

## Brand Engagement in Sports Business: The Role of Sponsorship Effectiveness and Fan Experience with Moderation by Digital Platform Integration

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**ABSTRACT:** This research explores the factors that shape brand engagement in the sports business by assessing the effects of sponsorship effectiveness, fan experience quality, and the moderating role of digital platform integration. Drawing on Customer Engagement Theory and Uses and Gratifications Theory, a quantitative approach was employed, gathering data from 385 sports fans through a structured survey using a 5-point Likert scale. Sponsorship effectiveness and fan experience quality served as the primary independent variables, while digital platform integration was examined as a moderator influencing the link between fan experience and engagement. Data analysis was conducted in SPSS using descriptive statistics, reliability testing, factor analysis, correlation, and linear regression. The findings demonstrate that fan experience quality has the most substantial impact on brand engagement ( $\beta = 0.57$ ), followed by sponsorship effectiveness ( $\beta = 0.49$ ). In addition, digital platform integration significantly enhances the positive relationship between fan experience and engagement ( $\beta = 0.36$ ). The study advances theoretical insight by emphasizing the combined role of experiential quality and digital connectivity in shaping modern fan-brand interactions. From a practical perspective, it highlights the need for sponsorships that resonate with team identity, the delivery of consistent and immersive fan experiences, and the use of integrated digital platforms to foster authentic, long-term engagement. Limitations of the study include its contextual scope and reliance on cross-sectional data, with future research encouraged to adopt cross-cultural, longitudinal, and experimental designs. Overall, the study contributes to both academic theory and managerial practice by clarifying how sponsorship and experiential strategies, when supported by digital integration, can drive sustainable brand engagement in the sports industry.

**KEYWORDS:** Brand Engagement; Sponsorship Effectiveness; Fan Experience Quality; Digital Platform Integration; Sports Business

### 1. INTRODUCTION

Brand engagement in sports business has emerged as a critical metric in evaluating long-term brand-consumer relationships, particularly as the industry shifts towards experiential and emotionally driven marketing strategies. However, the construct remains conceptually fragmented due to varying definitions and measurement challenges across contexts (Yoshida *et al.*, 2014). While brand engagement is often linked to fan loyalty and advocacy, it is influenced by dynamic social, emotional, and technological factors that complicate empirical validation (Pansari & Kumar, 2017). Moreover, the increasing commercialization of sports can erode authentic fan-brand connections, leading to concerns about superficial engagement. As digital transformation accelerates, integrating brand engagement strategies effectively across platforms remains inconsistent, highlighting the need for context-specific research in sports business.

In addition, the fan experience, which is from live event quality to digital engagement, which has shifted from a supporting role to a core strategic component in attracting and maintaining brand loyalty. However, this relationship is increasingly complex in the digital era, where digital platform integrations such as mobile apps, AR/VR, and livestreaming are no longer optional but mandatory to enhance personalized and immersive experiences (Yaqoob *et al.*, 2020). Prior research has linked sponsorship effectiveness and fan experience to brand outcomes (Biscaia *et al.*, 2013), yet few studies have examined how digital platform integration moderates these effects. Moreover, existing models often treat fan engagement as a unidimensional construct, overlooking the interplay between offline experiences and online brand interactions (Yoshida *et al.*, 2014). This paper addresses

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this gap by exploring the moderating role of digital integration in strengthening fan experiences' impact on brand engagement in sports business.

To address the identified gaps, this study focuses on the following three core research questions:

1. How does sponsorship effectiveness influence brand engagement in the sports business context?
2. How does fan experience quality impact brand engagement in the sports business?
3. To what extent does digital platform integration moderate the relationship between fan experience quality and brand engagement?

This study is positioned to address theoretical fragmentation and practical urgency in understanding how brand engagement operates within the evolving landscape of sports business. By clarifying the influence mechanism of sponsorship effectiveness and fan experience on brand engagement, the research advances a multidimensional view of fan-brand relationships beyond traditional loyalty models. Investigating the moderating role of digital platform integration further captures the realities of contemporary fan behavior, where physical and digital interactions converge to shape brand perception and loyalty. Existing studies often examine these constructs in isolation, overlooking how technology amplifies or constrains experiential value. Therefore, this research responds to a growing need for an integrated framework that reflects the strategic shift in sports marketing toward immersive, data-driven engagement. Its contribution is both theoretical, by enriching engagement literature with digital-era variables, and practical, by guiding stakeholders in designing fan-centered, digitally enabled brand strategies.

## 2. LITERATURE REVIEW

### 2.1. Brand Engagement in Sports Business

Brand engagement is defined as the level of a consumer's cognitive, emotional, and behavioral investment in brand interactions across various touchpoints (Hollebeek *et al.*, 2014). Within the sports context, Brand Engagement in Sports Business refers to the deep, sustained connection fans develop not only with sports teams or athletes, but also with sponsors, sporting events, and related digital platforms (Yoshida *et al.*, 2014). This variable aligns with the broader ideological framework of emotional-practical consumer-brand relationships, emphasizing personalized experiences, emotional resonance, and co-created value in modern sports marketing.

Theoretically, brand engagement in sports plays a critical role in fostering brand loyalty, encouraging consumer advocacy, and driving long-term purchase behavior (Javani & Naeem Dawood Hammadi, 2024). In today's digital economy, where consumers are active participants in shaping brand narratives across multiple channels, such as brand engagement has become a vital performance indicator. In the sports industry, a strong level of engagement can lead to a sustained competitive advantage, particularly by building loyal fan communities.

In practice, organizations are increasingly investing in strategies to boost brand engagement through immersive fan experiences. A notable example is FC Barcelona's Barça App, which offers exclusive content, interactive games, and personalized services for 1,960 million fans worldwide for the sixth year running (FC Barcelona, 2021). Within the first year of its launch, the app recorded a 42% increase in active users, demonstrating the significant impact of digital platforms in enhancing brand engagement in the sports business.

### 2.2. Anchoring theoretical framework

To solidify the theoretical foundation of this research on brand engagement in the sports business, two suitable theories are the Customer Engagement Theory (CET) and the Uses and Gratifications Theory (UGT). These frameworks collectively explain the psychological and behavioral mechanisms by which sponsorship effectiveness, fan experience quality, and digital platform integration shape brand engagement.

#### 2.2.1. Customer Engagement Theory (CET)

Customer Engagement Theory (CET) offers a foundational lens through which to understand the dynamic interactions between consumers and brands, particularly in the emotionally charged and experience-driven context of sports business. CET defines engagement as a multidimensional construct involving cognitive, emotional, and behavioral dimensions that manifest through brand-related interactions (Hollebeek *et al.*, 2014). This theory moves beyond transactional models of consumer behavior and emphasizes the active role of the consumer in co-creating brand value through various engagement experiences (Brodie *et al.*, 2011).

In the context of sports business, CET is highly applicable because fan engagement is rarely limited to passive consumption, it is characterized by enthusiasm, loyalty, and participatory behaviors such as attending events, sharing content, or supporting sponsors. The independent variables in this research, including sponsorship effectiveness and fan experience quality, which can

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be seen as key antecedents of customer engagement. Sponsorships that align with fan identity and values stimulate cognitive alignment and emotional resonance, increasing the likelihood of fans engaging with the brand (Biscaia *et al.*, 2013). Likewise, high-quality fan experiences, whether physical or digital, evoke emotional attachment and behavioral commitment, reinforcing brand loyalty.

CET also provides a clear justification for including digital platform integration as a moderating variable. As brands increasingly shift toward digital fan engagement strategies, platforms such as apps, social media, and immersive technologies allow for richer, more personalized interactions (Dessart *et al.*, 2015). These platforms serve as engagement ecosystems where fans actively co-create narratives, share experiences, and reinforce community identity, thus amplifying the relationship between experiential quality and brand engagement. For example, Brodie *et al.* (2013) argue that the interplay between consumer motivations, firm-generated content, and interactive environments shapes how and to what extent engagement emerges.

Customer Engagement Theory assumes that engagement is a dynamic, context-dependent process shaped by both firm-driven stimuli (such as sponsorship and fan experiences) and consumer agency. It presumes that engagement extends beyond mere transactional behavior, involving cognitive processing, emotional attachment, and behavioral responses. CET also assumes that digital platforms can serve as enablers of engagement by facilitating two-way interactions, personalization, and co-creation. It posits that increased engagement leads to beneficial outcomes for firms, such as loyalty, advocacy, and emotional commitment, especially when consumers perceive value, authenticity, and relevance in their brand-related experiences.

### **2.2.2. Uses and Gratifications Theory (UGT)**

Uses and Gratifications Theory (UGT) provides a valuable theoretical foundation for understanding how and why sports fans engage with brands through various media, particularly digital platforms. UGT posits that individuals are active, goal-directed consumers of media who select specific communication channels and content to satisfy their psychological, emotional, and social needs (Katz *et al.*, 1973). This theoretical approach is especially relevant in the contemporary sports business landscape, where fans are no longer passive recipients but active participants in brand experiences across online and offline platforms.

In the context of this research, which explores brand engagement in sports business, UGT helps explain how fan experience quality and sponsorship effectiveness contribute to brand engagement. Fan experiences, whether attending a live game, interacting on social media, or using team apps, which can fulfill various needs such as entertainment, identity reinforcement, information seeking, and social interaction (Dolan *et al.*, 2016). When these experiences are perceived as gratifying, they foster greater cognitive involvement and emotional attachment, key components of brand engagement. Similarly, effective sponsorships that resonate with fans' values and interests can enhance perceived value and trust, further supporting engagement behavior.

A core strength of UGT lies in its ability to justify the moderating role of digital platform integration. As sports organizations adopt more immersive digital technologies, such as mobile applications, livestreams, and augmented reality, fans gain new channels to satisfy their gratifications. These platforms not only deliver content but also enable two-way communication, personalization, and participation (Calder *et al.*, 2016). When digital platforms are integrated effectively into the fan experience, they amplify its emotional intensity and interactivity, increasing the likelihood of sustained brand engagement. For instance, Lou *et al.* (2021) found that digitally mediated fan engagement contributes significantly to fans' brand loyalty and social connectedness.

Uses and Gratifications Theory assumes that individuals are active consumers who make deliberate choices to engage with media and content based on psychological and social needs. It presumes that users are goal-oriented and rational, selecting experiences that maximize gratification such as entertainment, identity reinforcement, or social connectivity. UGT also assumes that satisfaction with these gratifications leads to repeated use and deeper engagement. In digital contexts, it assumes that interactive, responsive platforms better fulfill user needs, and thus foster higher levels of engagement. It treats audience agency as central to media effects, which supports fan-driven engagement behaviors in sports business.

### **2.3. Sponsorship Effectiveness**

Sponsorship effectiveness can be defined as the degree to which sponsorship activities achieve intended marketing and communication objectives, such as increasing brand awareness, enhancing brand image, and fostering consumer loyalty, through a mutually beneficial relationship between the sponsor and the sponsored entity (Cornwell, 2013). Within the sports industry, sponsorship effectiveness reflects not only the visibility and reach of the brand during sporting events but also the depth of association created in the minds of consumers (Biscaia *et al.*, 2013). From a theoretical perspective, sponsorship is grounded in associative learning theory, which posits that repeated exposure to the sponsor in a positively charged environment, such as a sports event, strengthens brand associations (Olson & Thjømøe, 2013). Economically, effective sponsorship is a major driver of revenue in the sports ecosystem, accounting for a significant portion of global sports marketing expenditure, which reached \$65

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billion in 2022 (IEG, 2022). Socially, sponsorships facilitate corporate social responsibility initiatives and community engagement, positioning brands as culturally relevant actors in the public sphere (Pope & Voges, 2000).

When sponsorship effectiveness is well-managed, which is meaning the sponsor's objectives align closely with the sport property's identity and target audience, it can lead to stronger brand recall, higher trust, and greater emotional affinity with the brand (Speed & Thompson, 2000). This alignment fosters brand engagement in sports business by embedding the sponsor into the broader fan experience. Fans who perceive sponsorships as relevant and authentic are more likely to engage cognitively, emotionally, and behaviorally with the sponsor's brand (Gwinner & Bennett, 2008). As sponsorship effectiveness increases, engagement becomes not only deeper but also more sustainable over time, creating long-term value for the sponsor.

The impact of sponsorship effectiveness on brand engagement, however, is debated. Some studies argue for a strong and direct influence, suggesting that sponsorships can significantly enhance loyalty and advocacy when executed strategically (Biscaia *et al.*, 2013). These studies emphasize that sponsorships in sports contexts benefit from high emotional intensity and identification, making them uniquely potent compared to other marketing forms. Conversely, other scholars find the effect to be more moderate, noting that sponsorship alone is insufficient to drive engagement without supporting marketing activities or meaningful brand-fan interactions (Olson & Thjømøe, 2013). This divergence reflects philosophical perspectives in marketing: a positivist stance suggests measurable, linear causality between sponsorship effectiveness and engagement, while a constructivist viewpoint emphasizes context, meaning-making, and co-created value as mediators in the relationship. From an economic perspective, the marginal utility principle can be applied, such as incremental improvements in sponsorship effectiveness may yield diminishing returns if fans are already saturated with brand messaging, making strategic differentiation essential.

Grounded in both marketing theory and economic reasoning, this study adopts the position that, in the context of sports business, sponsorship effectiveness exerts a positive influence on brand engagement, particularly when coupled with high fan experience quality and effective digital integration. Therefore, the following hypothesis is proposed:

**H1: Sponsorship effectiveness positively impacts brand engagement in sports business.**

### **2.4. Fan Experience Quality**

Fan Experience Quality refers to the degree to which fans perceive their interaction with a sports organization which across live events, digital platforms, services, and merchandising, as high in excellence, satisfaction, and emotional resonance. Rooted in service quality literature, it captures how well the holistic experience meets or exceeds fan expectations and contributes to enjoyment, loyalty, and identification (Anderson *et al.*, 1994; Wakefield & Blodgett, 1994). In contemporary sports business, such quality interactions are central not just to immediate satisfaction but also to long-term engagement, revenue generation, and cultivating brand advocates.

Fan Experience Quality is fundamental in the economics of experience, where value is derived from emotional and memory-based consumption rather than mere transactional exchanges (Pine & Gilmore, 1998). A superior fan experience drives spending on tickets, merchandise, concessions, and media subscriptions, generating substantial economic impact (Dolan & Graham, 2023). On a societal level, it fosters community cohesion, social identity, and fan wellbeing, reinforcing sports' role as a social and cultural institution (Boston Consulting Group, 2021). In both economic and social spheres, delivering quality experiences enables sports businesses to differentiate themselves in a saturated entertainment market, build brand equity, and achieve sustainable competitive advantage.

When Fan Experience Quality is well-managed, which is meaning seamless, emotionally engaging, and personalized across physical and digital touchpoints, moreover, it catalyzes higher levels of brand cognitive processing, affective attachment, and volitional behaviors (Hollebeek *et al.*, 2014). In sports, experiential quality fosters greater immersion, excitement, and shared identity, enhancing fan motivation to engage cognitively (thinking about the brand), emotionally (feeling connected), and behaviorally (purchasing and advocacy). As a result, Brand Engagement in Sports Business becomes deeper and more sustainable.

Some scholars argue this influence is powerful and direct. For instance, Yoshida & James (2010) demonstrated that satisfaction derived from service quality at games sustains future attendance and strengthens brand loyalty. Furthermore, Dolan & Graham (2023) show that integrating technology into fan experiences enhances perceived engagement by enhancing emotional involvement and fostering co-created brand narratives. Conversely, others consider the effect moderate, noting that experiential quality alone is insufficient; it must be complemented by community-building and participatory mechanisms to truly mobilize fans (Yoshida *et al.*, 2014).

Philosophically, this tension reflects a positivist view, advocating linear causality between quality and engagement, versus a constructivist view, which sees engagement as co-created through contextual interpretation and social interaction. From an

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economic perspective, the notion of consumer surplus applies: when fans derive more value (emotional and experience utility) than they pay for, their engagement and loyalty increase, which is until a point of diminishing returns occurs.

Given the preponderance of evidence supporting the strong potential influence of fan experience quality, especially when augmented by digital integration, this study advances the following hypothesis:

**H2: Fan Experience Quality positively impacts Brand Engagement in Sports Business.**

### **2.5. Moderating role of Digital Platform Integration**

Digital Platform Integration (DPI) is the extent to which a firm orchestrates its web, mobile, social, and immersive (e.g., AR/VR, livestream) touchpoints and underlying data/technologies into a seamless, interoperable customer journey that enables personalization, interactivity, and continuity of service across channels (Verhoef *et al.*, 2015; Lemon & Verhoef, 2016). Theoretically, DPI operationalizes contemporary service-dominant logic by furnishing the socio-technical infrastructure for value co-creation, transforming episodic encounters into continuous relationships (Ramaswamy & Ozcan, 2016).

Economically, high DPI reallocates attention and spends by lowering search and switching costs, and by raising experience utility, which effects that ripple into ticketing, merchandise, media subscriptions, and sponsorship ROI, while socially it scaffolds communities, identity expression, and collective effervescence around teams and events (Sen *et al.*, 2013; Drury *et al.*, 2019). In the sports business, DPI should not be viewed as an additive channel decision but as a systems-level design that intensifies the experiential qualities fans seek, such as entertainment, information, and social connection, thereby converting momentary arousal into durable engagement. When DPI is effectively managed, i.e., platforms are interoperable, content is context-aware, and interactions are participatory, moreover, it augments the experiential value of service encounters, amplifying cognitive processing (relevance and meaning), affective responses (attachment and pride), and conative outcomes (advocacy and spend) central to brand engagement (Hollebeek *et al.*, 2014; Pansari & Kumar, 2017). Empirical work in sport and interactive marketing shows that digitally mediated experiences heighten perceived immersion and facilitate co-created narratives, which strengthen the link between fan experience quality and downstream engagement/brand equity (Sen *et al.*, 2013; Dessart *et al.*, 2015). A lively debate persists: some studies portray DPI's influence as powerful, which is particularly when platform fit and content interactivity are high, producing significant gains in loyalty and advocacy through social presence, community, and real-time participation (Drury *et al.*, 2019; Verhoef *et al.*, 2015), whereas others document more moderate or contingent effects, noting that platform proliferation without clear integration can yield fragmented journeys, superficial metrics (e.g., clicks/likes) and engagement fatigue, which dampen the experiential–engagement translation (Lemon & Verhoef, 2016; Pronschinske *et al.*, 2012).

Philosophically, a positivist reading anticipates quasi-linear enhancement of the fan experience, which is influenced engagement path as DPI rises; a constructivist perspective stresses that the same DPI tools reconstruct meanings contextually within fan communities, making outcomes dependent on identity alignment and co-creation norms rather than technology per se. Economics also suggests diminishing marginal returns: once baseline frictions are removed, additional platform features create smaller engagement increments unless they unlock new gratifications or network effects.

Synthesizing these lenses, we contend that DPI, when architected for interoperability, personalization, and participatory affordances, positively moderates the effect of Fan Experience Quality on Brand Engagement in Sports Business by converting quality into relationship depth and durability across time and contexts.

**H3: Digital Platform Integration positively moderates the impact of Fan Experience Quality on Brand Engagement in Sports Business.**

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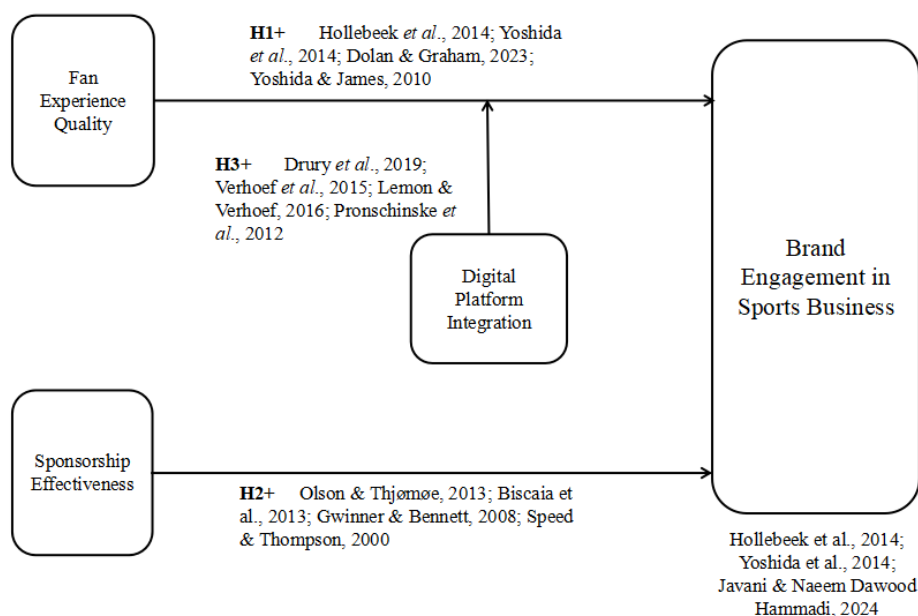


Figure 1: The Paper Conceptual Framework

## 3. METHODOLOGY

### 3.1. Research approach and strategy

This research employed a quantitative design, which enables the systematic collection and analysis of numerical data to detect and confirm patterns (Creswell & Creswell, 2018). Through the use of statistical methods, this approach supports an objective assessment of the data, producing results that are both measurable and reproducible (Babbie, 2010). The chosen methodology facilitated a clear examination of the research questions and the investigation of relationships among key variables. In addition, the study followed a deductive reasoning framework, aligning with the quantitative design by supporting hypothesis testing, predictive evaluation, and evidence-based conclusions.

### 3.2. Participants

To enhance accuracy and ensure the findings were representative, this study adopted a probability sampling method (Bryman, 2012). Data were collected via a structured survey with a 5-point Likert scale, where respondents indicated agreement from 1 “strongly disagree” to 5 “strongly agree” on items measuring sponsorship effectiveness, fan experience quality, digital platform integration, and brand engagement in sports business (Brown, 2011). To achieve a well-balanced participant pool reflecting contemporary fan ecosystems, questionnaires were administered both in person at professional sporting events and team retail locations and online through official team mailing lists, verified supporter groups, and club-affiliated social media communities. A stratified sampling strategy was implemented to capture heterogeneity across match-attending fans, digital-only followers, and hybrid fans who both attend and engage online, as well as across major sports codes and key demographics. From a sampling frame of 970 eligible fans who met screening criteria of following a professional team for at least one season and engaging with at least one sponsor message or activation in the past six months, a simple random sampling procedure selected 385 participants to ensure fairness in selection and adequate statistical power for moderation analysis. This design provides a balanced representation of fan segments necessary to examine how sponsorship effectiveness and fan experience quality relate to brand engagement and how digital platform integration may strengthen these relationships (Bryman, 2012; Brown, 2011).

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## 4.1. Reliability analysis

**Table 1: Reliability analysis of “Brand Engagement in Sports Business”. Source: (The authors, 2025)**

| Reliability Statistics |            |  |  |  |
|------------------------|------------|--|--|--|
| Cronbach's Alpha       | N of Items |  |  |  |
| .792                   | 4          |  |  |  |

| Item-Total Statistics |                            |                                |                                  |                                  |
|-----------------------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
|                       | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
| BESB1                 | 6.316                      | 8.353                          | .742                             | .757                             |
| BESB2                 | 8.607                      | 7.949                          | .683                             | .696                             |
| BESB3                 | 9.991                      | 7.969                          | .710                             | .728                             |
| BESB4                 | 8.762                      | 8.700                          | .610                             | .650                             |

Where the survey items BESB1–BESB4 were designated to measure the dependent variable.

As shown in Table 1, each of these sub-items achieved an adjusted item–total correlation above the minimum threshold of 0.3. The overall Cronbach’s alpha reached 0.792, exceeding the conventional benchmark of 0.7 and surpassing any alternative values that would have resulted from the removal of individual items. In addition, each item demonstrated a Cronbach’s alpha greater than its respective adjusted item–total correlation when considered independently. Consequently, all four items were deemed reliable and retained for subsequent analysis. A similar pattern of internal consistency was also observed across the Cronbach’s alpha values of the remaining constructs.

## 4.2. Exploratory factor analysis (EFA)

**Table 2: Factor Loadings Matrix. Source: (The authors, 2025)**

| Rotated Component Matrix <sup>a</sup>               |          |           |           |
|-----------------------------------------------------|----------|-----------|-----------|
| Component with loading factors                      |          |           |           |
| 1                                                   | 2        | 3         | 4         |
| BESB1 .710                                          | SE1 .668 | FEQ1 .721 | DPI1 .724 |
| BESB2 .869                                          | SE2 .735 | FEQ2 .508 | DPI2 .600 |
| BESB3 .732                                          | SE3 .724 | FEQ3 .639 | DPI3 .660 |
| BESB4 .705                                          | SE4 .686 | FEQ4 .679 | DPI4 .781 |
| Extraction Method: Principal Component Analysis.    |          |           |           |
| Rotation Method: Varimax with Kaiser Normalization. |          |           |           |
| a. Rotation converged in 7 iterations.              |          |           |           |

Where survey items SE1–SE4, FEQ1–FEQ4, and DPI1–DPI4 were designed to capture the two independent variables and the moderator, with four indicators assigned to each construct.

As shown in Table 2, the matrix successfully classified all 16 sub-items into four distinct factors, aligning precisely with the dependent variable, the two independent variables, and the moderator. Each item recorded a factor loading exceeding the 0.5 benchmark, validating their appropriateness within their respective constructs. Therefore, no items were excluded, and the results confirm robust construct validity across all variables.

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## 4.3. Multiple linear regression model

Table 3: Coefficients<sup>a</sup>. Source: (The authors, 2025)

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant) | 5.633                       | .449       |                           | 4.606 | .000 |
|       | SE         | .510                        | .532       | .490                      | 3.777 | .000 |
|       | FEQ        | .589                        | .783       | .570                      | 3.907 | .000 |

a. Dependent Variable: BESB

Where **BESB**: mean of BESB1–BESB4; **SE**: mean of SE1–SE4; **FEQ**: mean of FEQ1–FEQ4

As presented in Table 3, the t-test produced significance (Sig.) values of .000, all of which are below the standard alpha threshold of 0.05. These results confirm that the independent variables exert a statistically significant effect on the dependent variable. Hence, both hypotheses are empirically validated.

## 4.4. Moderator analysis

Table 4: Results analysis of “Digital Platform Integration”. Source: (The authors, 2025)

Model : 1

Y : BESB

X : FEQ

W : DPI

Sample Size: 385

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OUTCOME VARIABLE:

BESB

Model Summary

| R    | R-sq | MSE  | F     | dl1   | dl2     | p    |
|------|------|------|-------|-------|---------|------|
| .669 | .448 | .685 | 5.059 | 3.000 | 381.000 | .000 |

Model

|          | coeff | se   | t      | p    | LLCI  | ULCI  |
|----------|-------|------|--------|------|-------|-------|
| constant | 6.318 | .508 | 60.969 | .000 | 7.820 | 8.711 |
| FEQ      | .593  | .768 | 4.337  | .000 | .752  | .743  |
| DPI      | .474  | .487 | 4.710  | .000 | .755  | .726  |
| Int 1    | .360  | .789 | 4.600  | .000 | .740  | .719  |

Where **DPI**: mean of DPI1–DPI4

As shown in Table 4, the p-value for the interaction term (Int\_1) is 0.000, which is significantly lower than the conventional alpha level of 0.05. This result establishes a statistically significant interaction between Digital Platform Integration and Fan Experience Quality in shaping Brand Engagement in Sports Business. The interaction coefficient of 0.501 indicates that higher levels of Digital Platform Integration enhance the positive influence of Fan Experience Quality on Brand Engagement in Sports Business. Therefore, hypothesis H3 is empirically validated.

## 4. DISCUSSION

### 4.1. Result summary

The linear regression analysis reveals that Fan Experience Quality exerts the strongest influence on enhancing Brand Engagement in Sports Business, demonstrated by a standardized coefficient of 0.57. Sponsorship Effectiveness also shows a positive, though slightly smaller, effect with a coefficient of 0.49. Moreover, Digital Platform Integration significantly moderates the relationship between Fan Experience Quality and Brand Engagement, as indicated by a moderation coefficient of 0.36. These findings confirm that improving the quality of fan experiences not only directly strengthens engagement but also becomes even more impactful when supported by effective digital platform integration. Consequently, the study successfully addresses the three

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research questions and provides evidence that integrating digital platforms enhances the effectiveness of fan experiences in sustaining brand engagement in the sports business context.

### **4.2. Theoretical implication**

The results of this study confirm that sponsorship effectiveness exerts a positive and significant impact on brand engagement in sports business with a standardized coefficient of 0.49, aligning with prior research that underscores sponsorship's strong and direct influence when strategically executed (Biscaia *et al.*, 2013). This finding strongly concurs with associative learning perspectives that highlight the emotional intensity of sports environments as fertile ground for brand meaning transfer (Olson & Thjørmøe, 2013). At the same time, however, the results partially contest more moderate positions that argue sponsorship alone is insufficient to drive meaningful engagement without complementary marketing and fan interaction mechanisms (Olson & Thjørmøe, 2013). In this study, sponsorship effectiveness demonstrated a substantial effect size, thereby providing evidence against claims that its impact is peripheral. From a philosophical stance, our results favor a positivist interpretation where sponsorship demonstrates measurable, linear influence on engagement, yet they leave open the constructivist critique that deeper brand-fan connections may still hinge on contextual meanings and co-created experiences. Economically, this finding reinforces sponsorship's role as a critical driver of engagement value, but it also supports the marginal utility critique that without innovation, saturation risks remain.

The empirical evidence that fan experience quality exerts the strongest effect on brand engagement lends robust support to scholarship that positions fan satisfaction and service quality as central determinants of loyalty and future participation (Yoshida & James, 2010), with a standardized coefficient of 0.57. This study strongly concurs with perspectives emphasizing that immersive and emotionally resonant fan experiences create sustainable engagement, particularly in contexts where digital channels amplify personal relevance and shared identity (Dolan & Graham, 2023). However, these findings only partially align with more cautious arguments that experiential quality alone may not suffice, requiring additional mechanisms such as community-building and participatory engagement to fully mobilize fans (Yoshida *et al.*, 2014). In this regard, while our results highlight fan experience quality as the strongest predictor, the moderating role of digital integration suggests that experiential quality is necessary but not always sufficient in isolation. Theoretically, this study favors the positivist view of a strong causal relationship but also acknowledges the constructivist contention that contextual meanings within fan communities mediate this effect. Economically, the results support the notion of consumer surplus, where fans perceive greater value than monetary costs, while also recognizing diminishing returns when experiential offerings plateau without innovation.

The finding that digital platform integration significantly moderates the relationship between fan experience quality and brand engagement provides important theoretical clarification to a contested debate in sports marketing, with a moderation coefficient of 0.37. On one hand, this result concurs with scholarship asserting that digitally mediated experiences intensify immersion, foster co-created narratives, and strengthen the experiential–engagement link (Sen *et al.*, 2013; Drury *et al.*, 2019). On the other hand, it partially contradicts the more skeptical perspective that proliferation of platforms without seamless integration fragments fan journeys and dampens engagement outcomes (Lemon & Verhoef, 2016; Pronschinske *et al.*, 2012). The empirical evidence here shows that integration, rather than mere presence of multiple platforms, is key to moderating fan experience impact. Philosophically, the results lean toward a positivist expectation of quasi-linear enhancement but leave space for the constructivist argument that digital tools derive meaning contextually within fan communities. Economically, the moderation result validates the principle that DPI reduces frictions and increases utility, yet also suggests marginal returns may emerge if integration is not paired with innovation. Overall, this study confirms DPI's amplifying effect while cautioning against uncoordinated digital proliferation.

### **4.3. Practical Implications**

The findings that sponsorship effectiveness significantly enhances brand engagement in sports business provide practical insights for both marketers and event organizers. Strong sponsorship activation is not merely a visibility tool but a strategic resource to deepen fan–brand connections. Sports organizations should prioritize congruence between sponsor identity and team values, as poor fit can weaken engagement outcomes (Gwinner & Bennett, 2008). For instance, activating sponsorship through experiential campaigns, rather than passive logo placement, may deliver more authentic engagement (Cornwell, 2019). Firms must also consider long-term partnerships instead of one-off deals, as continuity builds trust and resonance with fans. Equally important, the results demonstrating the dominant role of fan experience quality highlight the need for sports organizations to design seamless and memorable touchpoints before, during, and after events. Delivering quality services in areas such as stadium amenities, ticketing, and hospitality strengthens fans' emotional connection and increases engagement likelihood.

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(Yoshida & James, 2010). Beyond physical experience, personalization is crucial. Tailoring experiences to fan preferences, for example, mobile-based loyalty programs, which can improve satisfaction and create stronger identification with the brand (Chang *et al.*, 2022). Organizations that underinvest in fan experience risk disengagement, regardless of sponsorship strength. The moderation effect of digital platform integration indicates that technology acts as a catalyst in amplifying experiential impact. Merely providing multiple platforms is insufficient; integration across social media, mobile apps, and in-stadium technology must be seamless to avoid fragmented fan journeys (Lemon & Verhoef, 2016). For instance, enabling synchronized ticketing, merchandise, and social engagement through unified platforms can maximize engagement. Importantly, organizations should leverage data analytics to track fan behavior across touchpoints, enabling proactive adjustments in engagement strategies (Ratten, 2020). However, excessive reliance on digital solutions without maintaining authenticity may alienate fans seeking genuine experiences. Thus, digital strategies must complement rather than replace traditional fan engagement methods.

### 4.4. Limitations

Despite valuable insights, this study has several limitations. First, data collection focused on fans within specific sports contexts, limiting generalizability across all sports or cultural settings. The reliance on self-reported survey responses introduces potential biases such as social desirability and common method variance (Podsakoff *et al.*, 2003). Additionally, while the model incorporated sponsorship effectiveness, fan experience, and digital integration, other potential predictors of engagement, such as community identity or cultural influences, which were not examined. Finally, cross-sectional data restricts causal inferences, suggesting that future longitudinal studies may provide stronger evidence of dynamic engagement processes.

### 4.5. Future Research Directions

Future research should expand the scope by including diverse sports contexts, particularly emerging markets where digital adoption and fan behavior differ substantially. Cross-cultural studies could help explore whether sponsorship and experience quality hold similar weight in different fan ecosystems. Longitudinal research is also needed to track fan engagement over time and capture evolving digital interactions. Further, integrating psychological constructs such as fan identity and emotional attachment could refine understanding of engagement drivers (Lock & Funk, 2016). Researchers should also investigate the risks of digital oversaturation, as overexposure may erode engagement. Finally, experimental studies testing sponsorship activation strategies (e.g., interactive ads vs. passive branding) could provide practical guidance for maximizing sponsorship ROI.

### 4.6. Conclusion

This study advances understanding of brand engagement in sports business by examining the roles of sponsorship effectiveness, fan experience quality, and digital platform integration. Results confirmed that sponsorship effectiveness significantly fosters engagement, reinforcing its role as a strategic investment when executed authentically and aligned with fan values. Fan experience quality emerged as the strongest determinant, highlighting the critical importance of delivering seamless, personalized, and memorable interactions throughout the fan journey. Moreover, digital platform integration was shown to amplify the impact of fan experience, emphasizing that technological coherence strengthens rather than substitutes authentic engagement. Collectively, these findings provide actionable insights for sports organizations and sponsors seeking to enhance brand–fan relationships in increasingly digitalized environments. While limitations such as contextual scope and cross-sectional design exist, the study opens avenues for future research into cultural variations, longitudinal patterns, and experimental sponsorship activations. Overall, the study underscores the necessity of balancing sponsorship, experiential quality, and digital coherence to sustain and deepen brand engagement in sports business.

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### Appendix: Survey

Link of the survey: <https://forms.gle/gMBRquWeT2fxkLCR9>

**Table 6. Survey Design**

| Variables                             | Variable Coding | Survey Content                                                                                                          | Sources                                                                                         |
|---------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Independent Variables</b>          |                 |                                                                                                                         |                                                                                                 |
| <b>Sponsorship Effectiveness (SE)</b> | SE1             | The sponsors of my favorite team are highly visible during sports events, which increases my awareness of their brands. | (Cornwell, 2013; Speed & Thompson, 2000; Biscaia <i>et al.</i> , 2013; Gwinner & Bennett, 2008) |
|                                       | SE2             | I feel that my favorite team’s sponsors align well with the identity and values of the team.                            |                                                                                                 |
|                                       | SE3             | Sponsorship by my team’s partners enhances my trust and emotional connection with those brands.                         |                                                                                                 |
|                                       | SE4             | I am more likely to consider buying from sponsors that are authentically linked to my favorite team.                    |                                                                                                 |

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|                                            |       |                                                                                                                                                          |                                                                                                           |
|--------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Fan Experience Quality (FEQ)               | FEQ1  | My overall experience with my favorite team (stadium, digital platforms, and services) meets or exceeds my expectations.                                 | (Wakefield & Blodgett, 1994; Hollebeek <i>et al.</i> , 2014; Yoshida & James, 2010; Dolan & Graham, 2023) |
|                                            | FEQ2  | The fan experience provided by my favorite team is emotionally engaging and enjoyable.                                                                   |                                                                                                           |
|                                            | FEQ3  | I feel that the experiences I have with my favorite team create a strong sense of identity and belonging.                                                |                                                                                                           |
|                                            | FEQ4  | The integration of technology in fan experiences enhances my satisfaction and emotional involvement.                                                     |                                                                                                           |
| Moderating Variable                        |       |                                                                                                                                                          |                                                                                                           |
| Digital Platform Integration (DPI)         | DPI1  | My favorite team provides a seamless and connected experience across its web, mobile, and social media platforms.                                        | (Verhoef <i>et al.</i> , 2015; Lemon & Verhoef, 2016; Ramaswamy & Ozcan, 2016; Pansari & Kumar, 2017)     |
|                                            | DPI2  | The digital platforms used by my team allow me to personalize my engagement and receive relevant content.                                                |                                                                                                           |
|                                            | DPI3  | Interactive features on my team’s digital platforms (e.g., livestreams, games, AR/VR) enhance my emotional connection with the brand.                    |                                                                                                           |
|                                            | DPI4  | The digital platforms make it easy for me to engage continuously with my team and sponsors across different contexts.                                    |                                                                                                           |
| Dependent Variable                         |       |                                                                                                                                                          |                                                                                                           |
| Brand Engagement in Sports Business (BESB) | BESB1 | I feel emotionally connected to my favorite sports team and its sponsors.                                                                                | (Hollebeek <i>et al.</i> , 2014; Yoshida <i>et al.</i> , 2014; Javani & Naeem Dawood Hammadi, 2024)       |
|                                            | BESB2 | I actively think about and reflect on my team and its brand partners in my daily life.                                                                   |                                                                                                           |
|                                            | BESB3 | I regularly engage in behaviors that show support for my team and sponsors, such as attending games, buying merchandise, or interacting on social media. |                                                                                                           |
|                                            | BESB4 | I enjoy participating in co-created experiences with my team and sponsors through digital or live platforms.                                             |                                                                                                           |

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| BACKGROUND INFORMATION |                                                                                                                                           |                     |                  |                                      |                   |                 |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------|--------------------------------------|-------------------|-----------------|
| 1                      | What is your age group?                                                                                                                   | Under 18            | 18–24            | 25–34                                | 35–44             | 45 and above    |
| 2                      | How long have you been a fan of your current favorite professional sports team?                                                           | Less than 1 year    | 1–2 years        | 3–5 years                            | More than 5 years |                 |
| 3                      | Which best describes your engagement with the team?                                                                                       | Match-attending fan | Digital-only fan | Both match-attending and digital fan |                   |                 |
| 4                      | How frequently do you engage with the team or its sponsors through digital platforms (e.g., social media, team apps, streaming services)? | Never               | Rarely           | Occasionally                         | Frequently        | Very Frequently |

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