Hype or opportunity? Tokenization as engagement platform in sport marketing

Abstract

Purpose: Novel technologies such as tokenization have the potential to disrupt value co-creation in sport marketing. Tokenization in particular has generated a hype in sport marketing by facilitating engagement behavior. However, it remains unclear to what extent tokenization can serve as an engagement platform to enable new and innovative interactions between sport organizations and its network of actors.

Design: The study investigated a tokenized governance platform of a professional sport club as engagement platform by means of a case study applying a multi-method approach combining document analyses and semi-structured interviews with sport management, sport club fans, and blockchain experts.

Findings: Governance tokens indeed foster fan engagement by including fans in decision-making processes. The engagement platform is meant to enable two-way communication between fans and professional sport clubs. However, benefits could be overrated, and fans describe concerns about increasing commercialization due to the application of governance tokens. Thus, opportunities must be balanced out to foster engagement of sport club fans.

Originality: Our findings contribute to extending the phenomenon of tokenization as a financing model and engagement platform in sport marketing. The results show how tokenized governance platforms can be applied in sport marketing and how they contribute to value co-creation in the digital world of sport clubs.

Keywords: Tokenization, blockchain, sport marketing, engagement platforms, digital transformation

Word Count: 7,998

Introduction

In an increasingly digitized world, the way sport organizations interact and co-create value with fans and other actors (e.g., sponsors) is constantly changing (Stegmann *et al*., 2021). Accordingly, sport marketers have started to use newer digital touchpoints such as social media to interact with fans and other actors to jointly co-create value. In so doing, sport organizations are able to foster loyalty and engagement behavior among their network of actors (Ratten, 2020; Stegmann *et al*., 2021; Zhang *et al*., 2021). Since the digital age has just begun, many other digital technologies (e.g. blockchain technology, virtual and augmented reality, Metaverse) also have the potential to disrupt the field of sport marketing (Ströbel *et al*., 2021).

At first, these new digital innovations generate hype as they offer new opportunities to sport marketing (e.g., Metaverse as virtual reality touchpoint for brand communities). Blockchain technology has been hyped because it changes the way data is stored and utilized and offers new opportunities for interactions. Blockchain technology can be described as a cryptographically secured decentralized database that stores data in interlinked blocks (Antonopoulos, 2017; Lynn *et al*., 2018) and has specific attributes, such as immutability, distribution, transparency, and lack of central authority (Bahga and Madisetti, 2017). There are increasing numbers of blockchain projects in the field of sport (Socion, Enjin, Dapper Labs), however, the present study focuses on tokenization, more specifically, on tokenized governance platforms (Otto, 2020), which describe fungible (divisible, non-unique and replaceable) tokens, which's possession allow token holders – among others – to access the right to participate in decision-making processes offered by the token distributor (Aki, 2021). Accordingly, tokenization provides touchpoints (i.e., engagement platforms) for sport organizations, on which different actors (fans, sponsors, sport club management) co-create value, for example by demonstrating engagement behavior (van Doorn *et al*., 2010; Yoshida *et*

al., 2014). However, as with many new technologies, there is a propensity to overrate their benefits and an urge to apply them even though they might not be needed.

Although an increase of tokenization applications can be observed, so far, only few empirical studies have explored tokenization in the field of sport marketing. Little is known about its usefulness, its level of acceptance among stakeholders (Naraine, 2019) or how it affects value co-creation and engagement behavior. Thus, sport marketing literature is calling for further research into the phenomenon of tokenization by integrating knowledge from industry professionals, sport club managers or other stakeholders (Naraine, 2019; Stegmann *et al*., 2021; Zhang *et al*., 2021), which led us to the following research question: *How are tokenized governance platforms enabling value co-creation (reflected by engagement behavior) within the network of professional sport clubs?*

Accordingly, this study will investigate a tokenized governance platform using a case study analysis applying content analysis of the tokenization platform of a professional sport club complemented with semi-structured interviews with blockchain experts, sport club management, and fans. The study will contribute to sport marketing research by: 1) studying tokenized governance platforms as digital engagement platforms; 2) investigating how engagement behavior is fostered among a network of actors using tokenization; and 3) discussing institutions that reveal potential opportunities and risks of tokenization for professional sport clubs.

Theoretical background

Blockchain in sport

To understand the phenomenon of tokenization in sport marketing, previous literature dealing with blockchain technology and tokenization was studied. PwC (2019) identified over 50 blockchain projects in financing, fan engagement, sport betting and other applications (e.g.,

ticketing) dedicated to sport while Carlsson-Wall and Newland (2020) recognized 63 blockchain companies with solutions for the sport market in sport betting, crowdfunding, fan engagement, fantasy sport and others.

The most popular application of blockchain technology is tokenization, the process of converting an asset into a digital representation (Aki, 2021). Most often, tokenization is applied in the form of non-fungible tokens (NFTs), which are unique and irreplaceable tokens such as verified sport memorabilia, collectibles and tokenized sport teams or players (Enterprise Ethereum, 2019). Additionally, fungible tokens, which are replaceable and non-unique (Baker *et al*., 2022), are frequently used with the distribution of decision-making rights that allow token holders to participate in sport organizations' decisions by giving them votes for deciding on specific issues (e.g., next year's team jersey; Otto, 2020).

Engagement behavior

Current research in sport marketing focuses on how actors (sport clubs, fans, sponsors, media) integrate resources in interactions with other actors (Woratschek *et al*., 2014) and, therefore, co-create value (i.e., value-in-use; cf. Vargo *et al*., 2008). These actors are considered active contributors to value co-creation rather than passive recipients (Vargo and Lusch, 2016).

Co-creation has been described as an "umbrella term"; bridging concepts are needed to inform sport marketing practice (Conduit & Chen, 2017, p. 1). Since "co-creation and engagement share common characteristics such as building on interactive experiences" (Conduit & Chen, 2017, p. 1), it was suggested to intensify research on customer engagement in service management, which was translated to sport marketing (Buser *et al*., 2020; McDonald *et al*., 2022). Previous service management literature discussed customer engagement either as psychological state and tendency to act (Brodie *et al*., 2011; Storbacka *et al*., 2016) or as actual manifestation of customers' behavior (van Doorn *et al*., 2010). Recently, McDonald *et al.*

(2022) reviewed previous literature on customer engagement in sport and identified various types of customer engagement (behavior). Our present study focuses on the behavioral manifestation of engagement, which has been broadened into a network-oriented approach including other actors such as employees (Alexander *et al*., 2018). (Actor) engagement behavior has been conceptualized as voluntary, non-transactional (beyond or without contractual agreements) resource integration by individual actors in interactions with the focal organization or other actors within the focal organization's ecosystem (Alexander *et al*., 2018; Buser *et al*., 2020). There has been various studies in sport marketing that dealt with non-transactional and voluntary actor (mostly fan) engagement behavior (word-of-mouth, blogging, prosocial behavior, management cooperation; cf. McDonald *et al*., 2022).

From a theoretical viewpoint (value-in-social-context; Chandler and Vargo, 2011; Edvardsson *et al*., 2011), engagement behavior has been deemed to take place on specific engagement platforms, which have been defined as "physical or virtual touchpoints designed to provide structural support for the co-creation of value between actors in a service ecosystem" (Breidbach *et al*., 2014, p.594). This implies that engagement behavior occurs within the unique social context of an engagement platform. Accordingly, engagement behavior and co-created value is uniquely determined by the actors' mutual resource integration on a specific touchpoint (Buser *et al*., 2022). From previous literature, it becomes evident that digital engagement platforms and governance tokens have been underrepresented in previous research dealing with engagement behavior and value co-creation (Stegmann *et al*., 2021).

The phenomenon of actor engagement cannot be studied on a single level of aggregation but rather by applying an oscillating focus (Woratschek *et al*., 2020). Likewise, potential engagement behavior in dyadic interactions (micro-level) using tokenized governance platforms must be examined considering various levels. These include the meso-level, which describes the platform's social context; the macro-level, which represents the service

ecosystem perspective; the intra-level, which comprises individuals' reasons to engage; the nature of the exchange, which describes characteristics of interactions such as the hyperconnectivity of digital platforms; and institutional arrangements, which determine the rules and norms of interactions across all levels of aggregation (Buser *et al*., 2022; Stegmann *et al*., 2021).

Tokenized governance platforms as engagement platforms

The tokenized governance platforms introduced in the previous sections allow sport organizations to develop new touchpoints (Enterprise Ethereum, 2019). Based on the initial, transactional exchange of buying a token, actors receive access to a network of opportunities (Buser *et al*., 2022 for the context of Olympic Games). However, from a modern logic of value creation, buying the token alone does not provide value (Vargo and Lusch, 2016). Rather, by buying a token, a buyer gets access to specific utilities (Roth *et al*., 2021) and through engagement behavior using the opportunities value is co-created (van Doorn *et al*., 2010). For example, only by making use of the voting right distributed by governance tokens (e.g., voting for/against a new sponsorship contract) value can be co-created. For instance, possessing tokens and using the exclusive rights (such as with an NFT from Bored Ape Yacht Club; BAYC, 2022) is meant to signal social status to others (Baker *et al.*, 2022; Dimson and Spaenjers, 2014) or to provide pleasure (Sengupta and Zhou, 2007).

Limited research has dealt with tokenization and actor engagement in sport, although there is research in its nascent stages from other fields (Alexander and Bellandi, 2022; Colicev, 2022). While in both studies, the role of tokens in general and NFT's specifically is discussed from a traditional, finance-oriented line of value creation, in both papers, the role of value co-creation enabled by tokens is dominating. While Alexander and Bellandi (2022) mainly highlight the co-created value of NFT's for owners alongside various value dimensions,

Colicev (2022) outlines its role during the marketing funnel (pre-purchase, purchase and post-purchase phase) and emphasizes the possibility to enable unique perks and to build a brand community.

The current study intends to overcome these research deficits and investigates a specific tokenized governance platform in the setting of a professional spectator sport club. Specifically, the study intends to research the intersection of the platform within the ecosystem (macro-level), the network of actors on the engagement platform (meso-level), the actual engagement behavior of these actors (micro-level) as well as individual reasons to engage on the digital engagement platform (intra-level) while considering the impact of institutions across all levels of aggregation.

Methods

Study design

To investigate the tokenized governance platform as engagement platform, a single case study using a multi-method approach was conducted. By sampling empirical data from various sources, it was aimed to strengthen the methodological approach by changing the unit of analysis from focusing on individual actors' perspectives towards a shared view on tokenization as an engagement platform. A qualitative approach seemed reasonable since it offers in-depth insights among various levels of aggregation (Mingers, 2003). More specifically, the partnership between a professional European football club and socios.com, a tokenized governance platform based on the cryptocurrency Chiliz (CHZ) was studied by using document analysis and semi-structured interviews from different perspectives (fans, sport club management, and blockchain experts).

Research process and data analysis

Data collection was structured in two steps. First, a document analysis was conducted. The tokenized governance platform offered by socios.com was researched in-depth. The content presented on the socios.com website, its smartphone app, the Chiliz website, the sport clubs' website and smartphone app was studied to gain an objective overview of the actors involved and the platform functionalities. Second, based on the insights obtained through document analysis as well as theoretical ideas from theories of value co-creation and engagement literature, semi-structured interview guides were designed and interviews with sport clubs management, fans and blockchain industry experts were carried out.

The interview guide for the sport club management and its fans consisted of questions regarding how tokenization was used by fans, which interactions emerged, how these interactions foster engagement, and what fans think about benefits and risks of the tokenized governance platform. Club management was also asked about its organizational goals and expectations. The interview guide for the blockchain experts consisted of questions about general blockchain projects in sport, aspects regarding the application of blockchain technology generally and tokenization specifically. The experts concluded the interviews by providing their personal outlooks, major shortfalls, and recommendations for the use of tokenization in sport.

In total, 14 interviews were carried out among these three different groups of actors (one with a sport club manager, five with fans, and eight with blockchain experts; Table 1). Blockchain experts included developers, lecturers, consultants, and founders of blockchain projects. The duration of the interviews varied from 19–47 minutes, with an average length of 37 minutes. All interview participants took part voluntarily. Interviewees consented about the scientific use of the interview material. Interviewee personal data were respected and anonymized. All interviews were audio-recorded and transcribed verbatim.

[Table 1 near here]

To analyze the data, MAXQDA 2020 was used and followed the procedures of thematic analysis (Braun and Clarke, 2006). More specifically, three rounds of coding were used. The first round, open coding, allowed for the identification of recurring patterns regarding the use, application and evaluation of the tokenized governance platform as engagement platform in sport. In the second round, axial coding to match quotes from the interviewees with different levels of value co-creation in order to group the identified patterns within themes was used (i.e., macro-level, meso-level, micro-level, intra-level and institutional arrangements). Finally, the themes organized through the various levels of value co-creation were reviewed again and tried to identify sub-themes.

Findings and Discussion

Macro-level (service ecosystem)

From the macro-level, it becomes evident that tokenized governance platforms can be perceived as specific touchpoints among a variety of touchpoints within the fan journey (F5).

I would say that it is simply an additional platform that you can use. (F5)

Distinct existing engagement platforms within a sport ecosystem have also been described in previous research dealing with the Olympic Games as a sport ecosystem (Buser *et al*., 2022) or within customer journey literature (a series of touchpoints to enhance attachment or identification with a brand; Lemon and Verhoef, 2016).

The sport club manager compared the application with social media, as he considered both touchpoints, where the sport club interacts and communicates with its network of actors.

Social media [and tokenization] are both communication channels. The advantage of tokenization is the interaction. [Social media] is one-way. You

communicate very informative. In the communication [with tokenization], you pass the ball to the fans and they pass it back. (M1)

He emphasized differences between the two and concluded that tokenization gives the club information about the fans' perception of specific topics. Accordingly, it seems that the sport club manager highlights differences between the (social) context of the aforementioned platforms, which has also been described in theories of value co-creation (Chandler & Vargo, 2011; Edvardsson *et al*., 2011) and which relate to the idea of social capital (Lin, 2002). While the sport club manager has positively evaluated this opportunities given by the tokenized governance platform, F4 disagrees with his statement, which could be attributed to the considerations of the density of networks (Burt, 1980).

I do not see these tokens as a feedback tool at all. I mean, who do you want feedback from? From people you know that these are fans of the club, that they identify with the club, and that they want the best for it. From these people you want feedback. (F4)

Overall, the fan community has agreed that tokenization might be a positive feature to add additional services, although it might be not as relevant as other platforms (F1, F2, F4, F5). However, they emphasized the strict separation of it from all sporting activities of the organization (F4, F5), which seems to be interesting for practical relevance as well as future research that might be built upon the ideas of Yoshida (2017) who described four encounters that may lead to extended fan experience and specifically sees sport as poorly controllable.

As long as those platforms are in the context of non-sport, non-core business activities, then I can live with it. For me, the stadium, for example, is a more important platform compared to this token platform. I am a fan of the club primarily because of sport. (F4)

Earlier, a soccer club was there to play soccer. Then, they found out that they had to offer the fans more. Tokenization is just another opportunity, a technology that is coming up and being used to grow the sport club's community. (F5)

Meso-level (network of actors)

To understand how actors engage in dyadic, triadic, or network-oriented interactions on an engagement platform, it is necessary to study the involved actors. It becomes evident that mostly sport club fans and the sport club itself are present on the tokenized governance platform. However, other actors such as management from socios.com, management from Chiliz, other sport clubs using the platform, cryptocurrency traders and players from the sport club are also involved (Socios App, M1, F4). From a sport club ecosystem perspective, it becomes evident that known actors (sponsors, media, league, federations) are excluded from the tokenized governance platform. Accordingly, this seems like an extension of the ecosystem towards new groups of actors that could be interested in the sport club (which might be understood as brand extension). Especially regarding the first mover status of the sport club, Fan 5 emphasized other sport clubs as relevant actor group that can be reached through this extension and that might start to exchange with the sport club due to the tokenization platform.

As first movers, we could lead the way for other clubs. I am sure many clubs have called them and asked how they should do it. (F5)

Similarly to the opportunity to extend the sport club's own brand, F5 also pointed out that tokenization not only provides him a platform to be in contact with his favorite club, but he rather owns tokens from all other clubs using the platform.

I hold at least one token from each team on Socios. Therefore, I can participate in all the votes and polls. (F5)

While F5 concluded that he is not using these tokens for financial gains, the interview with the sport club representative revealed that there are people using the clubs' tokens as a financial investment, although they are not involved with the sport organization.

Sure, the traders who trade back and forth also participate in the polls, but they are not fans. A buyer from Cyprus is classified as trader. (M1)

Additionally, from the interview with the sport club manager, it has become evident that the sport club has used data from socios.com to divide the majority of token holders into three subgroups of fans: 1) Season ticket holders or passive club members who received a free token; 2) Satellite fans who do not live near the club; and 3) Non-season ticket holders who live close to the club. Thus, it seems that in addition to address new target groups who are probably not very interested in the sport, the central target groups of the club seem to be fan groups.

However, the results also showed evidence that the tokenized governance platform may not be intensively used by the sport club's community besides its potential to help building a brand community (Colicev, 2022). Rather, several fans stated that they only knew very few people that are interested with these additional services offered by the sport club.

I know many people who have season tickets, but I have never really heard anyone actively say that they actually use these tokens. (F3)

I have a season ticket since a long time, I know many people who go to the games, and these are all good and long-time fans. However, I do not know anyone who uses the tokens. (F4)

In line with the statement that both fans only know rather few people that are using the tokenization platform, F5 concludes that the tokenized governance platform only is accessed by blockchain-affine people.

You just mainly meet the affine people who already know about it. Now it is somewhat not working. Right now, there is just barely a community and the question is how you get the community there. The club needs more traffic. (F5)

Micro-level (dyadic interactions)

To receive access to the platform, users must purchase at least one governance token from their sport club (or receiving it as a new season ticket holder or passive member) using the CHZ cryptocurrency and blockchain (M1, F5, Sport Club Website), which is in line with the theoretical understanding of engagement platforms (Woratschek *et al.*, 2014). This particular buying-based system to acquire fan tokens was criticized by F4 as he introduced the perspective that fan loyalty (e.g., buying a season ticket; Yoshida *et al.*, 2014) should be rewarded as well.

Perhaps in addition to the pure purchase of tokens via the monetary path, the club could introduce a loyalty system, for example, every year as season ticket holder you get a token. So that aspects of fan loyalty are considered. (F4)

In possession of the tokens, actors can make use of the opportunities offered by the engagement platform. For example, fans are invited to vote on the design of the away jersey, new fan jerseys, or the new goal celebration song (F5, Socios App, Sport Club Website). Thus, participants engage in co-developing behavior (Jaakkola and Alexander, 2014), which is understood as helping or giving feedback to the focal brand to improve particular service offerings that also creates value for the fans (Alexander and Bellandi, 2022).

In addition to the right to vote, users can receive rewards (memorable club experiences, exclusive merchandise, or access to specific competitions; Socios App, F5) by holding specific amounts of the platform-specific (and club-unspecific) tokens (called SSU). Fans can either acquire these SSU tokens by generally being active, by playing the match halftime game, by checking into the app and showing that you are at the game or by engaging in a daily GPS-

based collection of tokens, similar to Pokémon Go (Paavilainen *et al*., 2017). Accordingly, higher engagement is rewarded with club-specific rewards that help building attachment to the club (Colicev, 2022), which was described by F5, while mentioning also potentials future rewards.

> *You only get SSU if you are active. To me, the fan rewards seem to be a good future opportunity to enhance traffic on the platform. They could offer parking tickets or they can give percentages on merchandise. I twice received tickets for the VIP area. These are things that fans care more about than votes. (F5)*

Beyond the existing opportunities on the tokenized governance platform, other interviewees described additional ideas using tokenization, which similarly included reward systems for holding tokens, ticketing via tokens or payments (F2, F5).

The blockchain experts pointed out the possibility of tokenizing and collectively owning items, players, or even entire sport teams (i.e., fractionalized ownership; E3, E6). They emphasized fractionalized ownership as a governance solution.

> *I am the most excited from fractionalized ownership. If you ask me, this is how every professional sport team should be organized. (E3)*

Additionally, they point out that fractional ownership using tokens would allow owners to obtain voting rights on team decisions (e.g., player transfer). This would imply a disruption of football club governance to decentralized autonomous organizations (DAO) as one of the experts expects it to be in the near future.

> *I think it will happen soon, that we have football clubs working as a DAO, so token holders can decide, which players should be bought, which should [be] the coach. (E6)*

Although such a disruption towards a new predominant model of football club management might be possible, one of the experts pointed out the usefulness of fractional ownership in

crowdfundings, and thus how it could be used for pre-financing new investments (e.g., construction of new training facilities).

> *What you are doing is you are fractionalizing ownership. You fractionalize ownership on a work contract with remuneration behind it. So, you can pre-finance future investments. (E7)*

Overall, the experts emphasize the financial and engagement-related opportunities provided by tokenization in sport. They state that the focus of tokenization should not be placed on the token itself, but rather on the benefits it delivers: entertainment value and interactions (E2, E4, E7), which is in line with the understanding of engagement platforms (Stegmann *et al*., 2021).

> *When it comes to the tokens, the fan experience and benefits should be the focus. (E8)*

Intra-level (individual)

From the interviews, two aspects why sport club and fans engage in tokenization were identified: 1) Tokens give fans the opportunity to participate in the club's decision-making; 2) Tokens strengthen the clubs' financial success (F1, F2, F4, F5, M1). Moreover, fans said that having access to the tokenized governance platform offers a feeling of belonging to an exclusive subgroup of the club, which can be understood as signalling social status to others (Baker *et al.*, 2022).

> *The token can give you the feeling that you are a little closer [to the club]. (Fan 1)*

> *The club cares about the fans. If you feel appreciated, you rather go to games.*

> *The primary benefit is to stir up euphoria and empathy among the fans. (F4)*

Beyond the primary financial and non-financial benefits described above, F4 also discussed the role of token polls that may lead to higher acceptance of merchandise articles within the brand

community that may come from the provision of pleasure that the dress of your choice has been chosen within the brand community (Sengupta and Zhou, 2007). Consequently, this may also lead to higher sales for the sport club.

> *If a larger group decides, then you will meet the broader taste and can market the jersey the fans want, for which they are willing to pay. (F4)*

However, the interviewees also highlighted a potential bias that could lead to a misrepresentation of the brand community (F3, F4, F5). The bias can be amplified due the use of tokens as investment. Each token gives the right to one vote (although the maximum number of votes for an individual is limited; Socios App, F5). Actors who might not be fans could end up having more power.

> *You have to make sure that the right people are involved in the decision-making process and not that opposing fans can simply buy tokens and vote against the club's favor. (F4)*

Such a misrepresentation of the brand community could lead to manifold risks such as disengagement (Vargo *et al*., 2008). Similarly, disengagement could be observed due to the access to the tokens, which is limited by its complexity in general and regarding the registration process, which requires fans to verify their identities. More than one fan interviewed stated that he was not able to access his fan token distributed to him as a season ticket holder (F3, F4).

> *Yes, I downloaded the app to see how the whole thing is set up. Then, I never came somehow to the possibility to get this token. So I do not know, maybe I did not do it right, but I never had a token. (F3)*

Other fans claimed that previous polls had dealt with uninteresting topics such as the design of the captain’s armband (F1, F2). They added that this could cause fans to reduce their engagement.

If you make a vote, then it should have value. It is non-sense to vote on who comments the next match with the club radio. (F4)

Both fans and club managers discussed the risk of perceived over-commercialization among fans, which could lead to non-engagement, skepticism or even to boycotts of the club, although the sport clubs' need to earn money is acknowledged by both fans and experts (F4, E7).

The bottom line is that the club is a corporation. They have to pay wages and if tokenization is profitable, let them do it. (F4)

There is a risk that the fans will quickly get into the aspect of commercialization. Now, there are even tokens, the club tries to sell everything. This can be perceived unsympathetic. (M1)

Especially, it was emphasized that eventually parts of the fan community could be excluded from participating in polls when the price of tokens will increase.

If you look into the future and the tokens increase in value, then at some point the point of commercialization comes. In the fan community, the good fans are not just the ones who can buy tokens for 100 bucks. (F4)

Institutional arrangements

Engagement behavior on tokenized platforms is regulated by institutional arrangements (Buser *et al*., 2022). From the expert interviews, it has become evident that the use of blockchain incentivizes the sport club as token distributor with fast and cheap transactions to save time and costs as well as to increase security, which can be considered the major benefits of blockchain (Bahga and Magisetti, 2017).

Transparency, logistical and operational efficiencies. A decentralized system is safer than a centralized system. In terms of security, transparency, and operational efficiencies, blockchain aims to solve those core problems. (E4)

The consequences of utilizing blockchain technology would lead to emancipation from intermediaries, which include ticket sellers or payment processors (E1, E3, E5). Additionally, blockchain technology and its decentralized nature could be used to build trust and improve coordination between stakeholders (E5). Furthermore, blockchains offer proof that transactions took place, as recorded events cannot be altered (Lynn *et al.*, 2018). However, among the fans, it was argued that current problems of blockchain actually dismiss the positive aspects of the technology.

In the current crypto scandals, decentralization is exactly what is missing, because certain groups held all power. (F5)

Especially against the background of tokenization, eventually sport clubs are meant to be a centralized owner of the platform, which would require a conscious omission of the major benefits of blockchain technology.

The experts stressed that when it comes to the application of blockchain, one question must be asked: Why not use a database instead? In most cases, a centralized database would suffice and there is no reason to use private blockchains because a centralized database is always more efficient than a private blockchain (E6, E8). When using a private blockchain, one forgoes the benefits of a public blockchain but assumes the cost and additional effort without reaping the benefits.

What does a public or private blockchain offer that a private database cannot do? There is absolutely no reason for you to use a private blockchain. (E1)

This critical perspective of whether blockchain technology is suitable for specific cases in commercialized sport clubs might be relativated by the comment of E5, which highlights the specificity of tokenization platforms to fulfil specific needs of fans, for instance.

The question whether it is necessary or not, is debatable for fan engagement. Is it necessary? No. Is it beneficial? Yeah, it can be for fan engagement. (E5)

Lastly, the blockchain experts elaborated on potential shortfalls they perceived in the use of tokenization in professional sport clubs and stated that tokenization might be interesting in the future, however, general adoption needs to be achieved first (E1). They noted that due to the novelty, there are still many issues with blockchain implementations.

It is ahead of its time. The entire industry is not mature enough to support these ideas. There is no market for it yet. We are still a ways out from that. (E4)

The experts stressed that progress takes time. New and better versions of blockchain are being developed (E4). Accordingly, sport organizations should focus on new ideas that would not have been possible without blockchain.

The discussion should be directed to what you want to do. Are there new things we can do with blockchain that you cannot do without blockchain? (E7)

According to the interviewees (E1, E3, E5), most project ideas were flawed because the idea did not require blockchain, which is also described in previous research (Million, 2019). They just used the hype around blockchain to raise money (E5). The experts stated that a service is not successful because of blockchain but good ideas that bring better fan experiences or solve problems in professional sport are (E2, E3) , which was also mentioned by one of the fans.

If a new technology has no benefit, then, you do not have to hype something just because it's new. (F4)

The experts also emphasized issues regarding scalability (low speed, high fees), lack of trust and slow adoption, whereas they highlighted the importance of scalability.

Scalability and consumer trust are the biggest challenges. For people to adopt, they have to trust. For them to do that, you have to ensure scalability. Because when we press a button, we expect something to happen. (E4)

Experts identified a major challenge in compliance with laws and regulations when implementing blockchain technology or tokenization (E1). As regulatory agencies are always centralized, they stand in contrast with blockchain's decentralized nature.

Finally, blockchain recently – also considering the general economic situation – went through manifold scandals (e.g., FTX, Terra; Robinson, 2022; Yaffe-Bellany, 2022). An expert mentioned positive effects of these scandals as they stated that tokens without any utilities will be removed from the market.

> *The current low in the market is a great opportunity. This hype has brought money and has certainly financed many projects that do not deserve to be financed. Hopefully it has also funded some projects that deserve it and that now have the time to deliver the solutions that we need. (E2)*

Managerial implications

Overall, the results of the study demonstrate that fungible tokens and specifically tokenized governance platforms can be understood as engagement platforms, which enables fans to engage themselves and demonstrate value co-creation that may help the club to satisfy their fans. However, the interviews with both – fans and blockchain experts – indicate challenges that may hinder sport clubs to implement tokenization as engagement platform. First, the results demonstrated that neither blockchain nor tokenization can be considered miracle cure that automatically engages fans and fosters identification. Moreover, the experts have outlined that blockchain in most cases not even necessarily must be applied but can be considered a marketing tool that experienced hype and therefore was implemented with only few real utilities. However, it was shown that tokenization could help sport clubs to implement innovative forms of digital engagement, although there are manifold existing barriers that currently impede the launch of tokenization platforms (crypto scandals, lack of trust, lack of

scalability, complexity). With that said a next wave of crypto development that has undergone further legal and regulatory measures might help sport clubs to develop more sustainable tokenization platforms.

Second, the provision of tokens alone does not provide value. Active management and innovative ideas are necessary in order to keep fans engaged, regularly participating in polls and actively collecting tokens in order to receive rewards that must be determined and regularly distributed by the sport club. In so doing, sport clubs are asked to provide resources towards the continuous development of tokenized governance engagement platform in order to foster identification among their brand community. However, the results provide vague hints that a well-managed tokenization platform that includes valuable polls (e.g., the design of merchandise) and profitable rewards (e.g., voucher for parking slots) might be able to foster engagement behavior among brand communities. However, it has become evident that sport clubs should ensure to separate sport and commercialization when it comes to polls (e.g., no polls about line-ups).

Thirdly, it seems that within an ecosystem of a sport club, platforms with the scope of tokenized governance platforms have not yet existed so far and thus describe additional services for the brand community of a sport club, especially with regard to the opportunity of interactions between fans and the sport club management, which has not yet been this efficient. Furthermore, because of digital technologies, it has become even more complex for sport clubs to compete against the large amount of possible leisure activities that exist. Thus, a well-managed tokenization platform with unique rewards could help to retain the future generations of sport fans. However, sport clubs should apply a governance structure that hinders fans from other sport clubs or less engaged fans to be involved in polls (e.g., by using season ticket or membership authentication for instance).

Fourth, tokenization can help a sport club to increase its network of actors within their own ecosystem by gaining additional target groups (e.g., blockchain-affine people) that are interested in the innovative character of the sport club using tokenization and thus might become sympathizers or even fans. Furthermore, also on the organizational level, innovative engagement in digital technologies could help sport clubs to get in contact with international rivals that may be interested in marketing cooperation, which consequently could lead to international cooperation among sport clubs.

Finally, although one of the experts outlined that he expects DAO to be the predominant model of how sport organizations are funded and governed in the future, currently such a model seems difficult to implement. However, in specific cases, the decentralized governance of sport clubs that goes beyond, for example, merchandise-related polls but describes fractionalized ownership might be a more sustainable and identification-enhancing business model for sport clubs in the future.

Limitations and future research

A few limitations must be considered in interpreting this study. First, it only focused on a specific application of tokenized governance as engagement platform in sport. Although various perspectives were considered, it cannot be fully concluded that tokenization is a valid digital innovation that fosters engagement behavior and fan loyalty towards professional sport clubs. The access to potential interviewees was limited, which is reflected in the number of interviews that were carried out (14 interviews). Accordingly, the results must be considered with caution since the perspectives of the interviewees might not reflect a generalizable opinion. However, the results still demonstrate perception discrepancy regarding the acceptance and potential of tokenization. Indeed, there exists high potential for future research studying tokenization from all three included perspectives. Thus, for future research, additional

in-depth case studies should be conducted that investigate the phenomenon of tokenization in sport by either extending the amount of interviews carried out with the three proposed actor groups or by incorporating additional actor groups (sponsors, management from tokenization platforms) that were not yet considered in this study. Furthermore, quantitative studies should examine barriers and factors that affect the adoption of tokenization among sport club fans. Finally, it seems that tokenization could form a digital engagement platform that fosters engagement behavior among fans. Regarding the study of how engagement platforms might be designed, future research could carry out conjoint studies that may help to inform sport marketing practice how tokens foster engagement.

Second, the lack of previous case studies and literature about blockchain in sport influenced and impeded the analytical process, as the results regarding such applications in sport marketing could not be compared to a broad array of existing publications. Additional qualitative research could determine how and under which circumstances tokenized governance and other forms of blockchain-based technology such as NFTs, ticketing, Metaverse, web3.0 or fractionalized ownership with DAO can effectively be utilized in sport to create long-term relationship with fans.

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