse. The platform enables fans to share experiences, support BTS collectively, and build relationships with other community members. This is consistent with Sheth (1991) and Chen et al., (2008), who found that social benefits foster stronger community ties and engagement. The study further reveals that the indirect effects of functional, emotional, and social value on fan loyalty, mediated by SOVC, are substantial. Among

these, functional value exhibits the strongest indirect effect, followed by social and emotional value. This underscores the effectiveness of SOVC as a mediator in strengthening fan loyalty, supporting prior studies that highlight its critical role in digital communities (Blanchard and Lynne Markus, 2007; Koh & Kim, 2003).

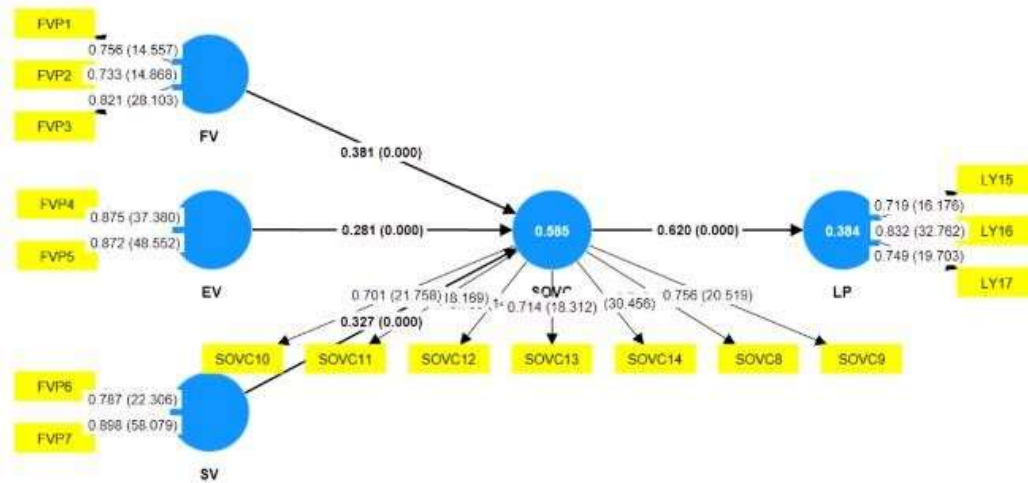


Figure 2. The Conceptual Model

The results also indicate that functional value has the most substantial impact on fan loyalty, both directly and indirectly. The ability of Weverse to provide seamless access to content, facilitate real-time communication, and create a space for meaningful engagement enhances fans' commitment. The direct engagement opportunities provided by Weverse, such as exclusive posts and interactive features, further reinforce its role in enhancing fan loyalty.

5. CONCLUSION AND RECOMMENDATION

This study highlights the crucial role of Sense of Virtual Community (SOVC) in strengthening fan loyalty on Weverse. The findings demonstrate that functional, emotional, and social values significantly contribute to the development of SOVC, which in turn enhances fan engagement and commitment to BTS. Among these values, functional value has the strongest impact, emphasizing the importance of easy access to content, interactive features, and direct communication with idols. The results provide insights into how virtual communities can optimize user experience and strengthen long-term fan loyalty.

For Weverse management, it is recommended to enhance interactive features, such as artificial intelligence (AI)-powered bots and direct messaging, to facilitate deeper connections between fans. Additionally, maintaining and expanding exclusive membership benefits, including new features such as audio messages or streaming parties, could further strengthen user engagement and retention.

For virtual community managers in the entertainment industry, Weverse serves as an exemplary model in fostering fan loyalty. Other platforms should adopt strategies that create a strong sense of belonging and direct artist-fan interactions to enhance community engagement. Organizing community-driven campaigns and interactive events can help reinforce social bonds among members and contribute to a sustainable virtual community ecosystem.

Future research should explore fan loyalty dynamics across different social media platforms, such as X (formerly Twitter), Instagram, and TikTok, to understand how different

environments influence engagement and community-building. Additionally, examining external factors, including global K-Pop trends and social media influences, could provide further insights into the evolving nature of fan loyalty in virtual communities. These directions will contribute to a deeper understanding of digital fan engagement and its implications for entertainment and media industries.

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