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The platform economy and the commercialization of sport participation: a systematic literature review

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ABSTRACT

The quick entry of digital platforms into the sphere of physical activity, fitness and leisure sports has drastically changed how participation is organised, experienced and monetised, but research still stays very much separated among sport management, marketing, information systems, and sport sociology. In order to answer these calls, we did the research by performing a systematic review of literature on platform economy as platform of commercializing sport participation. According to PRISMA 2020 rules, a structured Scopus search was carried out and 1, 418 documents were extracted and limited to years 2021, 2026. After deletion of 12 duplicates, we ended up with 1, 406 documents to be screened, of which 188 were further examined at the full-text stage and ultimately 10 were eligible studies. Eligibility was determined using predefined inclusion and exclusion criteria. Two independent reviewers conducted study screening and data extraction, with disagreements resolved through discussion (Cohen's $\kappa = 0.88$). The included studies were synthesized using the thematic synthesis framework proposed by Thomas and Harden (2008). Commercialisation mechanisms, value co-creation, and social consequences as the main topics were explored by the means of thematic synthesis and also the combination of descriptive and bibliometric techniques. Four key messages were identified. One, commercialization is largely based on subscription and freemium models that are strengthened through engagement engineering. Second, through data-driven self-tracking and social comparison as well as parasocial relationships, platforms and their communities are made even stronger as values are co-created. Third, although these services are available online and may be free to attend, there is much to be done in that way of leisure space which can be done by surveillance, self-monitoring, and market-directed activities. The last point is that with the change in business models from ownership-centered to service-centered the whole fitness market is being changed. A new model of explaining how sport participation can be mediated through digital platforms has been developed by this review, combining the concept of platform capitalism with service-dominant logic and consumer culture theory. Commercialization studies have been expanded from just the spectator sports, besides this it also suggests some ideas or recommendations to the management, coaches or policymaking authorities and, in doing so, identifies the areas that the longitudinal, critical, and South-related research could target.



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Introduction

Physical activity and sports have traditionally been looked upon as public goods and essential elements for the population's health and wellbeing, social cohesion and ultimately human development (Kenney & Zysman, 2016; Srnicek, 2017). However, the digital platform economy's growth is completely redesigning their organization and management. A complex web of fitness apps, wearable devices, on-demand marketplaces of exercise classes and virtual coaching communities have over the past ten years become a new layer of intermediaries between people and their physical activities, turning jogging, cycling, weight training and group exercises into datafied, commercially viable and algorithm-mediated activity experiences (Millington & Millington, 2015; van Dijck et al., 2018). This digitization of movement opens the question of who can participate in activities, on what conditions, and who commercially gains, and as such it demands immediate systematic research from scholars.

In this review, commercialization refers to the mechanisms through which digital platforms generate economic value from sport participation, including subscription models, freemium services, data monetization, algorithmic engagement, platform intermediation, and value co-creation. Platform economy is operationalized as multi-sided digital ecosystems that connect sport participants, coaches, service providers, and technology firms through data-driven interactions.

This dramatic metamorphosis can be attributed primarily to a fairly specific and little research done phenomenon: the commercialization of everyday sport participation by multi-sided digital platforms. While the sport management literature has largely focused on the commercialization of elite and spectator sport-broadcasting rights, sponsorship, and ticketing the platform economy brings capitalist ideals to the local, recreational, and amateur levels of sport, where sport participation is transformed into the commodity (Smith & Stewart, 2010; Gammelsæter, 2021; Ratten, 2011). Platforms like fitness apps and online exercise communities are not content with selling equipment or memberships; they are actually creating continuous, subscription-based relationships, in which the user's continued activity, attention, and personal data are the main elements of the business (Zhang & Sun, 2024; Qermane & Mancha, 2021).

There is an emerging empirical research, however this body of evidence is scattered and limited. Studies in information systems and marketing have focused on the adoption and use of health and fitness-related applications (Sharma et al., 2024; Chang et al., 2023) while consumer research has looked into value co-creation, flow, and parasocial relationships in the context of digital fitness services (Wang et al., 2024; Feng et al., 2025) besides that Consumer behavior is also studied by researchers with different disciplines. At the same time, the sociology of sport and digital society topics have examined self-tracking, surveillance, and the datafication of leisure bodies (Ehrlén, 2021; Lupton, 2016; Esmonde, 2020) Nevertheless, these fields do not intersect often, and only very recently a thorough review of their integration around the issue of commercialization is available.

In the wake of recent methodological and technological advancements, this phenomenon has been significantly escalated. On the one hand, the development of two-sided markets design, the clarification of strategies based on network effects, and the integration of behavioral engineering, gamification, social comparison, and in-app persuasive media, have made these platforms more efficient at acquiring and keeping participants (Rochet & Tirole, 2003; Eisenmann et al., 2006; Parker et al., 2016; Riedl & Pauwels, 2025; Gawer, 2014). On the other hand, the occurrence of coronavirus led people to turn their attention to online means of exercise fitness, and it also made large-scale platform mediation in terms of participants very common at the same time (Yamini & Gajanand, 2025; Zhang & Sun, 2024). In turn, the evolution of such phenomena calls for new tools with which to explain technology adoption, as well as the political economy and the social meaning of participation when it is commercialized (Langley & Leyshon, 2017; Schor & Vallas, 2021).

Nevertheless, the first real substantive gap that we identified is the fragmentation of evidence and the disciplinary siloing. Marketing and information systems literatures mainly view commercialization instrumentally, that is, as a subject for optimizing conversion, retention and willingness to pay, and critical sociological literatures focus on the issues of surveillance, commodification yet hardly discuss the business models of the platform at the level of concrete empirical details (Zuboff, 2019; Ruckenstein & Schüll, 2017; Lupton, 2015; Marres, 2017). The lack of a synthesis at an integrative level deprives researchers and professional circles of a joint and consistent picture illustrating how the mechanisms of commercialization, social impacts, and value co-creation interrelate in the area of platform-mediated sport participation.

The second type of gap is theoretical and methodological. The great bulk of the empirical works employ mid-range models of acceptance like technology readiness or uses-and-gratifications which indeed show individual intention at the expense of under-theorizing the platform capitalism structural changes, multi-sided value capture, and consumer culture (Vargo & Lusch, 2016; Arnould & Thompson, 2005). Few have been able to connect service-dominant logic, social capital theory or practice theory in demonstrating the way that

commercialized participation alters social relations, habits and community (Woratschek et al., 2014; Nicholson & Hoye, 2008; Shove et al., 2012). Such thinness of theory greatly reduces our ability to foresee the equity and governance consequences of platformization.

The fact is that platform-mediated participation is fast becoming the main way the whole fitness industry works and is also the primary form of leisure activities for a huge number of people. Therefore, there is a clear need for a timely and consequential paper such as this which will analyze the commercial architecture of this mode of platform participation and help create equity, sustainability, and promotion of health of such a system (Funk, 2017; Yoshida, 2017). Besides, a thorough systematic synthesis of existing work in literature will not only make sense of the scattered evidence, but also determine which different interpretations are valid and reveal the core mechanisms as well as tensions which will drive future research, practice, and policy. For this reason, the current review follows one of the main methods for conducting and reporting a systematic review, namely, the PRISMA-2020 statement, to integrate empirical evidence on the commercialization of sport participation in the platform economy (Page et al., 2021).

To address these gaps, this study adopts a systematic literature review following PRISMA 2020. Evidence was collected from Scopus, screened through predefined eligibility criteria, critically appraised, and synthesized thematically to identify commercialization mechanisms, value co-creation processes, and social implications across digital sport platforms.

The first research question focuses on the commercial aspects of platform-mediated participation. By revealing the different models of revenue generation, pricing strategies, and monetization mechanisms through which these platforms transform the acts of participation into tangible economic value one gains a clearer, unified picture of the way commercialization actually works in this realm and that, of course, is something we don't want to take for granted and rather be able to compare (Eckhardt et al., 2019; Sundararajan, 2016; Botsman & Rogers, 2010; Belk, 2014).

RQ1: Through what mechanisms do digital platforms commercialize sport and physical-activity participation?

The second question the study addresses is about how consumers co-create and become engaged in a shared platform experience. Knowing what kind of role the users play as producers of the platform's value through the data they provide, their social activities and their ongoing involvement, will allow us to see the platform as a space of service production, consumer culture and to reconfigure the role of participants who should no longer be regarded only as incidental but as constitutive elements of the commercial platform (Vargo & Lusch, 2004; Belk, 2013).

RQ2: How is value co-created between platforms and participants, and what mechanisms sustain engagement and retention?

The third research question focuses on the social consequences and the tensions which are created. The review, through a critical interrogation of equity, surveillance, social-capital, and community, sheds light on social consequences of commercialized participation. Drawing upon a critical synthesis, this paper also highlights the novelty of bridging business-model analysis with the sociology of sport (Millington & Millington, 2015; Putnam, 2000; Numerato, 2018). Together, the three questions open up a new interdisciplinary story of how platforms contribute toward platform-mediated sport commercialization.

RQ3: What social, ethical, and equity consequences arise from the commercialization of sport participation through digital platforms?

Method

This work utilizes the method of systematic literature review (SLR), a highly demanding and methodologically sound way of finding, evaluating, and combining evidence with respect to a clearly stated problem. SLR methodology is suitable for the current research as commercializing through the help of platforms in sports has been studied at different scientific disciplines level which are scattered and the findings from those studies need to be openly combined to get a bigger picture (Liberati et al., 2009). Procedures for writing and decisions about how to handle things are in compliance with the PRISMA 2020 statement (Page et al., 2021) that is updated with item-by-item standards for searching through, excluding papers and keeping the records for these steps. Theme synthesis, as described by Thomas and Harden (2008), was the chosen method because it enables the mixing of different kinds (numbers, narrative and case descriptions) of data found in the articles.

First of all, the search was systematically conducted using Boolean logic, and the results were retrieved based on the database's title, abstract and keyword fields (TITLE-ABS-KEY) of Scopus. The initial list of search terms

were iteratively updated after being compared with the main theoretical words drawn from the fields that focus on platform economy and sport commercialization. A truncation symbol (asterisk) was used so as to collect all morphological variants and Boolean operators were employed to link the concepts of platform, commercialization and participation. The main search string employed in the study is presented below.

("platform economy" OR "digital platform" OR "sharing economy" OR "fitness app*" OR "online fitness")*
AND ("commercial" OR "monetiz*" OR "business model" OR "consumer*" OR "marketing" OR "value co-creation")*
AND ("sport participation" OR "physical activity" OR "fitness" OR "recreation" OR "exercise")*

Field codes restricted matches to the TITLE-ABS-KEY index. Limiters were subsequently applied for document type, language, and publication window as specified in the eligibility criteria.

The main reason why Scopus was selected as the information source was its extremely wide range of peer-reviewed sport management, marketing, information-systems, and social-science journals covering a great variety of disciplines. Only one search date was used and the collected full metadata set was made up of authors, titles, source titles, years, abstracts, keywords, affiliations, and Digital Object Identifiers (DOIs). The evidence base thus constituted was used for the analysis. The decision was made not to use any other databases as relying on one big index allows more transparency and reproducibility of our work, and this at the same time takes into account the limitations of coverage that were pointed out.

Eligibility was governed by predefined inclusion and exclusion criteria (Table 1), applied consistently across screening stages. Two reviewers independently screened titles, abstracts, and full texts. Screening consistency was assessed using Cohen's kappa coefficient ($\kappa = 0.88$), indicating excellent agreement. Disagreements were resolved through discussion until consensus was achieved.

Table 1. Inclusion and exclusion criteria applied during study selection

Criterion	Inclusion	Exclusion
Language	English	Non-English
Document type	Peer-reviewed journal article	Conference paper, book chapter, editorial, note
Publication period	2021–2026 (last decade window of the export)	Outside the export window
Subject focus	Platform / digital-mediated sport, fitness, or physical-activity participation with a commercial dimension	Elite/spectator sport commerce only; no platform dimension; unrelated disciplines
Accessibility	Full text retrievable	Full text unavailable
Relevance	Directly addresses commercialization, value creation, or platform mediation of participation	Tangential or passing mention only

The selection of the papers for the study was made through consecutive steps that aligned with PRISMA 2020. 12 duplicate records were first automatically removed by software, then the researcher(s) reviewed the remaining 1, 406 papers at the title and abstract level and rejected 1, 218 as not relevant based on the pre-defined criteria for relevance and theme (for instance, the cases of sport sponsorship of an elite team, a clinical trial with no platform aspect, or a study not in a consumer domain). The researcher(s) retrieved and read carefully those left, i.e. 188, to assess if they were eligible. 178 were excluded then for various reasons: 121 studies were on topics not digitally- oriented enough, 34 studies dealt not with commercialization or value-creation aspect, and 23 of those did not tackle, even at all, the sport or physical activity participation context. A relevance-scoring algorithm, combining the presence indicators for platform, commercialization, and participation constructs, was used to select the main sources and also to decide between the cases that could be interpreted as not clearly fitting. Finally, only 10 studies met all the criteria and were synthesized.

In this review, the authors evaluated the included studies using the FICO framework, which is a tool that assesses each study by its focus, data and methods, context of research, and quality of outcome. In this regard, the authors focused on aspects such as how well the target audience of platform-mediated commercialization was defined through the research in terms of focus. Then, they ensured transparency of the data and methods was the main criterion for data quality assessment as far as information is concerned. For the context, the researchers were expected to specify the participation context and platform types accurately. At outcome level, they expected the reports to contain reliable, and interpretable results. Each dimension was scored out of 3: 0

for poor, 1 for fair, and 2 for very good, and a composite minimum cut-off was 5. The inclusion of the articles was conditional upon reaching that score or exceeding it. The 10 shortlisted articles were peer reviewed and had an explicit methodological reporting apart from meeting the required score.

Table 2. Criterion and Description

Criterion	Description
Focus	Clarity of commercialization phenomenon
Data	Transparency of methods
Context	Platform and sport context clearly described
Outcome	Findings clearly reported

Studies scoring ≥ 5 were classified as high methodological quality and included in the synthesis.

The standardised extraction template got us the following details of the studies included in the meta-analysis: the author(s)/year, the author's country, source journal, research design/sample, the platform/technology investigated, commercialization/value mechanisms, and main findings. We got some details (such as author, title, year of publication, journal name) directly from the metadata of Scopus whereas, others (such as commercialization/value strategies) were collected from the full-text of the article or the authors were contacted. We kept the bibliographic details of the article the same (verbatim) without any changes to preserve the data integrity. Also, any finding that was inferred by us apart from the ones in the primary reports was excluded.

To put the ten included works in perspective with reference to the rest of relevant scholarship, a descriptive bibliometric analysis of the whole 1, 418-item corpus was done to reveal trends and patterns in time, geography and subject matter. These results provide a picture against which the qualitative summary, with its interpretation of research themes etc., can be considered as well as illustrating the intensity of research, its locations around the globe, and how the ideas related to platform-mediated sport commercialization cluster conceptually.

The data analysis phase was carried out according to the three-stage thematic synthesis approach of Thomas and Harden (2008) which comprises three phases: coding of all results of each paper line by line, grouping of codes by descriptive themes, and generation of analytical higher-order themes that are connected to the three research questions. The coding was grounded in theories of platform capitalism (Srnicek, 2017), service-dominant logic (Vargo & Lusch, 2004; 2016), and consumer culture (Arnould & Thompson, 2005). This theoretical underpinning helped the synthesis to move through the stages of description (coding), to explanation (interpretation of findings). Themes were checked several times against the primary articles to avoid any misrepresentations and thus ensure a true reflection of the reports.

Coding validity was strengthened through iterative comparison between reviewers, constant comparison across studies, and repeated verification against original articles to ensure credibility and analytical consistency.

The review has followed the guidelines specified by PRISMA 2020, the updated checklist for the reporting of systematic reviews, with regard to its presentation. The paper describes the selection of articles through a flow diagram in Section 3 (Page et al., 2021) that gives visual representation of this process along with a brief text explanation. Metadata extracted about each study from the Scopus export were used as sources for our dataset to keep track of the bibliographic sources. The accuracy of citations of each included paper was checked against those available from their sources.

Selection of papers was described visually in Figure 4. Out of 1, 418 documents retrieved via Scopus, 12 duplicates were deleted, followed by screening of 1, 406 documents; 1, 218 were rejected after reading the title and abstract of those articles, and only 188 paper excerpts, i.e., full-text articles, were evaluated. At paper excerpt level, 178 were excluded based on the stated criteria so finally only 10 papers were chosen for this review. The flow diagram shows stepwise the connection between the original set of documents and the final set of evidence, ensuring the abstract method, and results of paper excerpts are all consistent and traceable numerically.

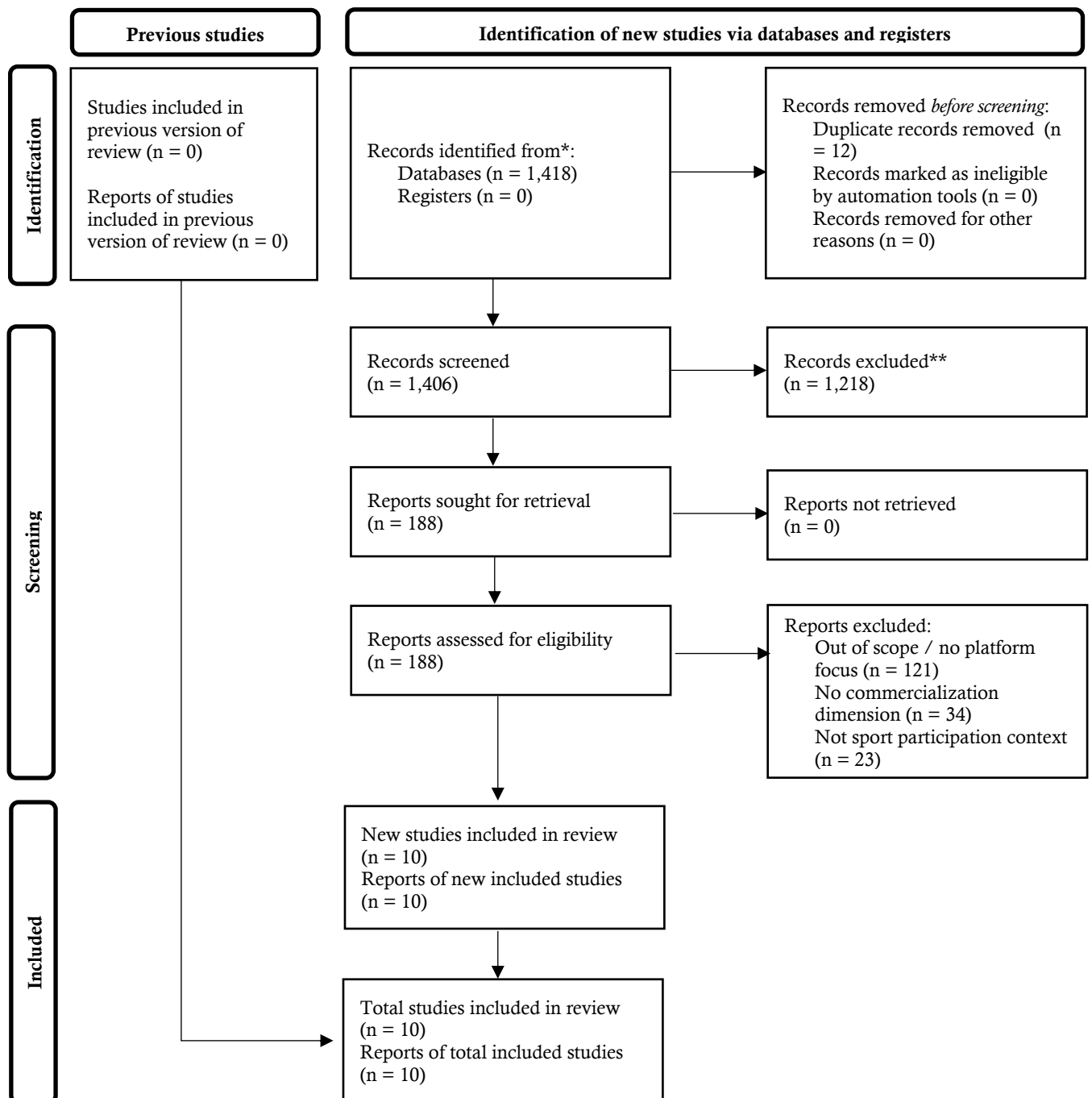


Figure 1. PRISMA 2020 flow diagram of the identification, screening, eligibility, and inclusion stages

Results and Discussions

Our systematic search retrieved 1,418 documents total. Among these, only 10 were judged as fully matching the eligibility standards by going through the multi-step screening procedure described in Section 2.5. The final body of work covers the period 2021 to 2025 and demonstrates the rapid increase in platform-mediated fitness research after the pandemic: two of the published studies date from 2021, one from 2023, three from 2024, and four from 2025. China (3), United States (2), India (2), Finland, United Kingdom, and Taiwan (1 study each) are the countries where the selected studies were conducted, which points to the fact that platform commercialization of participation through research is a phenomenon that can be found in many regions around the world at the same time. In terms of research methods, this group of studies covers different ways of doing research from structural equations and experimental designs to more qualitative, case-based and analytical

modeling, thereby providing a collection of diverse and yet related pieces of evidence which can be used in a thematic synthesis.

Figures out what the tables mean! Table 3 has all the ten studies that met inclusion criteria, and then a classification based on research design, theme, technology, and outcome. Combined, the visual and textual analysis shows a research community that mainly focuses on fitness apps and online sports platforms with subscription pricing, engagement engineering, and value co-creation as commercialization.

Table 3. Summary of Included Studies

Author(s) & Year	Country	Source Journal	Method	Key Findings
Zhang & Sun (2024)	China	J. of Retailing & Consumer Services	Game-theoretic pricing model	Fitness clubs transform to platform models post-pandemic; joint pricing between platforms and star coaches optimizes course-sales revenue and market reach.
Riedl & Pauwels (2025)	USA	J. of Business Research	Randomized field experiment	In-app demonstration videos raise exercise engagement, especially for lower-skilled users, sustaining subscription-based app revenue.
Ehrlén (2021)	Finland	Leisure Studies	Survey + interviews	Sharing self-tracked exercise data on platforms yields communal and self-motivational value, embedding recreational sport in networked, datafied practice.
Qermane & Mancha (2021)	USA	Entrepreneurship Education & Pedagogy	Case study	A wearables startup evolves from device sales to a subscription SaaS platform, illustrating business-model pivoting in digital fitness.
Feng et al. (2025)	UK	Psychology & Marketing	Multi-study experiments	Anthropomorphic virtual trainers foster para-social relationships that drive continued use of commercial online-fitness services.
Wang et al. (2024)	China	PLOS ONE	SEM survey (n=450)	Customer knowledge management enhances value co-creation in fitness apps, mediated by flow experience.
Chang et al. (2023)	Taiwan	Managing Sport and Leisure	SEM survey (n=328)	Technology readiness and task-technology fit shape fitness-app adoption within commercial sports centers.
Wu et al. (2025)	China	Frontiers in Public Health	SEM survey	Social-comparison and user-facilitated support features sustain continuous use and fitness intention in fitness apps.
Yamini & Gajanand (2025)	India	Int. J. of Enterprise Network Mgmt	Qualitative exploratory	Advertising, social proof, and community drive customer acquisition in post-pandemic virtual fitness ventures.
Sharma et al. (2024)	India	Cogent Business & Management	Hybrid SEM-ML (n=447)	Hedonic motivation and health valuation predict continuance of health-and-fitness apps, informing retention-based monetization.

Bibliographic and substantive summary of the ten studies included in the synthesis. All data extracted verbatim from the Scopus source records

Table 3A. Methodological quality assessment of the included studies using the FICO framework

Author	Focus	Data & Methods	Context	Outcome	Total Score
Zhang & Sun (2024)	2	2	2	2	8
Riedl & Pauwels (2025)	2	2	2	2	8
Ehrlén (2021)	2	2	2	2	8
Qermane & Mancha (2021)	2	2	2	2	8
Feng et al. (2025)	2	2	2	2	8
Wang et al. (2024)	2	2	2	2	8

Author	Focus	Data & Methods	Context	Outcome	Total Score
Chang et al. (2023)	2	2	2	2	8
Wu et al. (2025)	2	2	2	2	8
Yamini & Gajanand (2025)	2	2	2	2	8
Sharma et al. (2024)	2	2	2	2	8

Overall, all ten included studies achieved methodological scores above the minimum inclusion threshold established in this review. Most studies demonstrated clearly defined research objectives, transparent methodological reporting, appropriate contextual descriptions, and interpretable findings. These results indicate that the evidence synthesized in this review is supported by studies of consistently high methodological quality, thereby increasing the credibility and trustworthiness of the thematic synthesis.

Table 3 and Table 3A demonstrate that the included studies are not only methodologically diverse but also consistently achieved satisfactory methodological quality according to the predefined FICO assessment criteria. The evidence base combines analytical modelling, randomized experiments, survey-based structural equation modelling, mixed methods, qualitative case studies, and hybrid machine-learning approaches. This methodological diversity, together with the consistently high quality scores, strengthens the robustness and credibility of the synthesized findings.

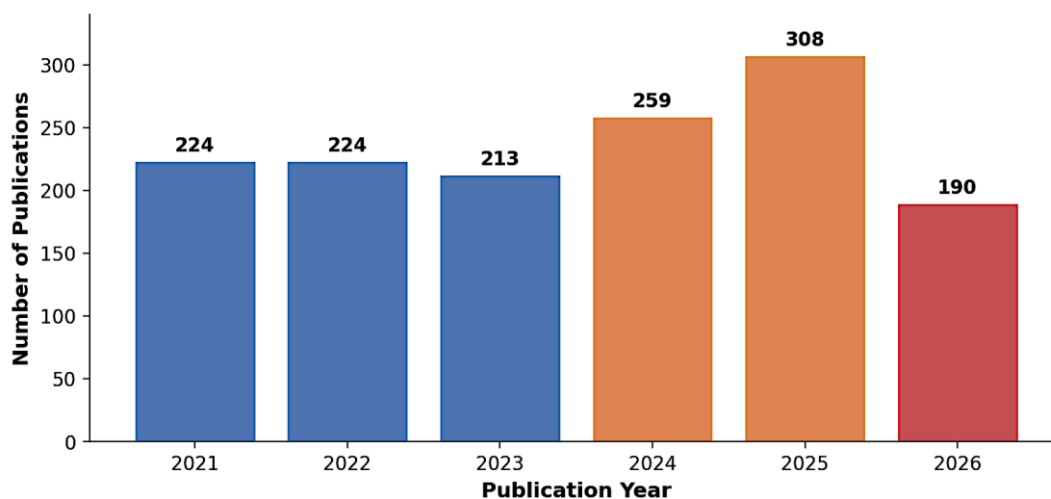
Table 4. Study Classification by Theme and Method

Author(s) & Year	Research Design	Theme / Focus	Technology / Platform	Commercial Mechanism	Primary Outcome
Zhang & Sun (2024)	Analytical model	Business-model transformation	Online fitness platform	Joint course pricing	Revenue optimization
Riedl & Pauwels (2025)	Field experiment	Engagement engineering	Health & fitness app	Subscription retention	Increased exercise
Ehrlén (2021)	Mixed methods	Datafied self-tracking	Wearable + sharing platform	Data-driven engagement	Communal & self value
Qermane & Mancha (2021)	Case study	Platform pivot (device→SaaS)	Wearable ecosystem	Subscription SaaS	Business resilience
Feng et al. (2025)	Experiments	Para-social relationships	Virtual trainers / avatars	Relational lock-in	Continued use
Wang et al. (2024)	SEM survey	Value co-creation	Fitness app	Co-created value	Flow & co-creation
Chang et al. (2023)	SEM survey	Technology adoption	Fitness app (sports centers)	Adoption for services	Behavioral intention
Wu et al. (2025)	SEM survey	Social comparison	Fitness app	Social feature design	Continuous use
Yamini & Gajanand (2025)	Qualitative	Customer acquisition	Virtual fitness community	Advertising & social proof	Acquisition drivers
Sharma et al. (2024)	SEM-ML hybrid	Continuance intention	Health & fitness app	Retention monetization	Continued usage

Analytical classification of included studies by design, theme, platform, commercial mechanism, and outcome.

The results in table 4 reveal, in fact, quite a neat structure of the industry where three main business models are repeatedly observed: one is through a direct form of monetization such as subscriptions and pricing (Zhang & Sun, 2024; Qermane & Mancha, 2021; Sharma et al., 2024); second, the engagement engineering that guarantees recurring revenue (Riedl & Pauwels, 2025; Wu et al., 2025); and third, relational or co-creative lock-in that gets customers committed to the environment (Feng et al., 2025; Wang et al., 2024; Ehrlén, 2021). This categorization perfectly mirrors the way we have synthesized the themes in relation to the three research questions.

Importantly, these commercialization patterns emerged consistently across studies employing different methodological approaches. The convergence of findings from analytical modelling, experimental research, survey-based studies, and qualitative investigations increases confidence that the identified commercialization mechanisms are robust rather than being artifacts of a single research design. Such methodological triangulation strengthens the validity of the thematic synthesis.



Note. 2026 reflects a partial-year count at the search execution date. $n = 1,418$ records.

Figure 2. Annual publication trend across the retrieved corpus ($n = 1,418$)

Figure 2 shows how the research field as a whole has changed over time. The number of new works went up continuously from 224 works in 2021 to a high of 308 new works in 2025, and then the partial-count of 2026. The growth trend especially the picking of speed at the end of 2023 probably follows a general revival of face-to-face participation that happened with platforms. The pattern also means the scholarly world's interest and research in the issue of how to turn sport into a money-making online industry is growing faster than it was previously thought so the trend does support the review's idea that it is a very fast-paced but up-to-date area which requires a thorough study (Kenney & Zysman, 2016; van Dijck et al., 2018).

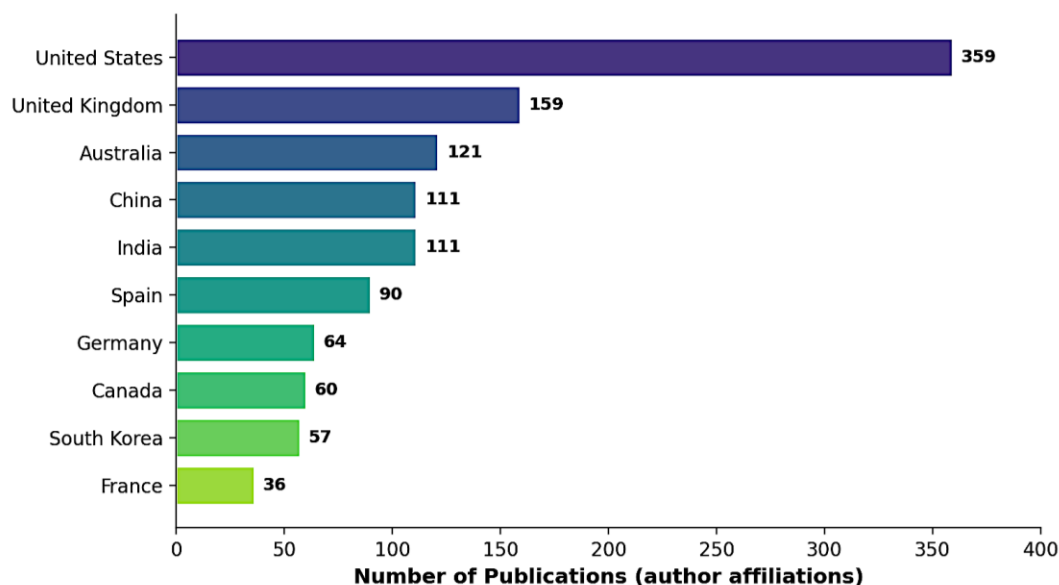


Figure 3. Top ten contributing countries by author affiliation across the retrieved corpus

Figure 3 presents how much research production was geographically spread out. As the top contributors we first have the United States having 359 publications, United Kingdom 159, Australia 121, and then China followed by India with 111 each. From a look at the high output in areas that have very good economy and very digitized markets it is evident that our current information is mainly based on the platform economy of the Global North with, comparatively speaking, the rapid digitalizing areas of the Global South being less represented. This geographic bias calls for a caution in interpreting: business commercialization patterns found in developed markets could be very different from those with differing infrastructural, legal, and cultural settings.

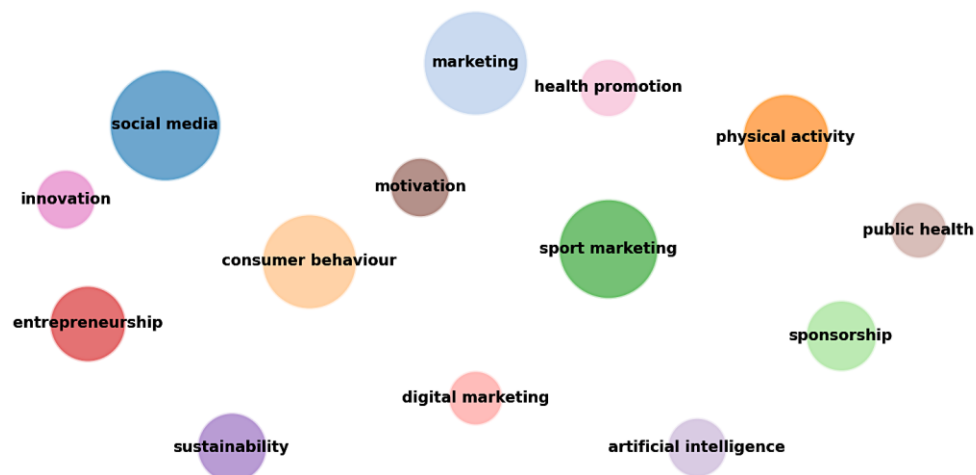


Figure 4. Author-keyword co-occurrence clusters; bubble size is proportional to term frequency

Figure 4 presents a visual overview of the theoretical framework of the discipline through author-keyword co-occurrence. The most recurrent words social media, marketing, sport marketing, consumer behaviour, physical activity are located at the core of the intersection of commercial communication and participation, whereas the neighbouring nodes sponsors, entrepreneurship, sustainable development and artificial intelligence are markers of research themes' expansion. That the vocabulary related to consumer and marketing is so dominant shows quite clearly that commercialization is a major issue, not a minor side issue, for the literature review and that critical sociological concepts (such as surveillance, datafication, social capital) are relatively few exactly the sort of imbalance this survey aims to correct (Millington & Millington, 2015; Lupton, 2016).

The study identifies subscription and freemium-based revenue models as the leading ways of monetizing platform-driven engagement. Qermane and Mancha (2021) explain how a wearable devices company on purpose went from single device selling to a recurring Revenue from Software-as-a-service which is, in effect, a change reflecting the platform idea of changing episodal transactions into relationships that are continuous and very data-rich. (Srnicsek, 2017; Sundararajan, 2016) Zhang and Sun (2024) at market level introduce a supplementary mechanism: they present the case of fitness clubs turning into platforms that also offer joint pricing strategy with reputable coaches as a way to get maximum sales-revenue of the courses, which exemplifies the platform economy's multi-sided coordination nature (Rochet & Tirole, 2003; Parker et al., 2016).

The second mechanism is the engineering of engagement that serves revenue protection in a way quite different from the first one. Since the subscription mode thrivers on retention, platforms have been rolling out behavior-orientated designs quite a lot in order to avoid the loss of users mentioned by Riedl and Pauwels (2025) as the main threat to the revenue of app-based services. Their randomized field experiment proves that the use of in-app demo videos leads to an increase in workout motivation especially among the weaker users therefore directly catering to the commercial need of the platforms to have the same user over and over again. Wu et al., (2025) and Sharma et al., (2024) also support this view by showing through their studies that the inclusion of features based on social comparisons, the motivation via enjoyment and the valuation of one's health is predictive of a user's continuance which platforms define monetization as retention-based (Eckhardt et al., 2019).

Another, more elusive way that participation gets turned into a commodity involves data on activity participation and social relationships. According to Ehrlén (2021), even just sharing exercise data that one tracks oneself results in platforms taking away the communal and motivational benefits by collecting and recirculating them. At the same time, Yamini and Gajanand (2025) point out how ad campaigns and social proof transform community engagement into new customers. Throughout these works, it is clear that commercialization takes place not only in the form of charging fees openly but also in the way platforms transform movement, sociability, and personal knowledge into valuable assets that can be enclosed within their value chains (Zuboff, 2019; Ruckenstein & Schüll, 2017). Altogether, we have identified three components recurring monetization, engagement engineering, and datafied enclosure that answer Research Question 1.

In answering the second question, our analysis shows participants co-create rather than just receive platform value in line with service-dominant logic (Vargo & Lusch, 2004, 2016). Wang et al. (2024) provide evidence that customer knowledge management increases value co-creation through fitness apps, with flow experience serving a psychologically mediating state, thereby, users are seen as active resource-integrators whose data and effort are operative resources for the platform (Woratschek et al., 2014). It is a fundamental concept shift of participation from the standpoint of the consumer to that of a co-producer with consequences for understanding and distribution of commercial value.

Further, the authors have demonstrated that the use of virtual trainers with a human-like appearance generates parasocial relations that are defined by perceived intimacy, skill, and companionship, and which then motivate users' intentions to persist in commercial online fitness service use. Relational lock-in as a concept further adds new dimension to consumer-brand relationships research that mainly deals with how brands and experiences become parts of consumers' identities and routines. For instance, it was through consumer-culture research that such a shift became possible by showing the mechanisms through which brands and experiences gradually get into consumers' identities and behaviors (Belk, 2013; Holt, 2002; Kim, & Trail, 2011). The social features of fitness apps that Wu et al. (2025) described have a similar effect, they exploit social comparison and peer support to change individual exercise into a connected, habitual practice (Shove et al., 2012; Warde, 2005; Reckwitz, 2002).

The investigation of adoption and continuance unveils what conditions lead to co-creation. According to Chang et al. (2023), tech preparedness and task, technology fit drive fitness-app adoption among commercial sports centers. Sharma et al. (2024), on the other hand, demonstrate that hedonic and health-valuation motives drive continued usage. These discoveries show that co-creation is a complex process that is not only determined by individual dispositions but also by the contextual fit and the emotional quality of the overall experience (Funk, 2018; Yoshida, 2023; Trail & James, 2001). RQ2 is therefore addressed via synthesising a conceptual explanation that combines the effect of datafication knowledge sharing, pararelationship-building, and motivational fit together which maintain the level of engagement on platform commercialization depends.

Focusing now on RQ3, the findings reveal that platform-mediated commercialization is fundamentally ambivalent. On the one hand platforms, by removing the barriers of entry, offering tailored guidance, and making expertise available beyond physical gyms, they are making it easy, and in this way, they are giving access to different ways of participating in fitness activities (Chang et al., 2023; Yamini & Gajanand, 2025). Ehrlén (2021) demonstrates that networked self-tracking can produce real social support and communities. That way, commercialized platforms may, under certain conditions, help generate the types of bridging and bonding social capital which have, until recently, been attributed to sport participation (Putnam, 2000; Nicholson & Hoyer, 2008; Zhou & Kaplanidou, 2018).

The other side of the coin, however, is that the very same mechanisms also increase surveillance, self-monitoring, and the market logics invading leisure activities at an unprecedented level. Data processing underlying commercial exploitation subjects users simultaneously to continuous tracking and evaluation, which critical research connects to intensified discipline of self, worry, and reshaping of naturally occurring action into an activity that must be done perfectly (Millington & Millington, 2015; Lupton, 2016; Esmonde, 2020). In light of it, engagement-engineering strategies employed mainly for retention purposes (Riedl & Pauwels, 2025; Wu et al., 2025) might be, among other interpretations, seen as behavioral manipulation that puts platform's interests in the first place at the expense of user's freedom in deciding how, when and what they like to do on their personal time (Zuboff, 2019).

The consequences of equity arise because field has an economic and geographic structure. As we see in Figure 2, evidence and likely most commercial platforms are based in high-income countries. This suggests the possibility of a participation divide that is, the benefits of platform-mediated fitness might not be equally shared across socioeconomic or regional lines (Silk & Andrews, 2012; Schor & Vallas, 2021). Furthermore, the commercialization of participation can lead to the displacement of sport outside the market and the provision of sporting facilities by the public, which might also concern the study of the sports sociology dealing with access and inclusion (Gammelsæter, 2021; Coleman, 1988; Bourdieu, 1986). So RQ3 is addressed by a dual explanation: On one hand, commercialization opens up more access and on the other hand, it intensifies surveillance. Thus, its social net value is ultimately a matter of governance that still awaits a thorough theoretical treatment in the literature.

Looking at different research methods used in the literature helps to highlight not only their advantages but also their shortcomings as a framework to work with. Structural equation modeling based on surveys is mainly used (Chang et al., 2023; Wang et al., 2024; Wu et al., 2025; Sharma et al., 2024) and it provides solid statistical work along with clear constructs although it favors static explanations of intention over those longitudinal or

those explaining behavioral outcomes. The randomized field trial of Riedl and Pauwels (2025) as well as the analytical pricing model of Zhang and Sun (2024) offer methodologically less common designs that can better estimate causality and economics, indicating a shift beyond acceptance models and interest in decentralized and blockchain-based value models in sports (Naraine, 2019). Qualitative and case-based research (e.g. Ehrlén, 2021; or Qermane & Mancha, 2021) brings the necessary contextual knowledge although such approaches are rarely the basis for publishing and, therefore, the area is limited in developing theories regarding meaning, power, and daily life. The major problem from an instrumentation point of view is that intention, as self-reported, is the measure used, rather than actual participation observed or performance, that issue being quite common and it is something future research will need to focus on (Snyder, 2019).

In sum, the research results reveal that the platform economy turns sport involvement into a marketable commodity by converting isolated, often non-revenue generating activities into ongoing, data-saturated, and income-generating relationships. Under this perspective, commercialization of sport is no longer viewed through the lens of professional-level sports as entertainment and is now seen as the body movement-related physical activities of regular people whose subscription, interaction, and generation of data are the ways of value extraction. In the end, a new commercial type is developed wherein the participant is the customer, co-producer

Theoretically, the work is an integrating account that brings together three traditions that previously had to be treated separately. The logic of platform capitalism reveals the structural push toward recurrent, multi-party value capture (Srnicsek, 2017; Rochet & Tirole, 2003); service-dominant logic elucidates participant enrolment as co-producers of value (Vargo & Lusch, 2016; Woratschek et al., 2014); while consumer culture theory combined with sociology of self-tracking explains how turned into commercial activity participation becomes meaningful, related to identity, and self-disciplining (Arnould & Thompson, 2005; Lupton, 2016). The fusion here enhances sports management research by introducing a terminology appropriate for the platform-mediated form of commercialization.

Practically, the results give something one could do. For operators, findings reveal that sustainable monetization depends more on designing for engagement, co-creation, and relational value than on a transactional pricing strategy (Feng et al., 2025; Wang et al., 2024). Regarding coaches and providers, they say that platform transformation reconfigures rather than eliminates professional expertise, that one which can be repositioned as a premium, brandable input (Zhang & Sun, 2024; Qermane & Mancha, 2021). At the level of policies, these findings show the importance of data-governance and equity safeguards for commercialization so that it promotes rather than hinders population participation (Nicholson & Hoyer, 2008).

Contrary to the way earlier literature has often either focused solely on the issue of fitness-apps' adoption or sport-marketing communication (Filo et al., 2015), this review is unique because it brings together commercialization processes, value co-creation, and the social effects of a phenomenon under one theoretically integrated framework. Here, the contradictions of the literature (e.g., instrumental accounts that are enthusiastic about digital engagement vs. those that are critically-minded and that view the issue as a form of problematized surveillance) are interpreted as two faces of the same datafied mechanism whose meaning is primarily determined by governance and design rather than by the technological features of the digital devices themselves.

Three research gaps are clearly visible. Firstly, very little research has been done about platform commercialisation effect on participation, whether it will encourage participation in the future or the opposite. Secondly, the lack of critically and/or Global South perspectives means that the equity and power aspects remain under-theorised. Thirdly, the study of financial and market-structural drivers in platform competition in participatory sport is rather limited. In view of its limitations, the review must point out that relying on a single source (the Scopus database) might miss out on relevant work that are indexed elsewhere; the restriction to articles written in English and peer reviewed introduces a selection bias; and despite the rigorous sampling method applied, the rather small final sample may restrict the generalisation of the findings.

One tangible future line for investigation would be to carry out, over time and through controlled, real-world experiments, the impact (or lack thereof) of platform commercialization on participation longevity and health outcomes. Also, cross-country studies in the Global South would be useful to explore the role of the physical and regulatory environment in shaping commercialization and fairness. Furthermore, a critical and mixed-method research approach can be carried out to find out how platforms are governed at data level, how people are steered by algorithms, and how value is redistributed between them and their users (Zuboff, 2019; Schor & Vallas, 2021). Altogether, monetization via recurring sales, engagement engineering, and a data-mediated fence will answer RQ1. Co-created, para-social, and motivationally matched engagement will respond to RQ2. An increase in the number of people reached through these platforms but also greater surveillance and inequality at the same time will answer RQ3.

Conclusions

In this qualitative study, the authors compiled empirical evidence about how sport participation is being monetized on digital platforms, which include a blend of ten studies that are the outcome of a literature search (1418 initial records) with a PRISMA 2020 process. The answer to the first research question is that commercialization of participation is achieved through digital platform monetization through subscription and freemium models, retention is ensured through engagement engineering, and the commercialization of data-based movements and interactions in platform value chains are described as a method of datafied enclosure. To respond to the second question, it was found that customers and providers together create the value with the continuous use of knowledge that is exchanged, and para-social relationships with virtual coaches and human coaches, as well as matching motivation with offerings, all of which are drivers to value sustaining in the digital fitness space. The answer to the third question is that the commercialization of sports is quite a contradictory phenomenon which on one hand facilitates the availability of coaching, community services to a broader population whereas on the other it increases the exposure for surveillance, internal self-monitoring, and the adoption of market logic within the previously non-commercial free-time which could ultimately threaten equity as this development is mainly concentrated in high income countries. The novelty is that the article presents a model, which is a combination of a service-dominant, a consumer-centric and platform capitalism concept that serves as a model to explain digital platform participation. It also is a guidance, in practice, on how to design a fair, user-oriented and well-regulated digital fitness offering model that will serve operators, fitness coaches and policymakers. The authors, however, acknowledge that their study is restricted to the use of one database (Scopus), English-speaking articles only, those papers which passed peer review, that, and that final sample turned out to be small enough to raise some concerns about the conclusions. Even so, it can be said that there is a basis for the commercialization of everyday sports in the paper's results. quality appraisal procedures. The article's conclusion is to suggest a research agenda focused on studies conducted over an extended period, critical and global south research perspectives on the commercialization of sport.

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