

Digital Transformation of Sports Entities by 2025:

What will it look like?

Based on GSIC Members Survey

June 2019

GSIC

Global Sports Innovation Center

Powered by  Microsoft

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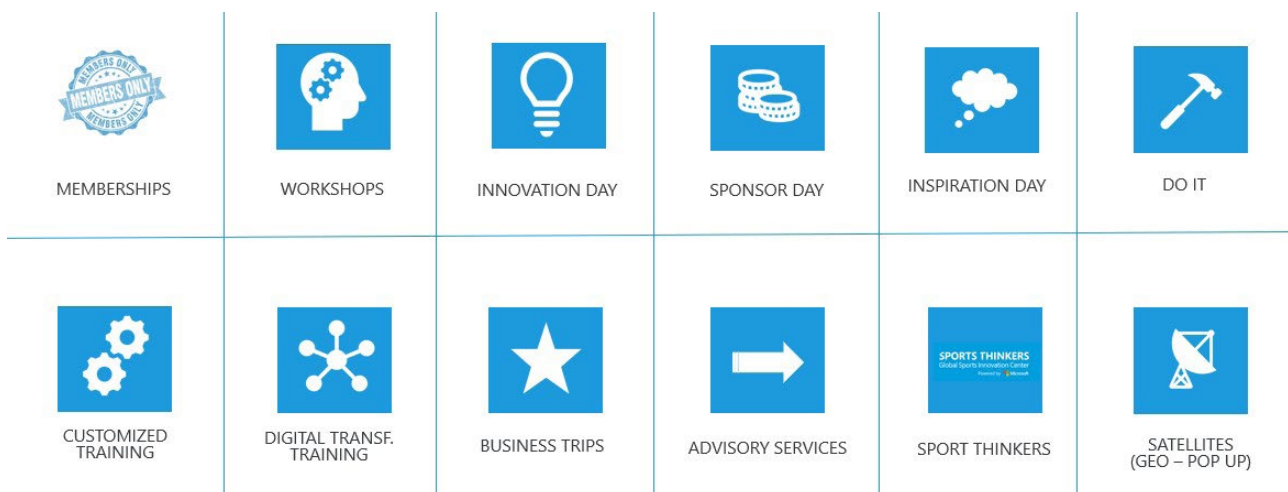
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ABOUT GSIC POWERED BY MICROSOFT

The **Global Sports Innovation Center powered by Microsoft (GSIC)** is the center of innovation in sport, a pioneer in Europe, which focuses exclusively on bringing the latest advances in technology to all areas of the sports industry.

Since the GSIC opened its doors in May 2015, its goal has been to create a wide and inclusive international ecosystem composed of entrepreneurs, universities and institutions, which, through the Center, can generate synergies, new projects and products, and of course businesses, in an atmosphere of co-creation, cooperation and innovation.

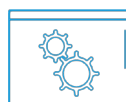
The purpose of the GSIC is to support sports companies and organizations in order to foster projects and activities that strengthen sports industry and also enable people to achieve a better quality of life, both through the experience of sport itself (professional and amateur) and as viewers. The Center represents a space where the experience ecosystem is developed, enabling innovation and the establishment of technologies in sports services, devices and venues.



For the past four years the GSIC has been creating a wide ecosystem composed by tech based companies, sports entities, institutions, industry professionals and stakeholders. By now GSIC counts with over **200 members from 32 countries** related to a wide range of activities (performance, health, training, IT, eSports, smart stadium, fan engagement, etc).

GSIC projects have an international scope that have allowed us to produce a greater global impact within the sports industry and reaffirmed our position as an open innovation center that has the largest network of associates and the best experts in the industry.

GSIC's philosophy is based on **5 pillars**: networking, startups and companies, showcase, applied research and innovation, Microsoft Solutions. These are the categories that the Center is working on with its associates and partners to power the sports industry all around the world.



The 5 Pillars

NETWORKING



The GSIC has created an international network of members to improve business opportunities, memberships, identification of synergies, B2B and B2C opportunities, and internationalization. It is a meeting point for supply and demand in real time.

The Center has environments and collaborative spaces that unite companies linked to the sports sector, technology companies, entrepreneurs and universities. Also, GSIC actively promotes events of interest to its members and facilitates the participation of all types of entities, public and private, thus enhancing the synergies between the different agents of the sports industry.

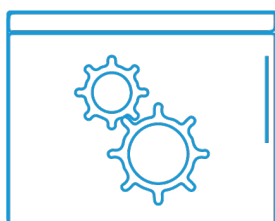
STARTUPS AND TRAINING



Entrepreneurs in the sports sector receive GSIC support as they grow, expert mentoring and technical advice, connections with large companies and global brands, as well as access to Microsoft technology at no cost.

Thanks to the BizSpark program, startups have access to legal advice, training, and use of Microsoft technology tools at zero cost during their first years. In addition, at the Center they can find the opportunity to participate in knowledge transfer, advice and validation events for their proposals, as well as potential investors and access to participation in acceleration programs.

APPLIED RESEARCH AND INNOVATION



The Center offers support to research aimed at identifying needs and opportunities in sport and the development of effective and viable solutions, in collaboration with public and private institutions, as well as knowledge transfer through connections, conferences, and virtual meetings.

Through its members, GSIC promotes collaboration in any business activity linked to sport and the university-company relationship, as well as the dissemination of knowledge about the most innovative technologies and trends.

SHOWCASE



GSIC offers an exhibition space open to the public where visitors can experience the technological innovations developed by GSIC members: technology in sports, health and fitness, fan engagement, performance and the next generation of digital consumer experiences.

Also, this area offers GSIC members a space of high visibility for their solutions for their potential customers.

MICROSOFT SOLUTIONS



GSIC has been supported by Microsoft Sports within Microsoft Applied Innovation corporate team, seeking the growth of the sports industry and its digitalization.

This strong partnership allows GSIC to prescribe Microsoft Solutions and offer its members the possibility of becoming part of the Microsoft partners ecosystem.

Based on the pillars mentioned above, GSIC develops series of activities for its network in order to contribute to the entire sector. Those activities are aimed to understand the starting point and the needs of sports entities, prescribe solutions created by GSIC members, reduce the gap between technological companies and sports entities, create new business opportunities and educate active and future professionals in digital transformation processes.

Introduction

Bearing in mind that GSIC aims to connect innovation to the sports industry and improve its value chain through different activities, the Center has conducted a survey between January and April 2019 in order to have a better understanding of what are the challenges and trends for the sports industry moving forward (vision 2025).

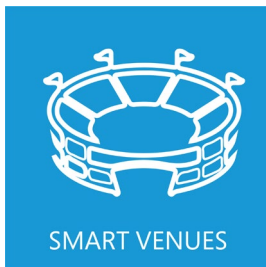
A wide variety of sports industry stakeholders -all of them members of GSIC- have given their approach in terms of how they envision the future of sports worldwide through digital innovation, which has led to the following collective opinion presented in this report.

Therefore, this document derives into several insights in five main areas that adress sports industry scenarios where GSIC members operate and an overall vision that they have on it:



Overall vision of the future of the sports industry

The report provides an overview of what will be the next trends in the **sports industry** from an economic and social perspective, and what will be the main challenges to tackle by 2025 in each of the transformation areas analyzed.



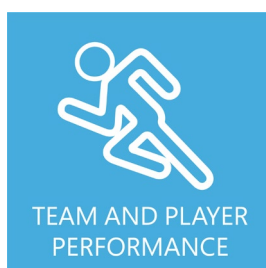
Smart venue

Experts state that digital solutions are being highly adopted in sports venues to transform the fans' journey in all the different customer touchpoints. In that sense, this report gives a snapshot of what are the main innovative digital assets that will be incorporated in smart venues to not only enhance fan experience but also increase profitability and security.



Fan engagement

The proliferation of new digital platforms allows sports entities to have a better understanding of attendee's profiles, improve customer targeting and create personalized experiences. This document shows how tapping into innovative digital technologies can boost fan engagement throughout the match-day (before, during and after the game).



Team and athlete performance

According to respondents, not only fans will be directly benefited from the use of technology, but athletes and teams will see their performance improve through wearables and sensors data gathering. This report explores different ways in which technological innovation can provide greater insight into athletes' performance.



Business insights and productivity

As technology advances, sports businesses will have to adapt and transform their processes in order to leverage on new opportunities.

Experts have shared how different technological solutions will boost business productivity by 2025.



eSports

eSports have grown drastically over the past few years and have become a global phenomenon.

This report delves into the different key growth areas in the near future both from a consumer and a business perspective.

This survey should be understood as the first of a series that GSIC will put together every year and share with the rest of the sport and innovation ecosystem in order to gain knowledge and foster further innovations and initiatives.

In fact, the following reports will provide further insights on the different domains that are shaping the future of the sports industry (fan engagement, smart stadiums, business insights and productivity, team and athlete performance and eSports).

GSIC would like to thank all the 55 professionals that have participated in this report.

SURVEY CONTENT

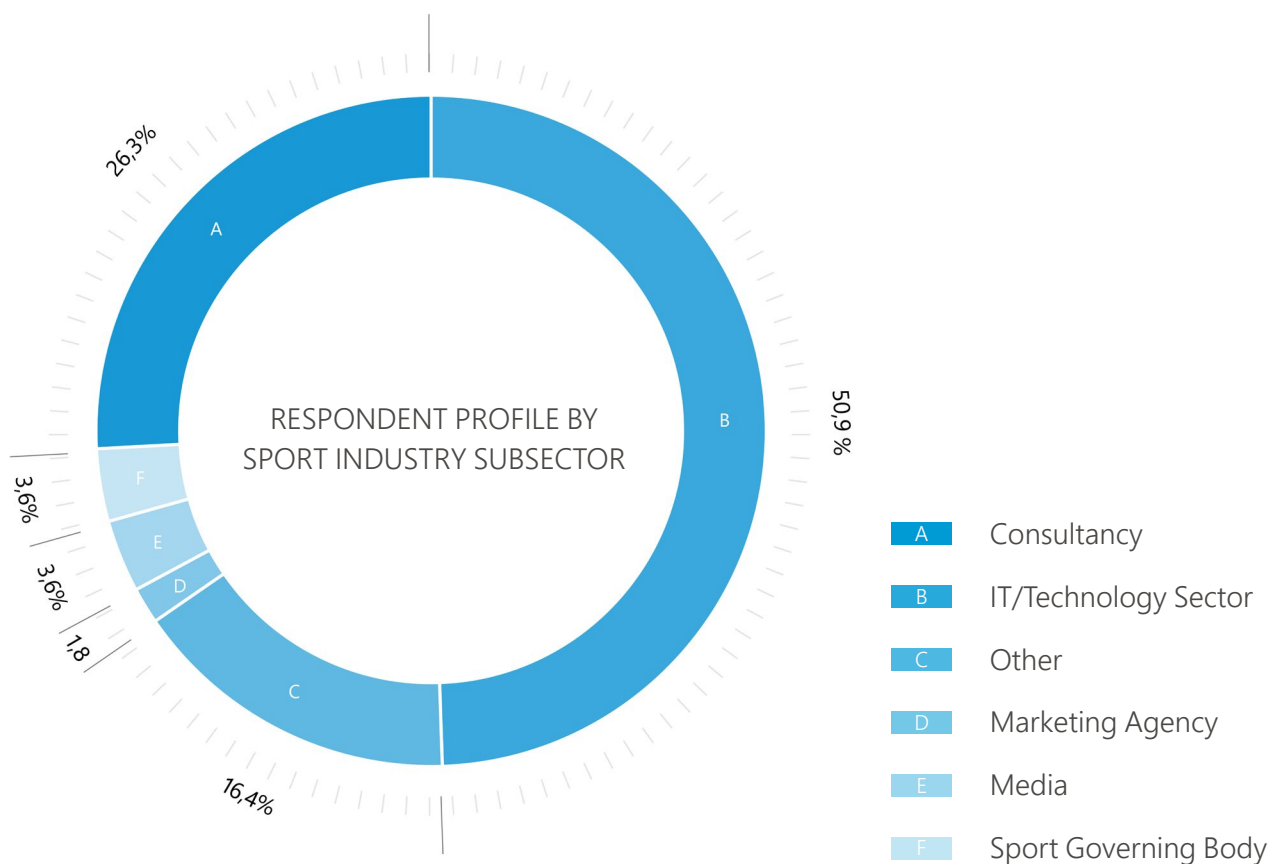
Survey Methodology

Respondents were asked to rank in a scale of 1 (minimum – totally disagree) to 7 (maximum – totally agree) several statements for the industry moving forward in the 6 main areas mentioned before:

01. Overall vision.	04. Team and athlete performance.
02. Smart venues.	05. Business insights and productivity.
03. Fan engagement.	06. eSports.

Respondents profile by sports industry sub-sector

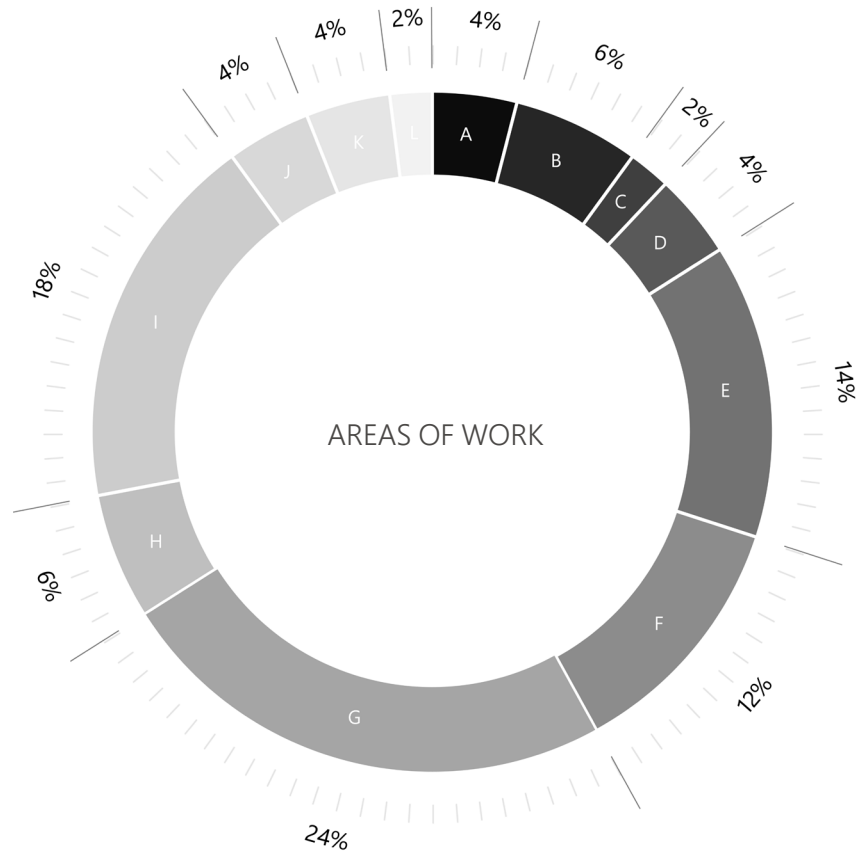
55 industry's experts answered the survey and most of the respondents are working in the IT/technology (50.9%) and consultancy (26.3%) sectors.



Among the respondents there are companies who are working on solutions in analytics, coaching and fitness systems, eCommerce and ticketing, eSports, fan experience, institutions, educational establishments, management and optimization systems, media, systems integration, consultancy, investment, team and player performance areas.

These are working areas that compose GSIC network and the main number of respondents belong to Management and Optimization Systems working area (24%) which is also representative in terms of main sector's trends as we can find out further in this report.

- A** Analytics
- B** Coaching & Fitness system
- C** eCommerce & Ticketing
- D** eSport
- E** Fan Experience
- F** Institutions & Education and Events
- G** Management and Optimization System
- H** Media
- I** System integrators/ Consultants / Investment
- J** Team & Player Performance
- K** VR/AR/MR
- L** Wearables and Smart Devices



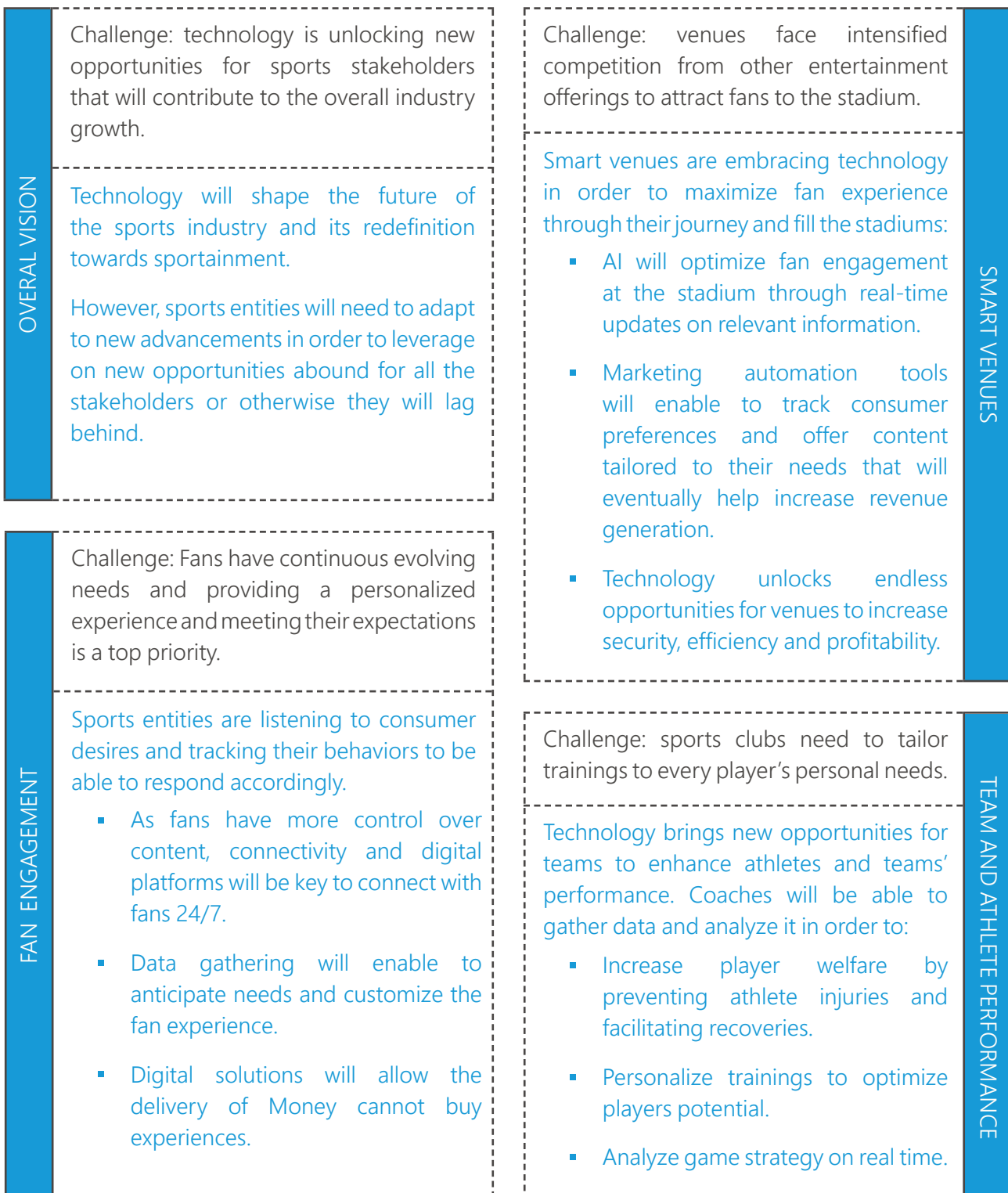
Apart from the survey results, this report provides complementary information from secondary research related to the areas analyzed in the document.

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EXECUTIVE SUMMARY

The accelerating digital transformation is being a key driver for growth in the sports industry. Currently, sports stakeholders are adopting new technologies in order to keep pace with the industry trends and face emerging challenges. Therefore, GSIC members envision a fascinating future for the industry in six main areas:



BUSINESS INSIGHTS AND PRODUCTIVITY	<p>Challenge: As technology advances, it is bringing new opportunities for businesses and they will need to capitalize on data gathering and analyzing tools in order to keep pace with the industry's evolution.</p>	eSPORTS
	<p>Sport entities will embrace technology at the center of their operations, in all the different business processes.</p> <p>One of the key priorities in the future will consist on being able to use all the data that technology can provide in order to improve business productivity and efficiency. New tools such as machine learning will come to facilitate the process and give insights on teams' performance and fan engagement.</p>	
	<p>Challenge: Despite eSports popularity, they still have top priorities to tackle such as monetization or legal framework and governing bodies establishment in order to close the gap with traditional sports.</p>	
	<p>eSports have seen tremendous growth over the past few years and are expected to keep increasing from a consumer and from a business perspective.</p> <p>Its rising popularity worldwide is shaping eSports towards a more mature market through the development of new league formats and new monetization capabilities which bring increasing opportunities for all the different stakeholders.</p>	

In summary, digital transformation is a key component of sports business.

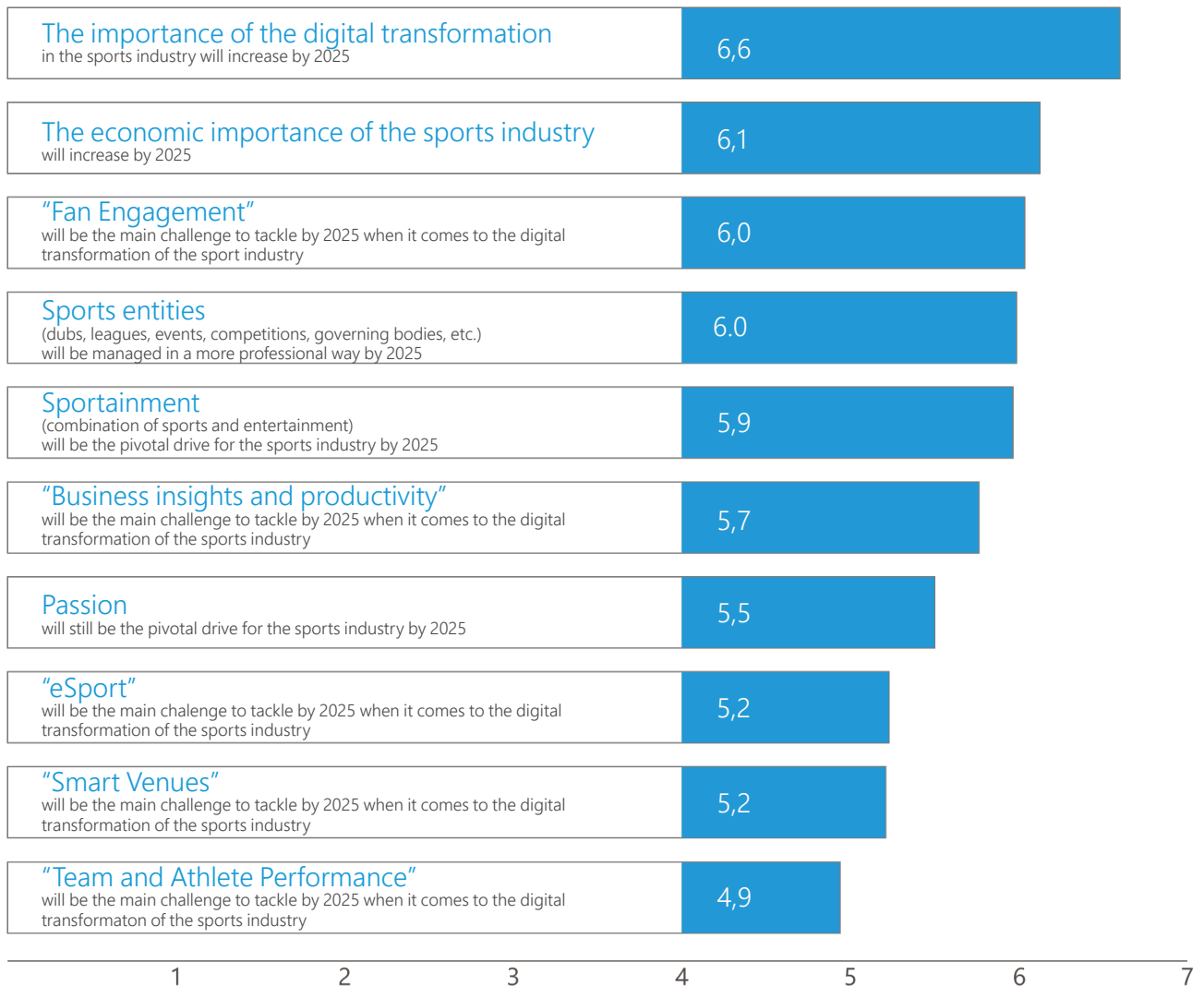


0.1 OVERALL VISION

Key takeaways for the Sports Industry Moving Forward (Vision 2025)

- The economic value of the sports industry will increase by 2025 and new broadcasting formats and sponsorship are the main expected contributors to the overall industry growth.
- Technology will shape the future of the sports industry as the accelerating digital transformation brings more opportunities for sports entities. However, organizations will need to capitalize on the new innovative tools and adapt their business models to keep pace with the industry trends.
- Technology has also brought consumers easy access to product or service information across digital channels. As fans become better informed, they also turn up to be more critical, more demanding and more powerful on their consumption decisions. Therefore, raising fan engagement will be one of the main challenges to tackle over by 2025 and one of the main priorities to strengthen bonds with them.
- Sports have merged with entertainment to create “Sportainment”. This brings new business opportunities, but sports organizations will have to create valuable experiences and differentiate themselves in order to face increasing competition from other entertainment formats.

Survey Results



Overall Vision of the Future of Sport's Industry

The sports industry is a wide-reaching business that accounts for 1.5% - 2% of the world's GDP. The business ecosystem features different stakeholders such as the sports properties (meaning leagues, federations, clubs and athletes), sponsors, broadcasters, public sector, investors and agencies (between others) that contribute to the industry's continuing growth.

In fact, respondents believe that, for sure, the economic importance of the sports industry will keep increasing in the future and they identify that technology will have a pivotal role as one of the first key drivers of growth by 2025 (when asked about which factor would have a greater impact in the sports industry in the future, respondents ranked the digital transformation first).

The economic importance of the sports industry will increase by 2025

According to PwC, **broadcasting and sponsorship** will be the main contributors to the overall industry growth as new digital solutions bring more opportunities and make their business models evolve.

Actually, emerging OTT platforms bring increasing competition to the traditional TV segment and are projected to be the fastest growing revenue stream (e.g. Dazn). What's more, the appearance of **new innovative advertising solutions** and the adoption of new capabilities to create **direct-to-consumer and personalized digital content**, will play a major role in the growth of sponsorship's contribution to the sports industry. Actually, brands will increasingly be able to develop more efficient sponsorship strategies and use the technology available to deliver personalized experiences to their target audience and increase loyalty.

Besides, given that improvements in technology have provided consumers both with more alternative entertainment offerings and with more access to information (regarding price comparisons, ratings, reviews, etc.), fans have become more powerful and demanding in their consumption choices. Due to this broad availability of different leisure options and decreasing fan commitment, respondents believe that the merger of sports with entertainment towards the creation of **"Sportainment"** will also be one of the pivotal drives for the sports industry over the next decade. However, although the development of Sportainment provides new business opportunities to the industry participants, it also puts pressure from intensified competition in other territories (sports, music, art, etc.) to achieve consumer attention.

Actually, when asked about the main challenge to tackle by 2025 when it comes to the digital transformation of the sports industry, respondents pointed that boosting **"fan engagement"** is the top priority (average grade of 6/7) in order to build loyal fan bases and outpace those alternative offerings.



Bearing this in mind, respondents believe that sports properties (meaning clubs, leagues, events, competitions, governing bodies, etc.) will be managed in a more professional way by 2025 from a sporting, commercial and business perspective. Technological innovations will have a pivotal role in it as they will allow sports businesses to develop new capabilities that help them:

- Gain a deeper understanding of new fans preferences and consumption patterns and create content tailored to their interests.
- Gain further knowledge of the teams and athlete's performance and use this information to maximize their potential.
- Adapt to the sports changing environment in every subarea: finance, marketing and communication, commerce and licensing, facilities, etc. As sports clubs are facing objectives that go beyond reaching sporting success, they are demanding new organizational structures that lead these entities to be considered as businesses.

In that sense, GSIC members consider that "business insights and productivity" will be one of the main challenges to tackle by 2025, as businesses will have to be able to adapt to the current digital transformation and adopt all the different tools that technology brings in order to be able to keep being competitive in the market.

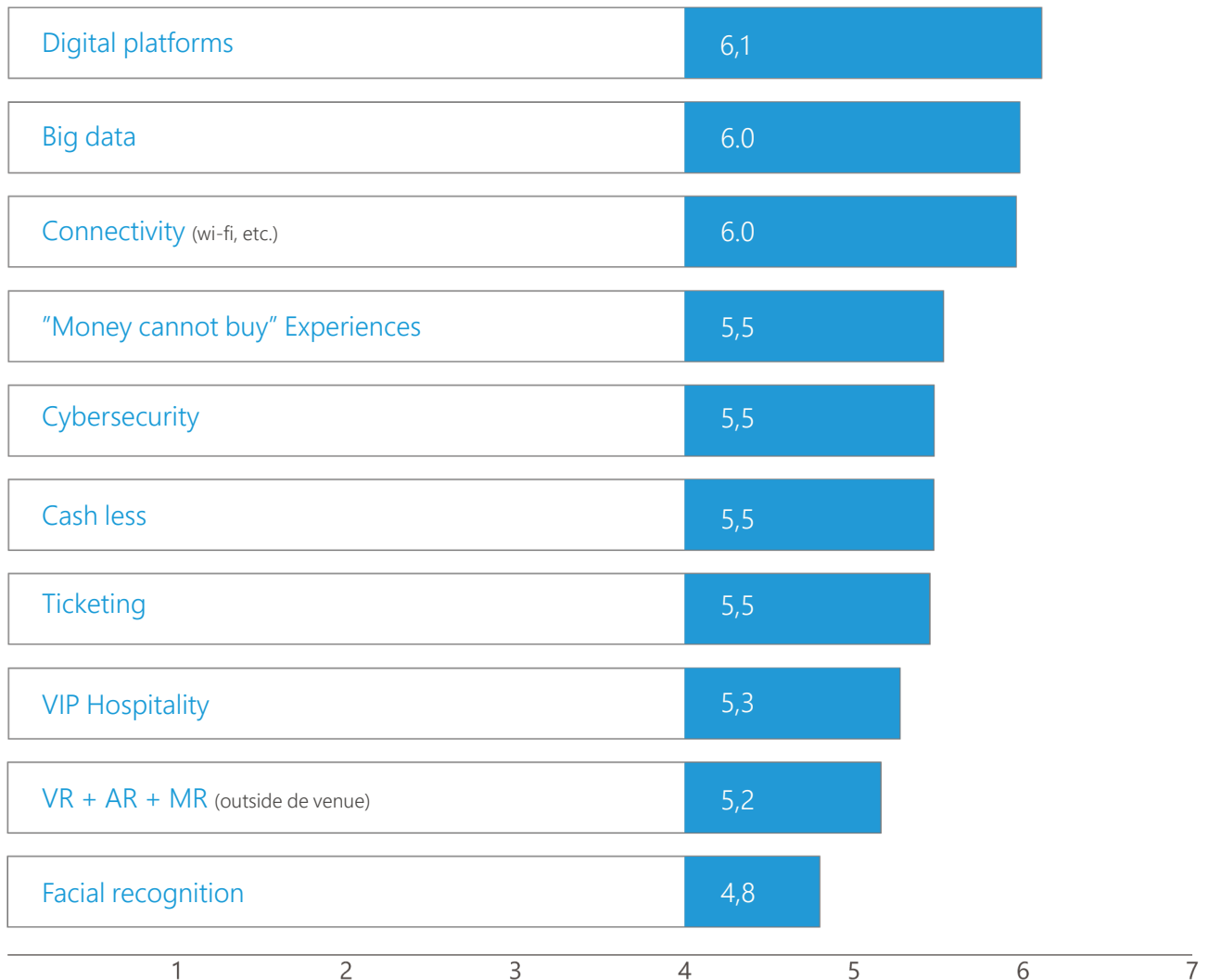


0.2 SMART VENUES

Key takeaways for Smart Venues

- Sports venues will adopt new technology innovations in order to attract fans to the stadium and outpace other entertainment formats (e.g in-home game watching or videogames).
- The top 3 innovative solutions in smart venues will be: the use of big data to gain a deep understanding of consumers, the appearance of digital platforms that allow the creation of automated personalized content, and the optimization of connectivity in-stadium.
- Digital platforms will have a pivotal role to maximize the fan experience in all the different touchpoints (inside and outside the venue). In particular, digital innovations will optimize stadium accessibility and convenience while improving the fan journey.
- Sports entities will embrace big data and new digital capabilities to track consumers behavior, understand their preferences and offer value-added services to them.

Survey Results



Smart Venues by 2025

Nowadays, stadiums and venues face an important and increasing challenge which is incremental competition from other entertainment formats to attract fans attendance and attention. The proliferation of new platforms through which sports can be quickly and easily consumed at home (e.g. OTT, "social media networks", athletes' own generated content, etc.) has led to the need for clubs (and other sport properties) to create differentiating experiences that compel fans to fill the stadiums, especially in the case of non-avid fans which are not that interested in the game alone and will need further stimulus to attend the games or otherwise, they will switch to other entertainment offering that better suit their preferences.

According to the survey's respondents, technology advancements are key to provide the maximum satisfaction to attendants in all the different interaction touchpoints in-stadium and out-of-stadium. In fact, the fan journey starts when a person gets ready to attend the venue and finishes when that person leaves.

Everything that happens before, during and after the match is critical for the overall fans' satisfaction.

Taking that into account, the 4-ring model (created by SPSG Consulting) divides stadiums in four different zones where each of them has a strong influence on the fan experience. Therefore, every single layer should be considered and optimized in order to maximize fan satisfaction:

Smart stadiums will maximize the fan satisfaction in all the interaction touchpoints

- **Ring 1 (R1):** Area inside the stadium arena, where the action takes place. The quality of the match and the ambience are the main factors that have an effect on the fan experience.
- **Ring 2 (R2):** Area inside the stadium but outside the court (e.g fan zones, indoor parking, restaurants and shops within the venue). In this layer, fan experience is influenced by other stakeholders as well (such as sponsors with their activations, restaurant operators or cleaning staff).
- **Ring 3 (R3):** other assets in the city. Other parties outside the venue affect the fan experience during the match day (e.g public transport to get there, restaurants outside the venue, parking areas, security, traffic jams, etc.).
- **Ring 4 (R4):** Known as "the rest of the world", takes into account every action that takes place far away from the stadium or online (e.g fan zones in other cities, social media activations, virtual reality).

Taking this model into account, GSIC members believe that **digital platforms and big data** will come on top of the pile in terms of the innovative solutions that will align all the experiential activities in the 4 ring stages (average grade of 6.11 and 5.97 out of 7 respectively).

To start with, smart venues will be able to help fans arrive to the stadium by providing valuable information and updates on parking availability, traffic jams or public transport delays (R3) and use artificial intelligence or even virtual reality to address all these different factors that are usually a "headache" for the attendants.

Once inside the venue, the gathering of data will also allow stadium operators to gain insights on flows of people (R2) and based on this data, digital platforms will also provide fans with convenient directions to their seats through the less crowded gate, or allow fans to know the state of waiting lines of bathrooms, restaurants and merchandise shops in real-time.

Besides, thanks to continuing assistant's comments and feedback on digital platforms, operators will be able to detect reported problems and immediately solve the issues (e.g. need for bathroom cleaning) and increase efficiency. What is more, respondents think that these platforms have the potential to offer an endless set of services including digital ticketing, digital access validation and cashless payment systems (between others) that will be key for fans to conveniently and securely enter stadiums.

Taking it one step further, even smart jerseys will have the capabilities of becoming the fan's ticket and wallet in the future.

Smart stadiums will focus on improving the fan journey through personalization

Apart from focusing on optimizing the venue's accessibility and efficiency, GSIC members consider that clubs and other properties will increasingly incorporate automated tools such as social listening technologies in order to track consumer preferences and past behaviors that enable them to draw trend-lines and anticipate their needs in the future.

For instance, stadium operators could increase revenue generation by understanding a fan's consumption patterns and consequently offering special promotions based on their previous purchases or suggesting them to buy new similar products). Not only that but through these technologies, sports properties will be able to listen to their customers and create valuable content for them while assuring fans' attendance to the stadium. Over the next few years, clubs could offer unique experiences for fans through the development of reward programs (likely through a "tokenization" process") and, at the same time, commit fans to keep going to the venue. For instance, teams could offer VIP treatment to recurrent stadium attendants, fastest access to get food and beverages or other appealing rewards that compel them to want to go to the stadium to redeem their perks.



Taking all that into account, unsurprisingly respondents have rated **connectivity** as one of the most important elements in smart venues (average of 5.9/7) as nowadays fans have become more demanding and fast internet connections have turned to be one of their basic satisfaction factors and thus, a must-have requirement (R1).

Not only will WIFI networks give fans access to all the information available regarding the stadium or arena accessibility but also will allow attendants to live an immersive experience through highly entertaining content offerings (e.g match footage and statistics during games, virtual reality, augmented reality, etc.). Actually, according to respondents, these innovative tools will be key for sponsors to offer "Money cannot buy experiences" and original VIP hospitality actions that are valuable to its target audience. In addition, in the outer ring (R4), virtual reality will be a key component to generate revenues by providing enhanced fan engagement.

However, as technology use in-stadium continues to increase and inter-connect critical functions, GSIC members predict that **cybersecurity** will be one of the most important capabilities to develop over the next few years to enable change while protecting IT infrastructures in venues and all the attendants.

Technology will be key for maximizing fan experience and stadium security, operations efficiency and eventually contribute to revenue generation through the following elements:

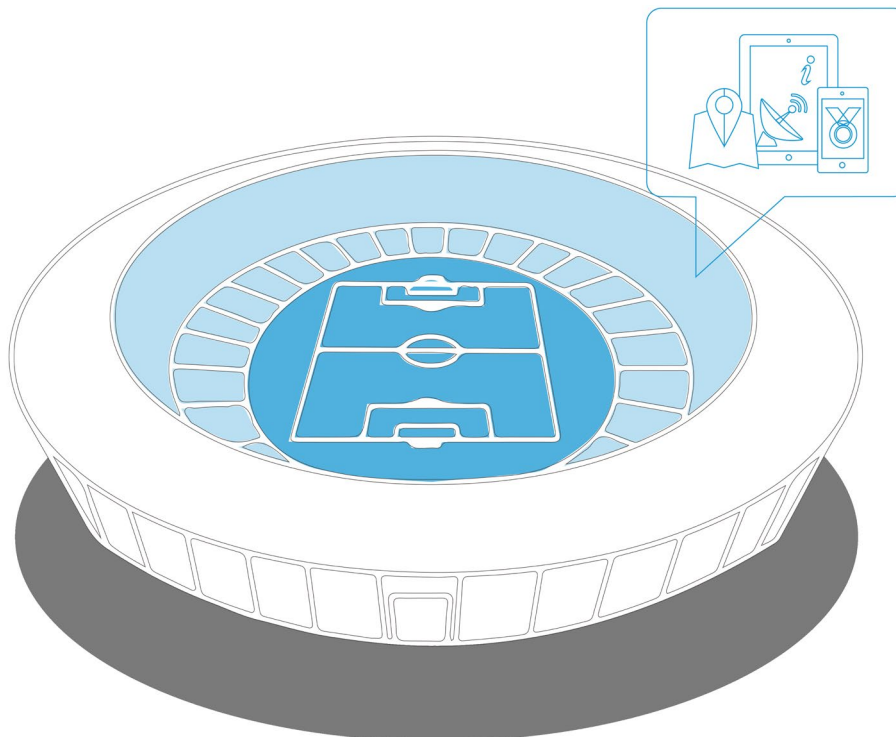
SINGLE FAN PROFILE
 DATA ANALYTICS
 MARKETING AUTOMATION



CASHLESS AND TICKETING VIP HOSPITALITY
 BIG DATA MONEY CANNOT BUY EXPERIENCES
 DIGITAL PLATFORMS
 TICKETLESS CONNECTIVITY CYBERSECURITY
 VIRTUAL REALITY + AR FACIAL RECOGNITION

The 4-Ring Model

Creation of an omnichannel experience before, during and after the game.



R1

Ring that enhances the Game experience

- Wifi networks with excellent connectivity (e.g. for real-time statistics, special promotions, replays).
- Sponsorship:
Money cannot buy experiences.
VIP hospitality.

R2

Ring that enhances the fan journey

- Convenience:
Directions to seat, bathrooms, restaurants, shops, etc, with the shortest lines.
- Profitability:
Special promotions and buying recommendations.
- Experiences:
Sponsorship activations and fan interaction zones.
- Security and operations efficiency:
Cybersecurity.
Digital ticketing & Cashless payments

R3

Ring that enhances convenience and venue accessibility

- Real time information on parking availability, Public transport and Traffic status through the integration of VR, AR, MR tools.

R4

Ring that broadens fan reach

- Creation of Fan zones in the city or even in other countries.
- Activations on social media (e.g. promotions).
- Fan experience through virtual reality.

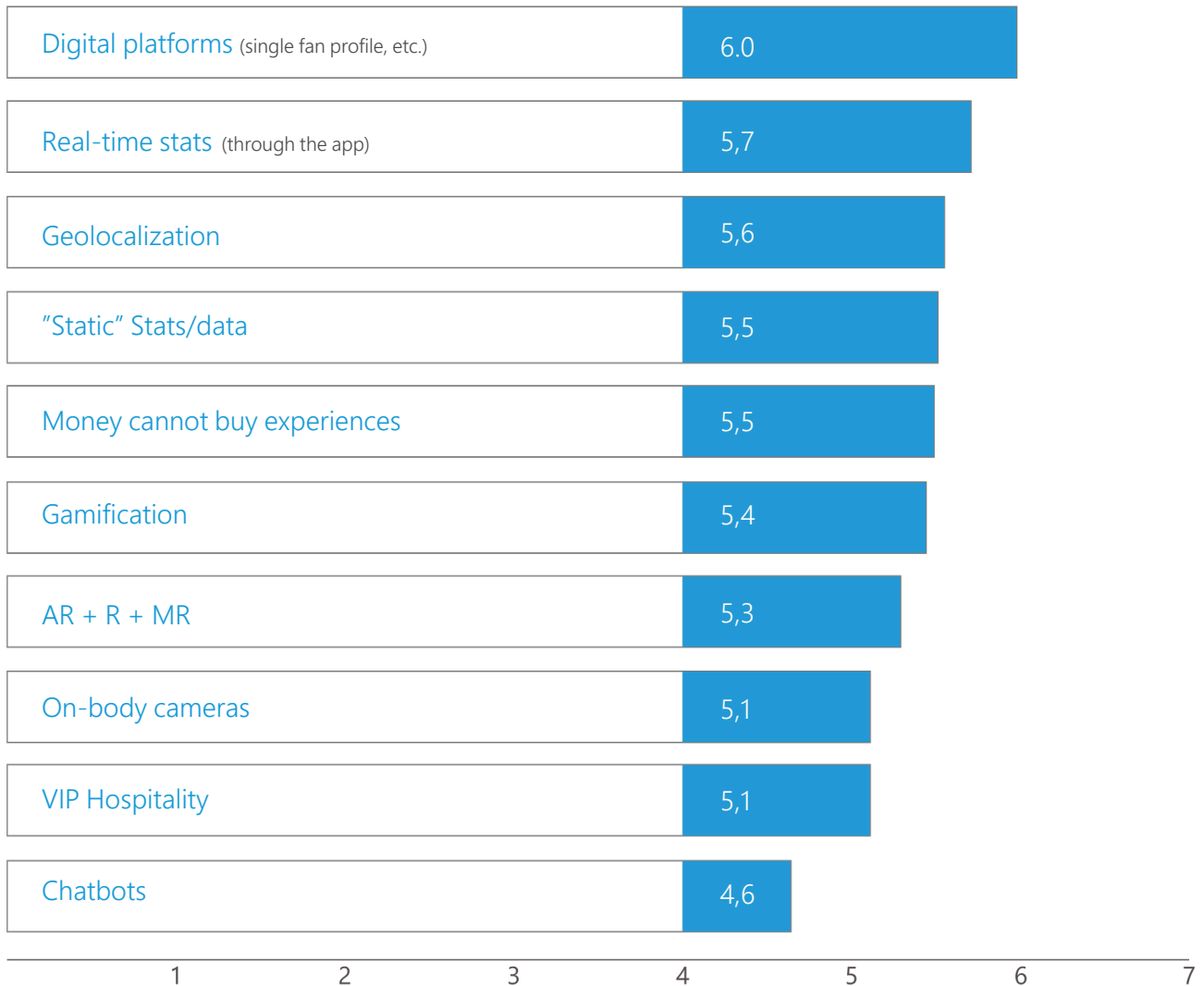


0.3 FAN ENGAGEMENT

Key takeaways for Fan Engagement Enhancement

- Fan engagement is one of the most important challenges for the sports industry, especially in younger generations. This is mainly due to shorter spans of attention (which is intensified by the endless availability of content in different platforms) and their rising expectations of receiving personalized and unique experiences.
- Technology advancements will influence the type of sports content that fans consume towards short-format videos such as highlights. This trend goes in line with the proliferation of OTT platforms which come to enable quick accessibility to videos-on-demand and respond to these identified needs.
- Data gathering will allow sports entities to understand this change in younger generations' preferences, better target fans and quickly respond according to emerging and evolving needs.
- Sports entities will increasingly use digital solutions to deliver "money cannot buy experiences" before, during and after a game. What is more, organizations will leverage on new capabilities such as virtual reality or real-time statistics in order to create an omnichannel experience.
- Top 3 digital solutions that drive fan engagement are expected to be: Digital platforms which enable to create personalized content and build positive relationships with fanbases; real-time and static statistics; and geolocation services for maximizing in-stadium's experience.

Survey Results



Fan Engagement's Enhancement

As mentioned previously, one of the biggest concerns in the sports industry is the shift in fan consumer behavior towards more digitally accessible devices, especially in younger generations that have significantly shorter spans of attention. Therefore, as we transition towards greater digital consumption, experts agree that digital platforms will become one of the most important factors to maintain fan engagement in the future (average grade of 5.9/7).

Digital platforms will become one of the most important factors to maintain fan engagement

The reason behind it is that not only we are seeing a change in the way people consume sports (from linear TV to OTT platforms and even Virtual Reality solutions) but also, the type of content they consume (highlights, video-on-demand, sport feeds and user-generated content).

In fact, these trends go hand-in-hand as short-content formats are consumed primarily via OTT and social media in mobile devices, primarily because they are accessible anywhere at any-time.

Actually, younger generations stand out for their technology use as they can even be checking social media and looking for stats in other apps while being in a live sporting event.



**Technology offers fans
control over how they want
to consume the games**

GSIC members consider that sports entities will capitalize on the fact that “millennials” are a fully connected generation and introduce new features in mobile platforms to attract their attention. Indeed, most of the respondents believe that fans (especially avid ones) would enjoy having full access to real-time statistics during a game or static-statistics in any other moment.

Therefore, they expect that artificial intelligence will allow sport properties to deliver rich content such as club’s historical results, metrics of all the players performance, and other related information so that attendants can check all the insights while watching the match.

And as these data come into play, clubs will increasingly seek out new opportunities to get fans more involved in the game experience. For example, they could launch special contests based on these statistics (e.g. fans could be able to vote which team would be likely to win the match).

Furthermore, virtual reality will also strengthen its presence in the sports industry to get fans in the middle of the action regardless where they are physically. As far as respondents concern, these devices will stimulate the fan experience by allowing them to see the game or match in real-time through players’ Point-Of-View (e.g. using on-body cameras) or even choose specific cameras to review key plays of the team.

However, it is worth noting that not all the customers have the same content needs. Therefore, respondents believe that digital marketing automation tools will be key in the future in order to gain deeper knowledge of attendees’ preferences and implement targeted promotional campaigns. For instance, properties could provide fans with personalized game offerings such as discounts for games similar to the ones that they have previously attended or offer redeem-points for the reward program to be used in activities they have looked for online.

**Personalized fan content will
be a key priority in the near
future**

These analytics tools will be highly valuable for sponsors as they will give access to richer data regarding fan profiles and allow real-time targeting. Besides, the industry experts consider that as younger generations have become more demanding in terms of expecting unique and captivating experiences, brands will have to leverage on new innovative capabilities such as augmented and virtual reality in order to increase fan commitment. In fact, the survey shows how respondents predict that consumers’ preferences will evolve from VIP hospitality actions to more tailored “Money cannot buy experiences” that create life-long and irreplaceable memories.

Apart from the immersive experiences that sponsors can provide, fans that go to the stadium have basic expectations that need to be fulfilled. As stated in the previous section, innovative technologies that amplify stadium’s convenience will have an important influence in the fan experience.

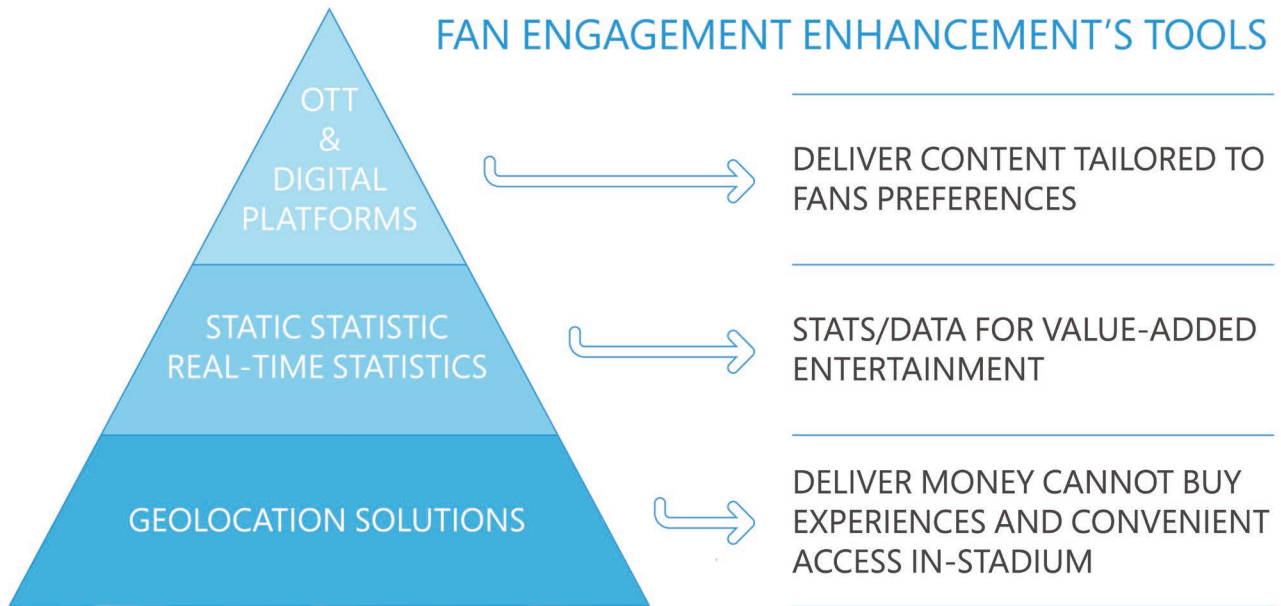
Thus, according to respondents, one key factor that will affect the fan journey positively will be the use of “geolocation” tools in-stadium (with an average grade of 5.55 out of 7) to enable operators to connect directly with fans and address their common concerns within the stadium (e.g. waiting lines in crowded matches, difficulty of accessibility due to different entrances or other external factors).



To finish, although chatbots are useful to help fans go through websites and address their concerns 24/7, they will lose ground in comparison to other innovative solutions.

3 Main Touchpoints describing the Fan Journey

	Before the game Emphasize accessibility and fan experience	During the game Emphasize convenience in-stadium and fan experience	After the game Emphasize convenience out-stadium
Geolocation Solution 	<ul style="list-style-type: none"> Fans will be guided to the stadium. Fans will receive real-time updates on traffic jams and available parking spaces. Fans will be guided throughout the venue. 	<ul style="list-style-type: none"> Fans will be guided to the bathroom with the shortest waiting line. Fans will be able to order food from their seats. Fans will be able to check restaurants and shops queues. 	<ul style="list-style-type: none"> Fans will be guided outside the stadium through the least crowded way. Fans will be guided to their parking space. Fans will be guided to their homes through the quicker way.
Digital Platforms 	<ul style="list-style-type: none"> AI solutions such as chatbots will help fans solve their concerns (e.g. Frequent QA). Digital innovations such as digital ticketing or cashless payments will speed up fan’s waiting times. 	<ul style="list-style-type: none"> Fans will receive personalized content through marketing automation tools (advertising & promotions). Fans will receive extra content (real-time statistics, replays) and participate in contests. Fans will be able to control content. Fans will be able to redeem perks of loyalty programs. 	<ul style="list-style-type: none"> Fans will be guided outside the stadium through the least crowded way. Fans will be guided to their parking space. Fans will be guided to their homes through the quicker way.
Sponsorship activation 	<ul style="list-style-type: none"> Money cannot buy experiences. Fan zones. 	<ul style="list-style-type: none"> Money cannot buy experiences (e.g. VR). VIP Hospitality. 	<ul style="list-style-type: none"> Money cannot buy experiences (e.g. Meet & Greet).



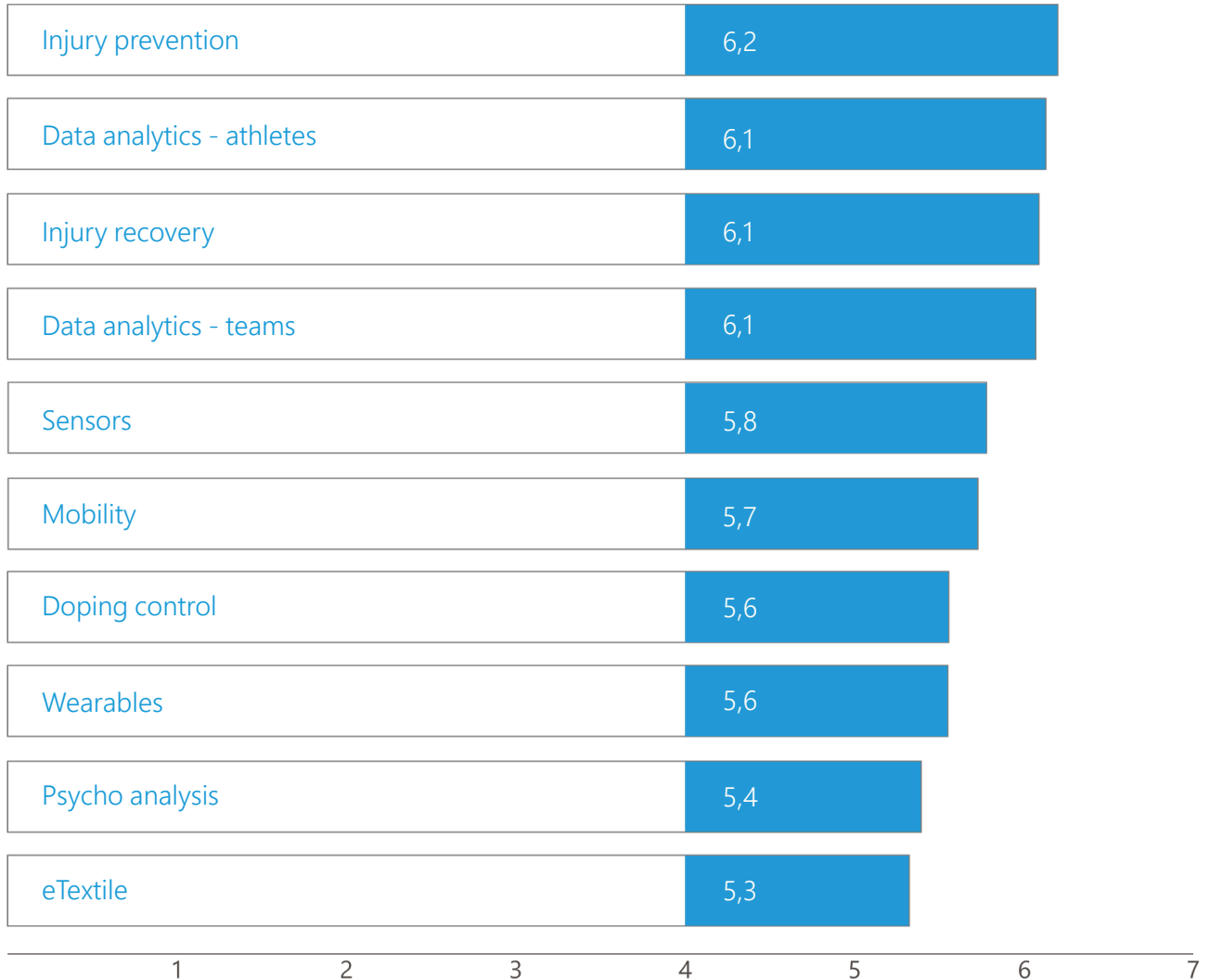


0.4 TEAM AND ATHLETE PERFORMANCE

Key takeaways for Team and Athlete's Performance Enhancement

- Technology will have a pivotal role in the growth and development of sports performance. Wearable technologies and sensors will provide performance metrics that enable to create players' profiles and share the information between all the professionals that may need those insights.
- Biometric data gathering tools will be key for optimizing athlete's welfare as they will allow to personalize trainings according to every player's needs. This in turn, will enable to prevent injuries and help athletes during their recovery.
- Data analytics in athletes and teams will also enhance their performance on the pitch/court: during games, data-gathering in real-time will allow coaches to have a better understanding of the team's strengths and weaknesses and facilitate decision-making. After the games, trainers will be able to draw trend lines during the games and adapt training sessions.

Survey Results



Team and Athlete Performance's Enhancement

The use of technology on and off the pitch is one of the most important drivers that will contribute to the sports industry's growth.

We have seen how **real-time and static statistics** will become an integral part for fans to watch professional sports in the near future, and according to respondents, these tools will also be used for enhancing athletes' performance to their best potential.

To start with, the survey illustrates that **electronic performance and tracking systems** will be crucial for training purposes and decision-making before, during and after a game.

**Electronic performance
and tracking systems are
crucial to enhance teams'
performance**

The majority of experts (average grade of 6.20/7) believe that the main innovative tools used to collect data for improvement of the players will be wearable technologies and sensors while eTextiles will lag a little bit behind. Wearable devices and sensors are being incorporated into the sports apparel, attached to the player's body (e.g. as a wristband) and integrated to the sports equipment such as balls.



These tools are useful to **measure the speed, accelerations and deceleration, distance covered, and heartbeat variability of an athlete** (between other factors) that once combined produce a general player profile. Going one step further, coaches can even have insights of the sleep quality of the players or their soreness after trainings.

Thanks to these solutions tied together, clubs can have a 360 view of their players and gain data-driven insights about their wellness (both physical and psychological, and over the whole life of the athlete). The gathered-insights are captured in a centralized data base that can be shared between all the different professionals working for the clubs' sporting success. For instance, if a player gets injured in a soft-tissue due to over-exercising, the coach will be able to share information with the physiologist in order to understand the cause of that injury and prevent it to happen again (by analyzing how many days of recovery he needs between trainings and assisting players on when is the best time to return to play). In particular, respondents believe that improvements in technology will have a pivotal role in **minimizing and preventing injuries**. Data gathering in training sessions and competitions enable coaches to detect player overloads and symptoms of overexertion that can lead to injuries. Not only that but other tools are appearing such as force impact technologies which use sensors to early detect concussions and prevent head injuries.

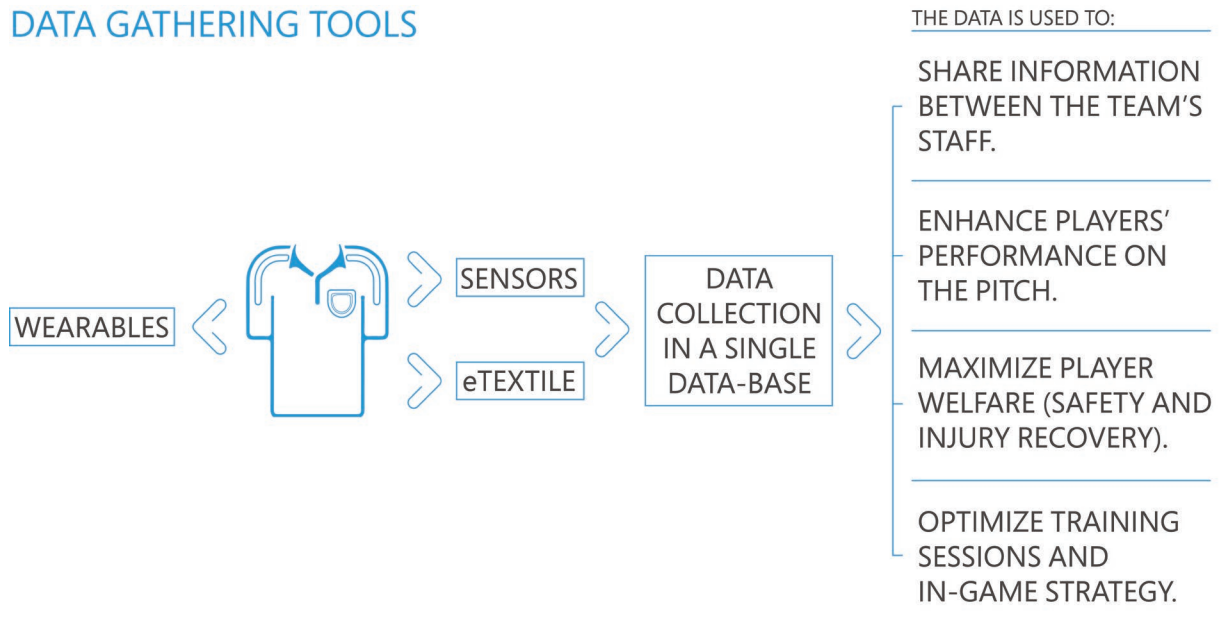
On the other hand, in case of an athlete's injury, data tools can be very useful in the recovery stages as they can provide information about the injury status, recommend a shorten recovery time and get insights on player's readiness to get back at his maximum potential. For instance, coaches will be able to know how a player should start training right after an injury, analyze how he is progressing and get to know whether he is ready to go back to competition or not.

Likewise, such technologies that monitor performance, will have a vital role to play for training purposes, including the education component of it. According to respondents, coaches will need to leverage on dashboards that include all the data collected and identify individual strengths and weaknesses of the team and, hence, personalize training to every athlete's optimal condition. Besides, as technology keeps evolving, we will see more innovative tools trying to enhance training of players to its maximum (e.g. virtual reality and augmented reality will simulate "real condition situations" such as car racing simulators do).

During competitions, the coach will be able to watch the team dynamics that can be improved, the opponent weaknesses, and modify the strategy from the sideline in real-time (e.g. through player substitutions). Indeed, GSIC members consider that real data analytics will allow trainers to make better, less-instinctive and justified decisions. After the game, data can be used to predict patterns and create tailored programs for specific players in order to reach performance goals faster and gain a competitive advantage over competitors.

Finally, respondents consider that the appearance of new digital tools will also foster the use of drug testing technologies to help fight performance enhancing drugs in sport.

DATA GATHERING TOOLS



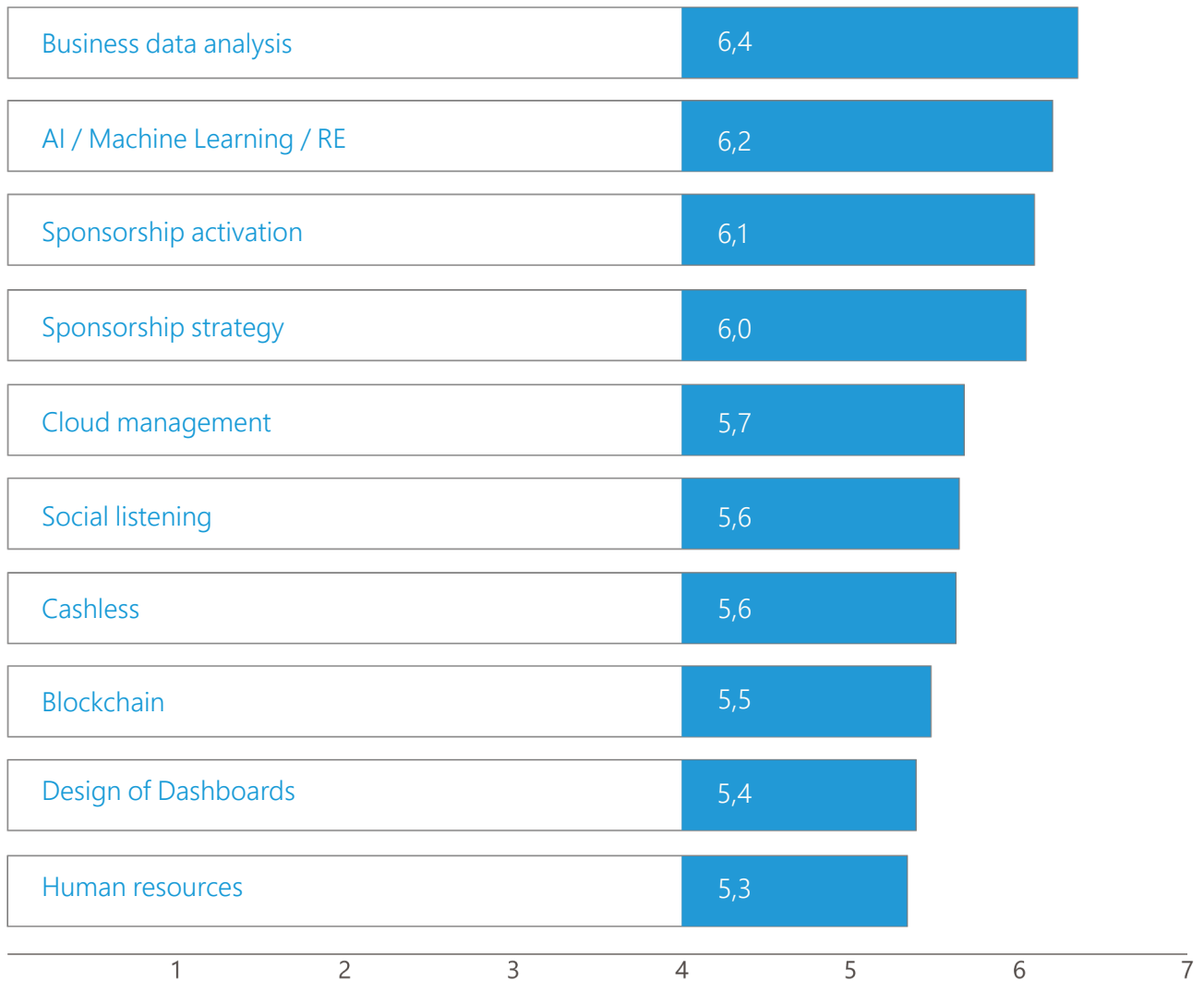


0.5 BUSINESS INSIGHTS AND PRODUCTIVITY

Key takeaways for Business Insights and Productivity

- Sports entities will need to embrace technology in order to keep pace with the industry's digital disruption and leverage on all the new opportunities.
- One of the most important drivers for growth will be business data analytics and artificial intelligence tools such as machine learning that will come to optimize the data-analysis process. These tools will collect all the data, select and process the most valuable insights and identify tendencies that will help organizations later on.
- Data analysis will also help brands develop better sponsorship strategies (e.g. they will be able to identify the property that better targets their customers and provide valuable content through more appealing sponsorship activations). Besides, data-gathering will also help justify sponsorship decisions (through more accurate ROI/ROO measurement, etc.).
- Based on the massive amounts of data that a company can gather; effective cloud management will be a top priority in the near future.

Survey Results



Business Insights and Productivity Drivers by 2025

Innovation is driving fan engagement more than ever in the sports industry, and as stated in the report, that unlocks new opportunities for organizations to gather data, gain a greater understanding of fans and create or optimize revenue streams.



Considering that big data is transforming the sports industry's ecosystem, respondents believe that business data analysis will be key for organizations to keep pace with the emerging trends and increase productivity (average grade of 6,35 out of 7).

As we have seen in the previous sections, sports organizations are increasingly being able to adopt less instinctive and more backed up and data-driven decisions in all the different business levels.

In the past few years, we have experienced a first wave of artificial intelligence tools such as chatbots that are able to provide all the information that fans may need 24/7. But in the future, **AI will bring process optimization and fan engagement to a whole new level.** For instance, AI will identify best plays during a match and create automated video highlights or automatically optimize the right camera angle in live events.

Business data analysis will be a key priority in the future

Not only that but as technology advancements are bringing large amounts of data from different sources to sports stakeholders, artificial intelligence will become more important to assist professionals in collecting them, selecting the most valuable insights for the team's objectives and doing a faster analysis. In fact, according to respondents, machines will be able to identify patterns and develop predictive models on their own which in turn will enable decision-making in a more accurate way. These prediction models are based on historical data and could be used for instance, to know what the opponent is likely to do, or even project how effective a young athlete will be in the future.

Coming in third, GSIC experts consider that the **collection of fan's behavior insights** will be crucial for "sports properties" (e.g. clubs, leagues, events, federations) to attract sponsors. Actually, this information brings additional value to brands as it enables them to gain a deeper understanding of the property's audience and see if it approaches their target effectively or not. Therefore, big data will enhance sponsorship strategies and decisions in all the different stages (from understanding who the fans are, what do they want, how to monetize it and finally measuring results).

Furthermore, in this new "digital and experience era" where consumers have access to a lot of information and expect to be engaged in exclusive ways, companies compete not only to gain consumers awareness but also to become appealing to them and gain their loyalty. In order to reach their audience segments, respondents believe that sponsorship activations will become more creative and involve the customer in every part of the experience. Social listening solutions will specifically come to give a voice to consumers and allow sponsors to distribute content tailored to their preferences. Sponsors will increasingly adopt innovative technologies in their activations to provide an immersive experience to fans and broaden its reach through different platforms.

Advances in technology will not only help sponsors unleash an omnichannel fan experience, but also improve businesses processes and facilitate internal management. GSIC members consider that technology will help companies build up more business intelligence and create more efficient dashboards to enable data-driven decision-making in all the different departments (e.g. automated machine learning can allow venues to predict trends and plan inventory and staff needs in advance of an event). These areas include logistics, human resources practices and customer relationship management. As businesses embrace digital developments, they will be able to make operational improvements in all the value chain and thus, improve security (e.g. blockchain will become more and more important according to respondents) and get better results.

What is clear is that big data is being used on and off the field and businesses are being fed with a massive amount of data from different sources. In that sense, GSIC members agree that cloud management will become one of the top priorities in the sports industry by 2025 in order to integrate all the digital strategy in one single platform.

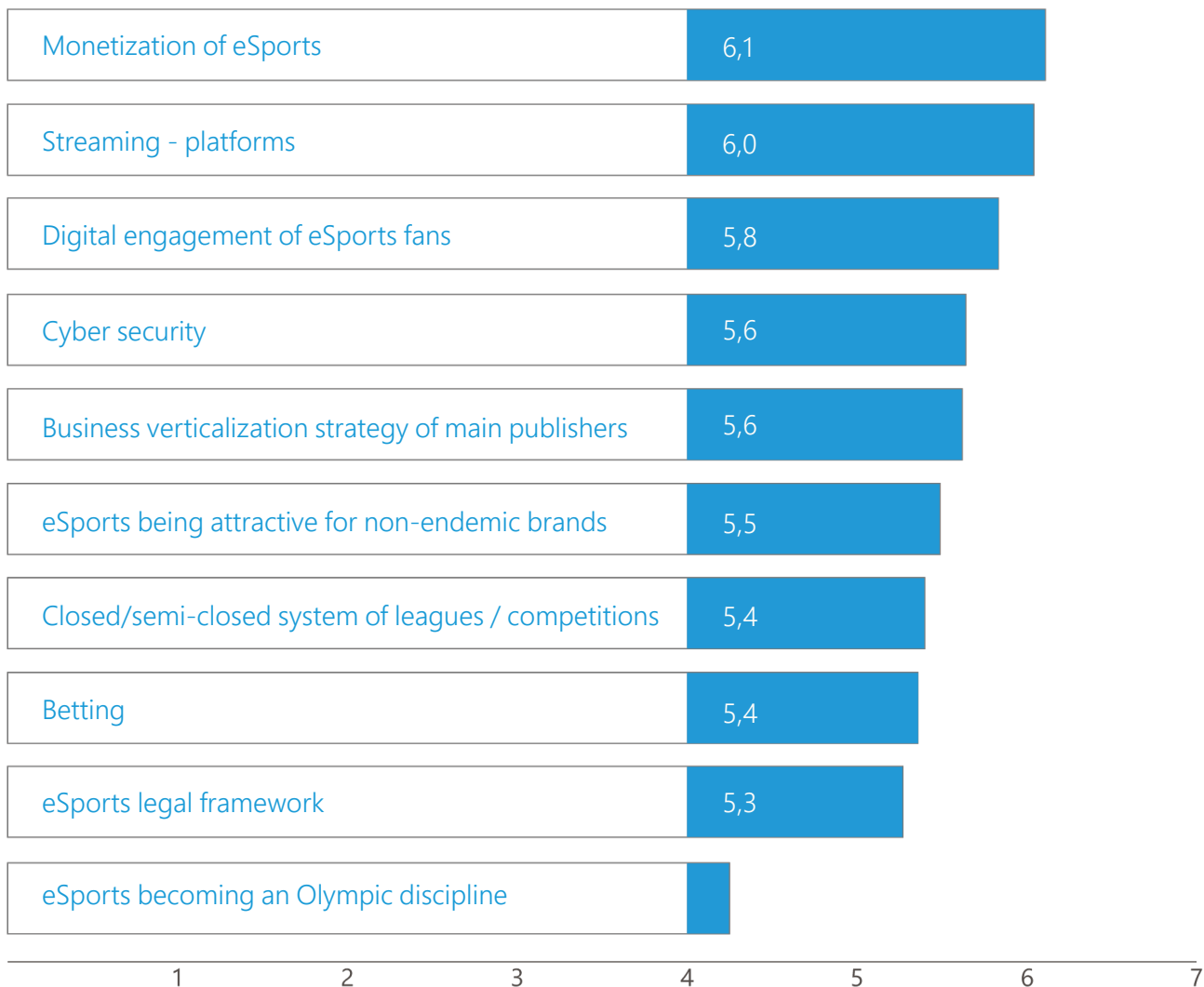


0.6 eSPORTS

Key takeaways for eSport

- The eSports industry has grown at a tremendous pace over the past few years both from a business and consumer perspective and is expected to keep rising in the future.
- Two of the main key drivers will be the media and sponsorship segment:
 - Live-streaming has influenced the eSports popularity rise worldwide and as gaming viewership keeps increasing, streaming platforms will become more important in our daily lives.
 - In terms of sponsorship, endemic brands are the most common sponsors of eSports properties due to their natural association with the sport. However, we are already seeing how eSports are increasingly becoming more attractive among non-endemic brands too (e.g. Orange).
- As eSports are experiencing tremendous growth, new league and competitions formats are being created to further expand viewership. And although eSports are starting to close the monetization gap in relation to other established “traditional” sports leagues, it will still be a priority in the future.

Survey Results



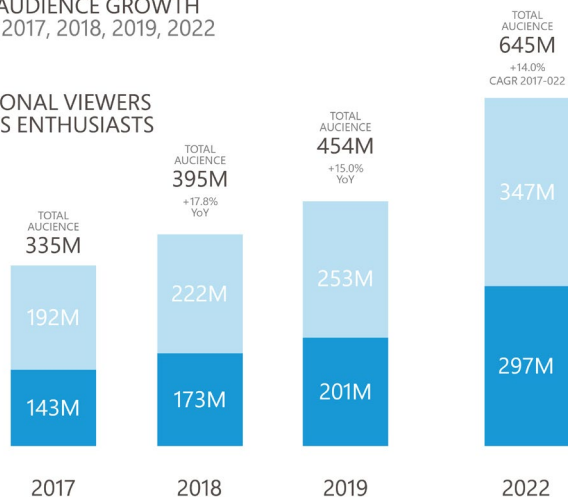
eSports by 2025

The eSports industry has grown at a tremendous pace over the past few years both from a business and consumer perspective.

In fact, according to Newzoo the **eSports audience will grow to 453.8 million globally in 2019.**

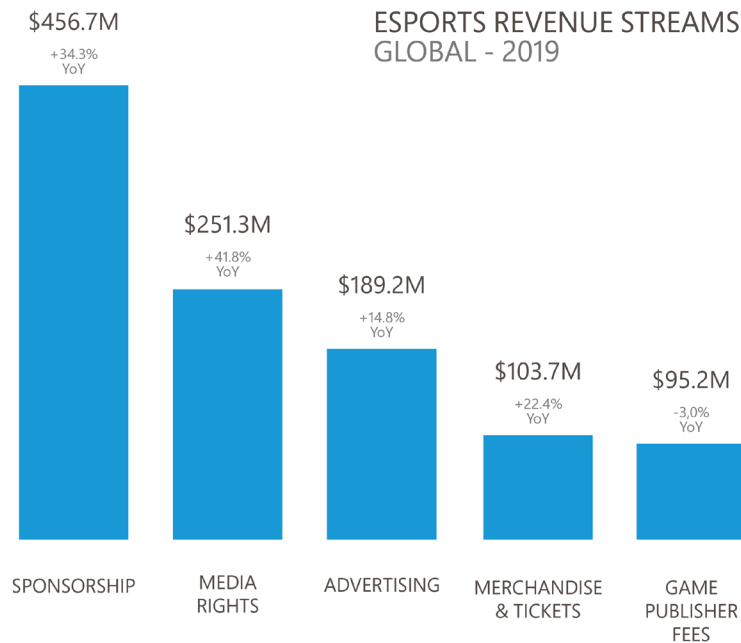
ESPORTS AUDIENCE GROWTH
GLOBAL - 2017, 2018, 2019, 2022

- OCCASIONAL VIEWERS
- ESPORTS ENTHUSIASTS



What is more, eSports enthusiasts (people who watch professional eSports content more than once a month) will account for 201.2M which means a rise of 28.2M and is expected to keep increasing with a CAGR (2017-2022) of +15.7% to 297.1M in 2022.

The number of global occasional viewers will reach 252.6M this year, up from 221.6M in 2018 and grow with a CAGR of +12.6% to 347.5M in 2022.



In terms of revenue, 2019 will exceed the billion-dollar revenue mark up to \$1.1B (an increase of more than \$230M) with sponsorship being the highest-grossing revenue stream worldwide (\$456.7M) and media rights the highest-growing one (\$251.3M, with a year-on-year growth of +41.8%). Within the rise of the sponsorship's revenue stream, respondents believe that **we will see a higher share of non-endemic brands entering the market** over the next decade (average grade of 5,49 out of 7).

What is more, taking into account the massive audiences that eSports have, their global geographical spread, the evolution of new league's infrastructures and the increase of associated revenues (e.g. through increasing size of prize pools), respondents believe that monetization of eSports will finally start to close the monetization gap in relation to other established "traditional" sports leagues and become one of the top priorities in the future.

In fact, one of the key factors that has amplified eSports rise over the past few years is live-streaming.

Streaming has not only driven user engagement to a whole new level, but it has also helped publishers to gain popularity worldwide and increase the sale of games. And as audiences keep increasing, respondents expect that dedicated streaming channels' importance will keep pace by 2025 and will also migrate to new formats (e.g. from primarily PC to also console & mobile). This underscores the opportunity for live-streaming to monetize further growth as nowadays most of the content is free-to-watch and, for now, the three main revenue channels are advertising, tipping through live-streaming and sponsorship.



NON-ENDEMIC BRANDS IMPORTANCE

**Streaming platforms
have clearly elevated user
engagement in eSports**

However, we are already seeing an evolution as platforms are providing value-added services where users can pay subscription fees in order to avoid seeing ads and gain access to exclusive content. Based on all the new opportunities that eSports can unlock, respondents expect a greater business verticalization of the main publishers where, apart from developing games, they become key content providers and create and run their own events/tournaments (e.g. nowadays, Tencent is a clear example).

Besides, as eSports have grown in popularity, the model for leagues are starting to change. GSIC members agree that franchise and semi-closed systems of leagues and competitions will become the dominant models over the next decade and drive eSports to a more stable environment for all the different stakeholders (this format maintains the same competing teams year over year without relegation and promotion and centralize all the league's operations: advertising, sponsorship, streaming and merchandising). For instance, the Overwatch League and the League of Legends Championship Series already operate under a franchised model where they require teams to pay a franchise fee in order to participate.

However, it is worth mentioning that due to the eSports global success, the different stakeholders can become a prime target for cyber-attacks. Then, respondents agree that cybersecurity will become a top priority to tackle over the next decade by all the parties involved in the ecosystem.

Finally, it is clear that eSports have significant growth prospects, but the industry's experts still don't see their inclusion as an Olympic sport in the near future as first, there are other elements such as its legal framework that need to be developed before.

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Web pages

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APPENDIX

Digital Transformation with GSIC

At the GSIC we support digital transformation processes of sports entities around the world thanks to our network of members whose trust and participation made possible the creation of some important projects that can bring you closer to your goals.

1. GSIC Institute

The GSIC Institute is an initiative developed by the Global Sports Innovation Center powered by Microsoft in partnership with European Sports Business School with an aim to develop educational programs that will allow us to achieve a bigger number of professionals on digital transformation in the sports industry as nowadays it's something in demand.

In this project we count on the support of all GSIC partners and collaborators: our Advisory Board and a network of mentors, composed by the highest-level professionals, and associates who we invite to share their knowledge and experience in their sector within our programs. Our partners are the most reliable reference for us to adjust the contents to the reality of their businesses.



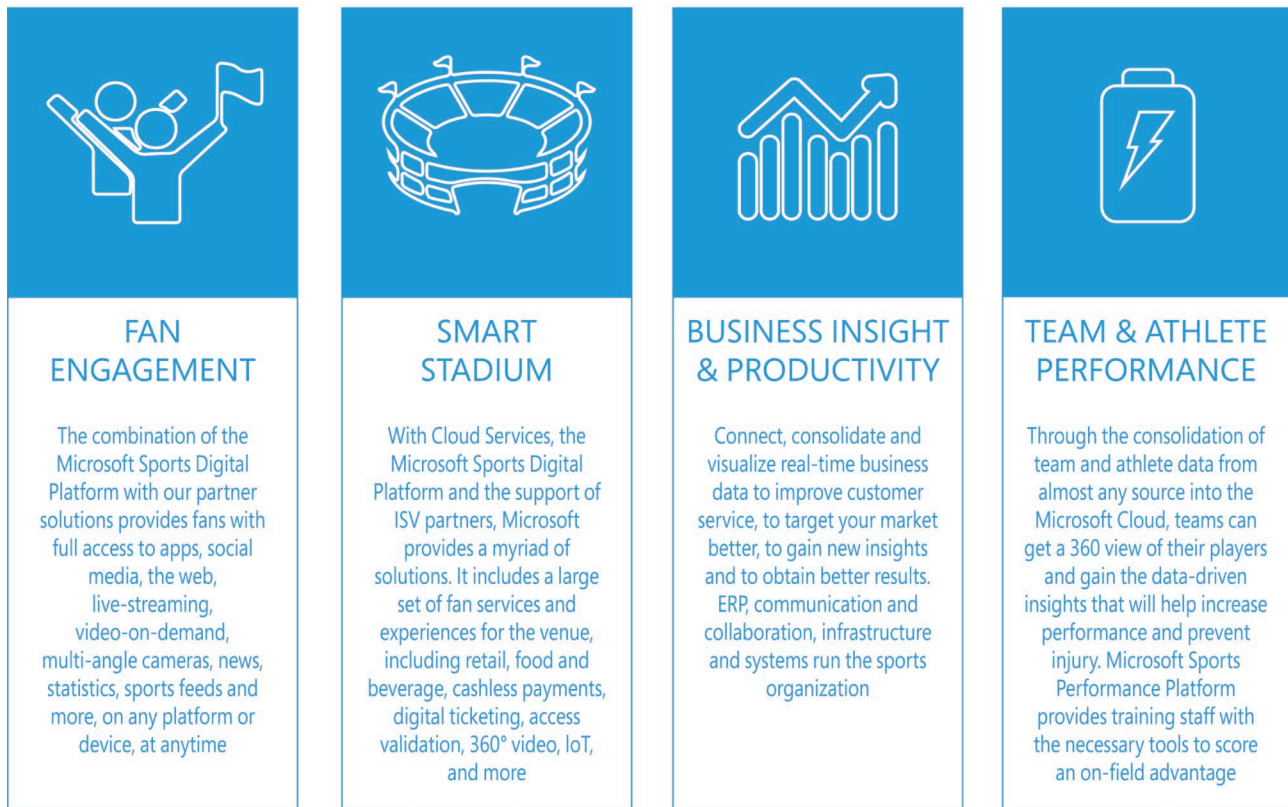
We seek	to reduce the tech gap between offer and demand in sports related-education
We will	give to our partners the chance to share their knowledge into academic scenarios
We must	organize strategically the different GSIC training and education offers
We wish	to align the education and training program to the GSIC international plan

Master in Digital Transformation of Sports			Entrepreneurship in Sports Course		
9 MONTHS	ONLINE	SPANISH & ENGLISH	2 MONTHS	ONLINE ONSITE	SPANISH & ENGLISH

2. Microsoft Sports

Since the beginning, GSIC count on a strong support from Microsoft Corporation within Microsoft Sports division which operates globally from Madrid. During 4 years of the Center's activity, around 80% of its members met Microsoft Sports Team members for exploring synergies, business opportunities, partnerships. Microsoft Sports team, who is adding value to sports organizations on a global level, includes solutions for its four pillars:

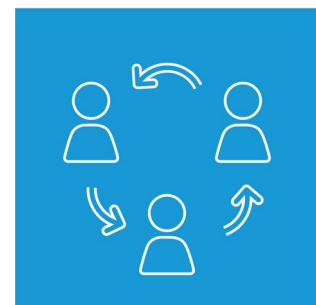
Microsoft Sports Scenarios Developing the future of sport together



3. Workshops

GSIC Workshops are an on-demand service both for members and for non-members who want to deepen their knowledge on a specific topic and solve some issues related to this topic in terms of their organizations.

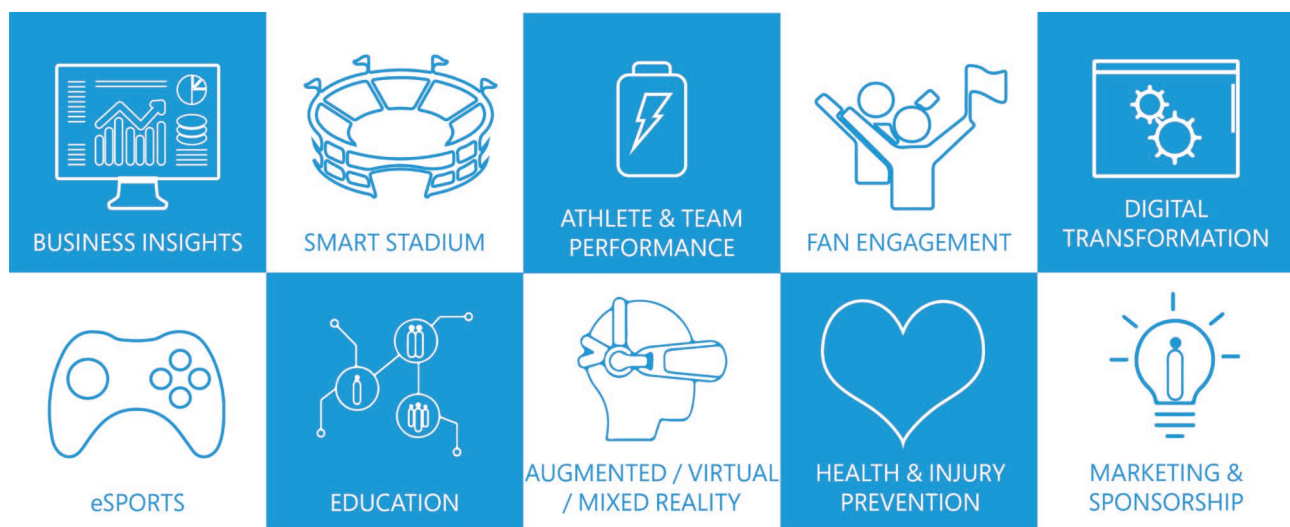
Our workshops aim is to explore collectively, with different members, possibilities to build projects and initiatives to be carried out at the Center, using other members' activities. Its purpose is to create new collaboration scenarios, learn in greater detail what our associates do, discuss different ways of approaching the value of belonging to the association and how to interact with the rest of the associates, by first identifying synergies and solutions aligned with their own goals and needs.



4. GSIC Members Working Groups

Work groups are born as a need to respond to the companies that make up the ecosystem of the association, with specific challenges, digital transformation processes or knowledge that need structured support and with results in a demo format or proof of concept.

We propose them as meeting points to develop solutions to real challenges for the technological innovation of the sector. Therefore, this initiative has as a final goal objective, the implementation of specific projects. This allows companies to be at the forefront of innovation in the sector, act as magnets to attract other industries and play an important role in innovation and sport.



5. Microsoft Solutions

Microsoft and GSIC partnership bring the opportunity to launch into the market the following solutions:

- The Social Dashboard is a centralized social media dashboard that measures reach & engagement of official accounts, compares performance across social networks and allows competitive analysis vs. other brands to detect trends and gets insights to improve editorial content.
- The CXO Dashboard includes content and expertise that helps sports customers to combine their enterprise data into a consolidated sports industry-specific data model which is designed to help them get a 360-degree view of their business and to make better/more efficient business decisions.

Microsoft Sports Digital Platform: A Solution Accelerator that drastically improves time to market

- used by organizations with no/or little legacy that want to speed-up their digital transformation journey. From, single fan profile, business analytics to marketing automation tools, it allows multiple heterogeneous data sources to be consolidated in a powerful data lake.

Digital Architecture Solutions: Strategic consultancy workshop to design Digital Architecture

- Solutions, providing the best and most appropriate technology solutions according to their needs and focus on their specific goals.

- Business Awareness & Monetization: Provide a set of workshops and strategic consultancy to support the organization's management team to identify new revenue streams and high-level considerations and dependencies.
- Gamification: Provide a set of workshops and strategic consultancy to support the organization's management team by setting up the basis to develop a Gamification Program that will empower users' retention, loyalty and fan engagement across the digital ecosystem.

6. Industry experts' network

Since 2015 GSIC was building a wide and strong network that also includes different industry professionals who has shown us and our members their support by helping to carry out projects, access our associated companies, prescribe GSIC in the sector and advise our members on numerous occasions.

This network is composed by successful entrepreneurs, sports clubs' top managers, recognized professors, coaches, IT and digital areas professionals, elite athletes, and it grows constantly thank to our current members and our active participation at all kind of sectors events. All of them can offer their experience and expertise to drive digital transformation processes within any sports entity.

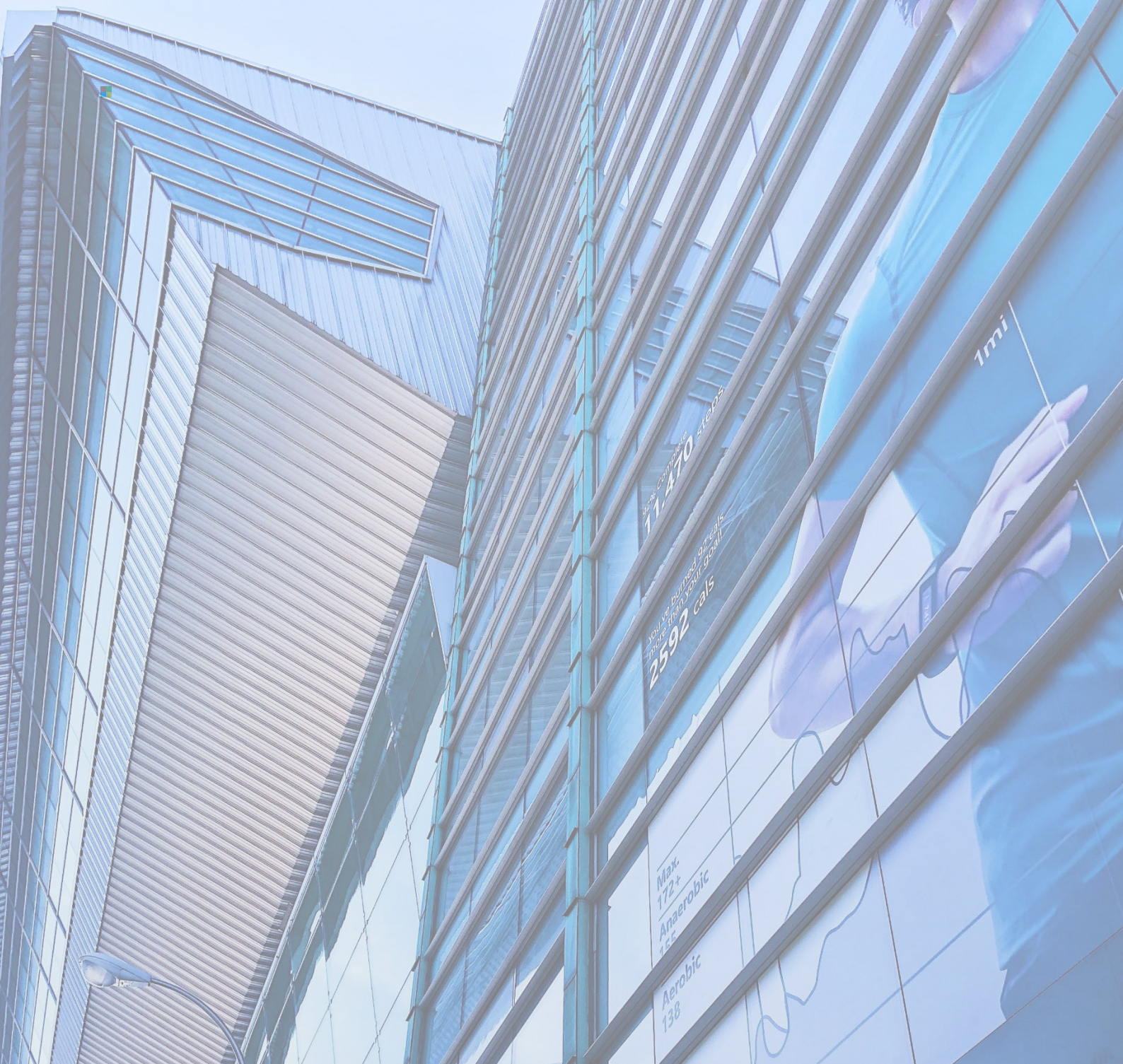
GSIC MEMBERS (by May 2019)

- 3D Digital Venue
- ACB
- ADESP
- AI Spotter
- Adidas
- Arbentia Consulting
- Arion
- Armis
- Astero Partners
- Astosch Technology
- Atos
- Atribus
- B-Graffos
- BRT News
- Batura Mobile
- BenchVote
- Bexfy
- Birchman Consulting
- Bkool
- Blinkfire Analytics
- Brand Extension Team
- Bravent
- Brintia
- Bull Communication
- CPMM
- Cabildo de Gran Canaria
- Chalk
- Choicely
- Cinfo
- Circuito Ricardo Torro
- Clariba
- Club Atlético Peñarol
- Club Baloncesto Gran Canaria S.A.D.
- Clupik
- Comunidad De Madrid
- Content Stadium
- Cool Tabs
- Crambo
- Cricketsocial
- Cruilla Mindfull
- Cruzados - Universidad Católica de Chile
- Ctrl365
- Cubenube
- Deep Data
- Deportec
- Dots
- ESBS European Sports Business School
- Entrenarme
- Esteban Consulting
- Etemenanki Technology SL (VAVEL)
- European Leagues
- Eventdata Services
- FCFL
- Fan 360 (9IneSports)
- FanSurfing - 515679447
- Fantom

- Fanwide
- Flip Kick
- Fluendo
- Football And Travel
- Footters
- Freedom And Flow Company
- Fundacion Escuela De Mareo Real Sporting De Gijon
- G2K Group Gmbh
- GVAM
- Game Time Giving
- GameReady
- Genius Tech Group
- Geodan
- GesDep
- Getting Goals Consulting S.L.
- Giorgio Gandolfi
- GlobalTMS
- Grupo Campus
- Grupo Ecsa
- Grupo IGOID
- Grupo Solutio
- Hero SpA
- Homerun
- I Mas D Running, S.L.
- IBV
- IETeam
- Imagine Lab Chile
- Infecar
- Infinit Fitness
- Inovace
- Inplay
- Insaitu
- Iqoniq
- Iristrace
- KLB
- Kabel
- Kamaljit
- Khinn
- LG
- LID Helmets
- La Salle University
- LaLiga
- Lava
- Levante UD
- Leverade
- Live Arena
- M&C Saatchi Sponsorhip
- MAD Lions
- MO2O
- Mapping Sports
- Marte Estudio
- Mediapro
- Medios y Contenidos Producciones S.A (RGB)
- Metail Limited
- Microsoft
- Minsait

- Motionize
- Motti
- NBN23
- NFC Sound
- NGAGE
- Nanfor Iberica
- Narrativa
- Neodata Group
- Netco Sports
- Nuubo
- Ontier
- Panasonic Marketing Europe
- Picue
- Plain Concepts
- Playgorithm
- Playoff
- Podoactiva
- Pons IP
- Pressenger
- ProLiga
- ProSport 365
- Proem Sports Analytics
- Promotora del Comercio Exterior de Costa Rica
- Prosegur
- Pulse
- Pyrates Smart Fabrics
- Real MadridC.F.
- Real Sociedad
- Realtrack Systems
- Recoverx
- Rethink Marketing
- Rookiebox
- Rosterfy
- SAG Sport
- SSRI
- Saludando
- Scisports
- Secutix
- Selecta
- Sensoria
- Signality
- Sitecore International
- Skidata
- Snaptivity
- Soccerdream
- Sociedad De Promoción Económica De Gran Canaria, S.A.
- Solos
- Spobi
- Sport Value
- Sportbests
- Sports Alliance
- Sports Clip Maker
- Sports Wizard
- Spsg Consulting
- Stadion
- Starthlete

- Statathlon
- TTSPRTS
- The International Humans Company
- ThermoHuman
- Three Balance
- Thrustmaster
- Ticketplus
- Todo TV
- Toools
- Totem Branding
- Trentino
- Triboom
- U. Camilo José Cela (UCJC)
- Udobu
- Universidad Europea
- Ushowapp
- VU Chile SPA
- Vicis
- Vidibond
- Wembley Studios
- Wildmoka
- Wizink Center
- World Football Summit
- Xpheres Basketball Management
- YBVR
- Yapp!
- Yarr TV
- Yoomedoo
- Yupaipi Community, S.L.
- ZIIM
- Zertior
- bFan
- iAltitude
- iXpole



GSIC

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Center