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**Hype or opportunity? Tokenization as engagement platform in
sport marketing**

13 **Abstract**

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

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

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

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

32 **Keywords:** Tokenization, blockchain, sport marketing, engagement platforms, digital
33 transformation

34 **Word Count: 7,998**

35

36 **Introduction**

37 In an increasingly digitized world, the way sport organizations interact and co-create value with
38 fans and other actors (e.g., sponsors) is constantly changing (Stegmann *et al.*, 2021).
39 Accordingly, sport marketers have started to use newer digital touchpoints such as social media
40 to interact with fans and other actors to jointly co-create value. In so doing, sport organizations
41 are able to foster loyalty and engagement behavior among their network of actors (Ratten,
42 2020; Stegmann *et al.*, 2021; Zhang *et al.*, 2021). Since the digital age has just begun, many
43 other digital technologies (e.g. blockchain technology, virtual and augmented reality,
44 Metaverse) also have the potential to disrupt the field of sport marketing (Ströbel *et al.*, 2021).

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

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

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

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

79

80 **Theoretical background**

81 ***Blockchain in sport***

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

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

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

96

97 ***Engagement behavior***

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

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

110 (2022) reviewed previous literature on customer engagement in sport and identified various
111 types of customer engagement (behavior). Our present study focuses on the behavioral
112 manifestation of engagement, which has been broadened into a network-oriented approach
113 including other actors such as employees (Alexander *et al.*, 2018). (Actor) engagement
114 behavior has been conceptualized as voluntary, non-transactional (beyond or without
115 contractual agreements) resource integration by individual actors in interactions with the focal
116 organization or other actors within the focal organization's ecosystem (Alexander *et al.*, 2018;
117 Buser *et al.*, 2020). There has been various studies in sport marketing that dealt with non-
118 transactional and voluntary actor (mostly fan) engagement behavior (word-of-mouth, blogging,
119 prosocial behavior, management cooperation; cf. McDonald *et al.*, 2022).

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

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

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

140

141 ***Tokenized governance platforms as engagement platforms***

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

154 Limited research has dealt with tokenization and actor engagement in sport, although
155 there is research in its nascent stages from other fields (Alexander and Bellandi, 2022; Colicev,
156 2022). While in both studies, the role of tokens in general and NFT's specifically is discussed
157 from a traditional, finance-oriented line of value creation, in both papers, the role of value co-
158 creation enabled by tokens is dominating. While Alexander and Bellandi (2022) mainly
159 highlight the co-created value of NFT's for owners alongside various value dimensions,

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

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

170

171 **Methods**

172 *Study design*

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

183

184 *Research process and data analysis*

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

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

202 In total, 14 interviews were carried out among these three different groups of actors
203 (one with a sport club manager, five with fans, and eight with blockchain experts; Table 1).
204 Blockchain experts included developers, lecturers, consultants, and founders of blockchain
205 projects. The duration of the interviews varied from 19–47 minutes, with an average length of
206 37 minutes. All interview participants took part voluntarily. Interviewees consented about the
207 scientific use of the interview material. Interviewee personal data were respected and
208 anonymized. All interviews were audio-recorded and transcribed verbatim.

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[Table 1 near here]

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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

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

237 He emphasized differences between the two and concluded that tokenization gives the club
238 information about the fans' perception of specific topics. Accordingly, it seems that the sport
239 club manager highlights differences between the (social) context of the aforementioned
240 platforms, which has also been described in theories of value co-creation (Chandler & Vargo,
241 2011; Edvardsson *et al.*, 2011) and which relate to the idea of social capital (Lin, 2002). While
242 the sport club manager has positively evaluated this opportunities given by the tokenized
243 governance platform, F4 disagrees with his statement, which could be attributed to the
244 considerations of the density of networks (Burt, 1980).

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

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

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

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

263

264 ***Meso-level (network of actors)***

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

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

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

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

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

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

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

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

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

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

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

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

310

311 ***Micro-level (dyadic interactions)***

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

368

369 ***Intra-level (individual)***

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

376 *The token can give you the feeling that you are a little closer [to the club]. (Fan*
377 *1)*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

421

422 ***Institutional arrangements***

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

490

491 **Managerial implications**

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

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

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

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

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

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

541

542 **Limitations and future research**

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

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

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

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