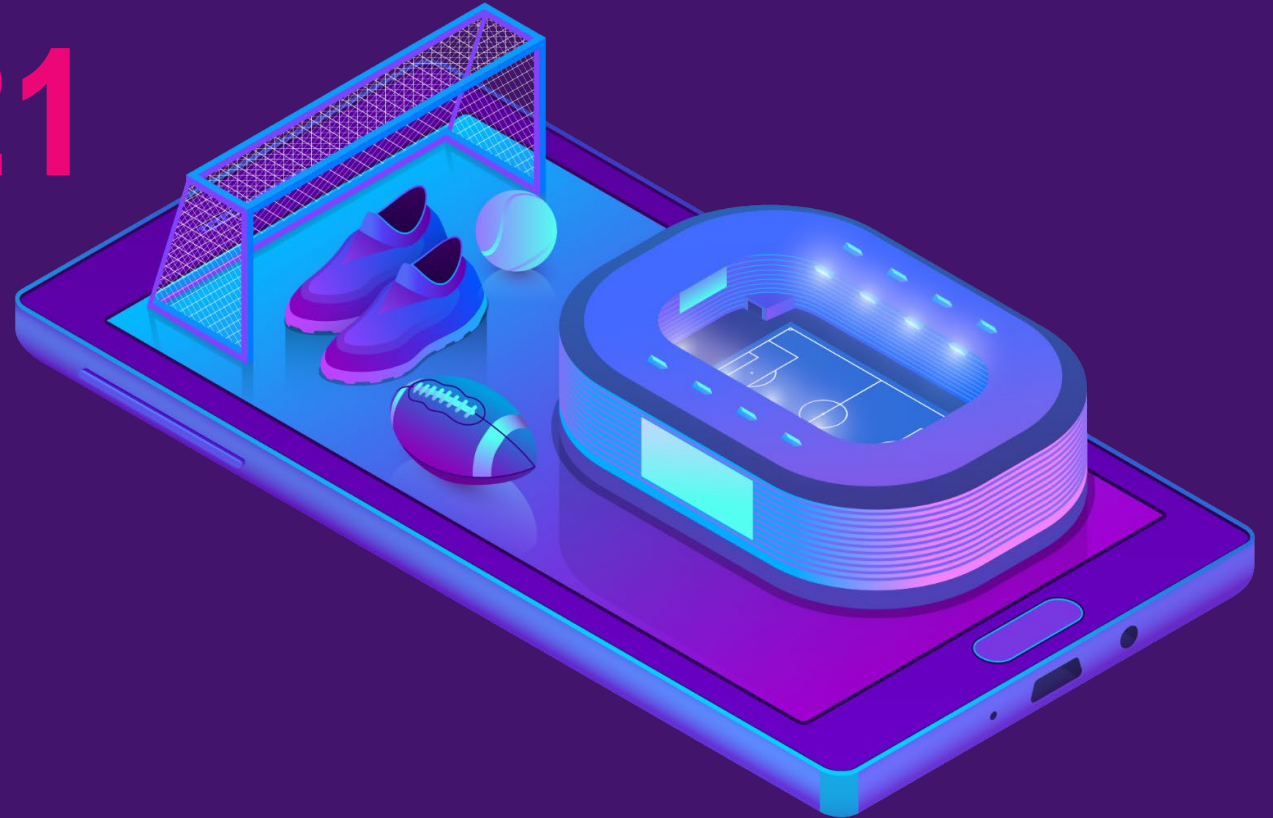


Sportech 2021

Paris, February 2022



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A. Tech innovations
in the Olympics

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B. News on the
SporTech ecosystem

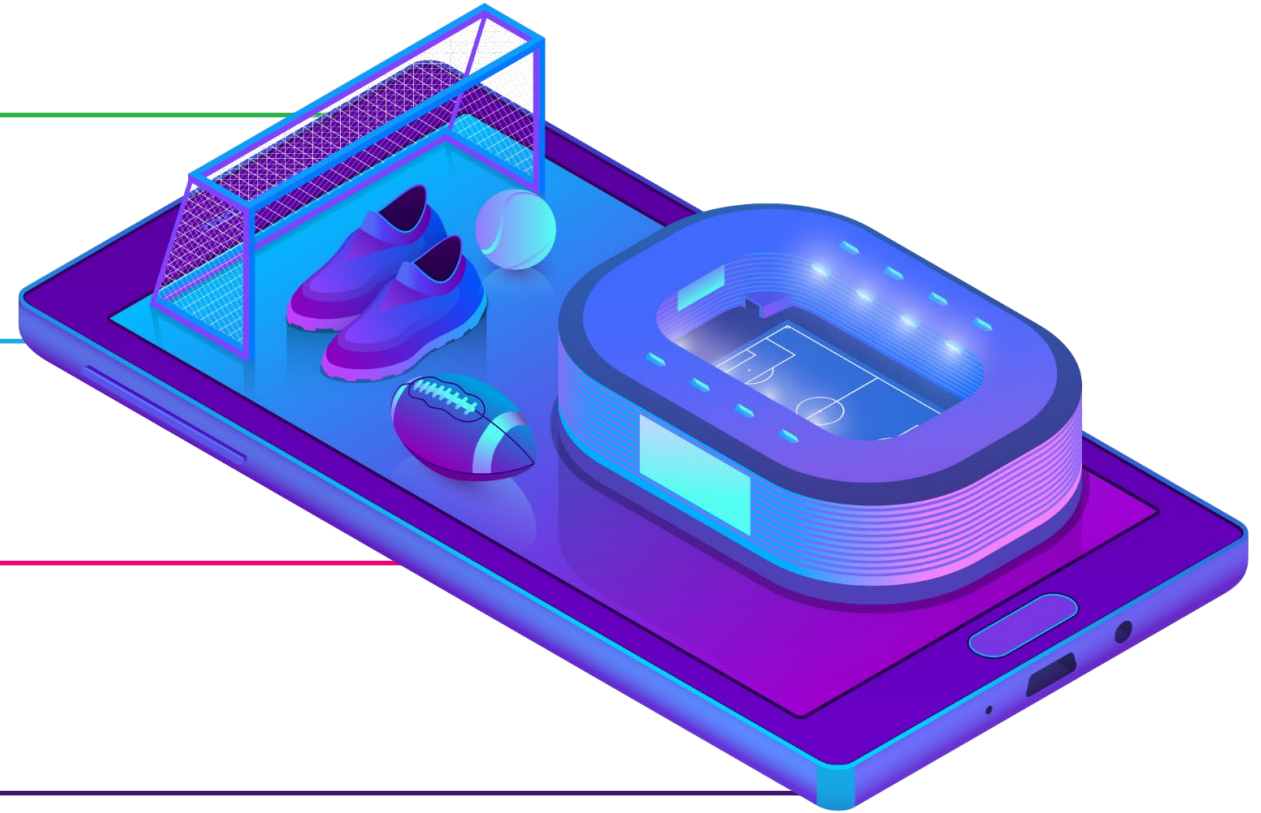
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A

Tech innovations in the Olympics



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Tech innovations target all aspects of Olympics, from facilities and crowd management to competition



Different types of technological innovation during the Olympics



1

Enhanced Competition

*Advanced outfits
Precision measurement*



2

Training

*Wearables
Virtual training
Training equipment
Recovery*



3

Broadcast & Telecom

*Cloud broadcast
Fan engagement
AR & 5G*



4

Green Games

*Recycling
Renewable energy
Sustainable transportation
Legacy*



5

Facilities & crowd

*Robots
Modeling
Security*



Athlete outfits have become increasingly high tech, driving up performances and raising questions about tech inequality

Different outfit innovation aiming to improve athlete's performance

Tokyo
2020



– Advanced outfits



Nike superspike
Combination of a stiff plate and pliable foam enhancing energy recovery

Ralph Laurent cooling suit
integrated air-conditioning technology



Chinese team x Anta
Multiple innovations from weightlifting shoes with lumbar support system to wrestling suits enhanced with nanoparticle anti grab technology



Speedo swimsuit
Continuing innovation on muscle compression and waterproof technologies



Runners wearing Nike 'superspike' took more than 60% of podium spots during the Tokyo Olympics



ARIONE0

– French Sportech:



Arioneo's connected sensor: Equimetre.

Measures cardio, speed and stride parameters of racehorses during their daily training. The data analysis allow trainers, to complement their expertise in performance management and health of horse athletes with objective and scientific data.

Data analytics plays now a key role in athletes training and preparation, from virtual training to tailored programs

Enhanced training technologies

Tokyo 2020

Virtual training

TRACKMAN

TrackMan

High tech home golf simulator with HD resolution, radar and camera tracking

Panasonic

Panasonic AR technology

Simulate Tokyo Olympic stadium to help the athletes in their training

Beijing 2022

Training Equipment

- **Anti-gravity treadmills:** enable individuals to walk or run at a lower percentage of their body weight and perform rehabilitation with less pain.
- China's first **self-designed bobsleigh:** carbon fiber composite materials to make the bobsleigh lighter and a design allowing a better air resistance

Virtual training

Development of ski & bobsleigh simulators



French SporTech:

RunMotion Coach provides adaptive training plans for runners taking into account the experience of the runner, its goals and when and where the user can run to generate a customised training plan

SPORTECH 

Tokyo 2020

Olympic javelin champion Thomas Röhler during his training for Tokyo 2021 has been using a **Panasonic laser projector, cameras and 4K OLED TV, to model the Tokyo Olympic Stadium.**





New cloud broadcasting systems and 5G innovations unleashed new experiences for billions of users

Broadcasting innovation for an immersive experience of the Games

Tokyo 2020



5G & AR

The Tokyo Olympics hosted a large number of innovations to make the Olympic experience as immersive as possible.

Ex: **AR headset at swimming venue;**
3DAT: 3D model of Olympians in action built from multiple 4K machine vision cameras....

Cloud Broadcast :

1st global Cloud

Broadcats: Possibility for the broadcasters to edit, distribute and store their materials on the cloud leading to on-site staff reduction

Beijing 2022



Fan engagement

Online Olympic learning platform to promote games in China

WeChat low carbon program obtain "carbon points" and other prizes with screenshots on WeChat

Paris 2024

5G

Orange as a central partner:
144 million EUR invested in the partnership to ensure the high-speed connexion of the venues and participants



French Sportech

FANartZONE by Art Design Story: Via an application, it becomes possible to access what is called a "room". We can, for example, find paintings or photos in augmented reality as well as avatars to discuss remotely, monuments



The Media and the Olympics – Historical overview



1924 – Paris
1st live radio broadcast



1936 – Berlin
1st filmed sporting event/
Opening ceremony audience:
100 000 person



1964 – Tokyo
1st satellite broadcast,
"The TV Olympics"/
Audience: 600 to 800 million person



2021 – Tokyo
1st Cloud Broadcast /
Audience > 3 billions

Driven by a sustainable ambition the Olympics leverage technology to make the games environmentally-friendly

Different types of innovations aiming to make the Games greener

Tokyo 2020

Recycling: from recycled plastic

- Recyclable cardboard beds
- Medals made with metals obtained from recycled phones and other electric device

Renewable energy

Olympic village as a functioning hydrogen city

Beijing 2022

Recycling

Innovation to reduce water consumptions of the venue: Transform the water from the pool into ice.

Renewable energy

1st Olympic to use carbon dioxide as refrigerants in ice-making: environmentally friendly technology

Sustainable transportation

800 fuel cell vehicles will provide transportation: they can start and drive in extreme condition

Paris 2024

Renewable energy

Smart grids: Intelligent water management system aiming to reduce the water consumption

Sustainable transportation

- **Navya Arma** : 100% autonomous electric bus
- **UrbanLoop** : Autonomous capsules, 100% electric able to transport 1 to 2 person at 60km/h

**NATURAL
GRASS** THE ART
OF THE
SURFACE

"Natural Grass' mission is to find **new solutions** to reconcile the requirements of a **high level sports turf with environmental issues.**

We develop **100% eco-designed sports surfaces** and environmentally friendly cultivation techniques, **reducing the need for water, inputs, and phytosanitary products.**

SPORTECH 

Paris 2024

"Startups can spontaneously propose their innovations to Paris 2024, especially that 2022 will be our prototyping year, after that, it will be too late as we will be in delivery mode ! The key themes being: accessibility, sustainability, fan experience (at home or in stadium), fan engagement, athlete experience, process optimization or active design"

Omar El Zayat

**Head of Innovation Integration
at Paris 2024**

Reusability of installations and social impact are now key elements of the games as they play a central role in their acceptability

Heritage of the Games

Tokyo 2020

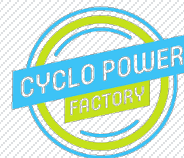
Legacy

- **Increase sport activity in the population:** 60% of adults in Tokyo participated in sports activity in 2020, up from 54% in 2012
- **Sport City Tokyo project:** creation of existing barrier-free and more inclusive sports facilities
- **Olympic village:** First hydrogen-powered city with residential housing and international exchange venues, multi-generational activities in education, culture and sports

Paris 2024

Legacy

- **Eco-district and Olympic pool** to serve the population of Saint-Denis
- **"Terre de jeux":** Construction of **5000 sport structures** (incl. 1,000 city stadiums, 1,000 dojos and 500 basketball, tennis courts and skateparks)



Cyclo Power Factory

provides companies and event organizers with a fitness solution using eco-designed cardio training equipment, 100% made in France, which transforms the energy of effort into renewable electricity. Via an application, users live a collective, fun and gamified experience and participate in energy challenges.

SPORTECH 

Paris 2024

"The Olympic & Paralympic Games highlight social and environmental issues to work on. We scout innovative solutions available on the market, and if pertinent, we can do Proof of Concepts and if the results match the expectations, the start up is put in touch either with the partner in charge of that category or will be informed of the public tender in order to apply"

Omar El Zayat

Head of Innovation Integration at Paris 2024

Robots and digital twins have become central to support organizers during the events, Paris will introduce the first autonomous flying cab

Robotic innovation at the Olympics

Tokyo 2020



NEC

Robots

From **field support robots** (power-assist suit, welcoming robots...), **to entertaining ones** (drone light show, mascots...): Robots have been a key elements of the last olympics.

Security

NEC: facial recognition technology

Paris 2024



Robots

VTOL: first flying taxi, (ADP, Airbus, RATP)

Modeling

Placemeter: measure the pedestrian, bicycle and vehicles traffic.

Beijing 2022



Robots

Automated high-speed rail line train guided by **BeiDou Navigation Satellite System**

Modeling

Digital twining of stadiums : monitor air quality, traffic



The Goleador's ball-launcher robots

, mainly used during training, are also appreciated by sponsors. Activated before, during and after competitions, as well in a stadium and in an urban area, the animations using this robot ensure an attractive and inclusive promotion of sports practice for all. After the competitions, the ball launchers used during the events can be donated to football clubs drawn by lot or selected on inclusion criteria.

SPORTECH



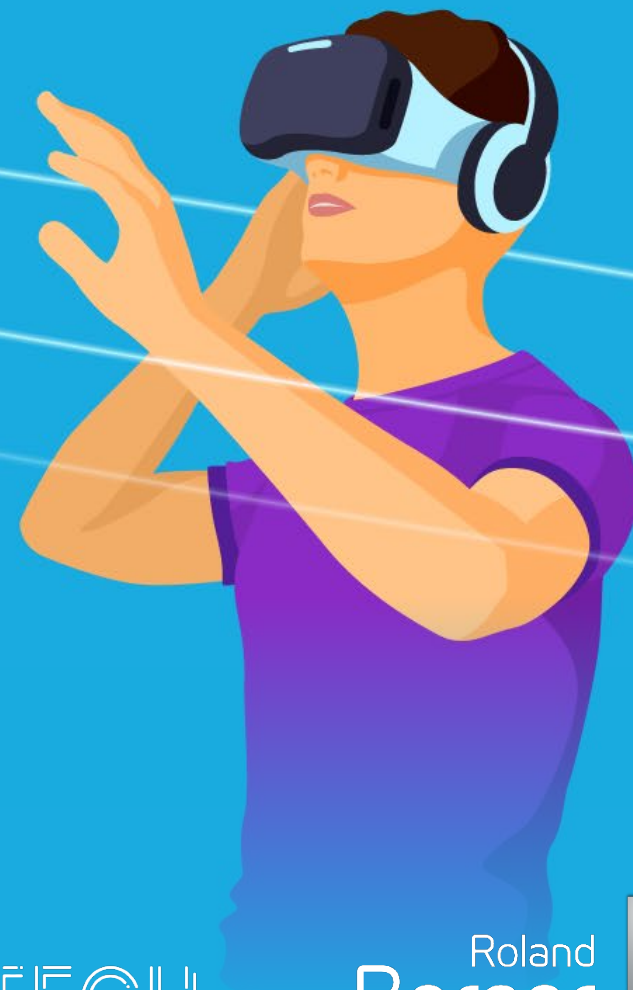
CUE3

Basketball AI robot

developed by Toyota shoots for a Guinness World Record and become officially the titleholder of the "Most consecutive basketball free throws by a humanoid robot"

B

News on the SporTech ecosystem



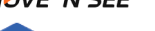
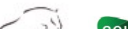
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The amateur segment is by far the most dynamic in number of companies, although the fan sector is the only one counting a unicorn

Classification of the French SporTech Startup¹ by size and segment [2021]

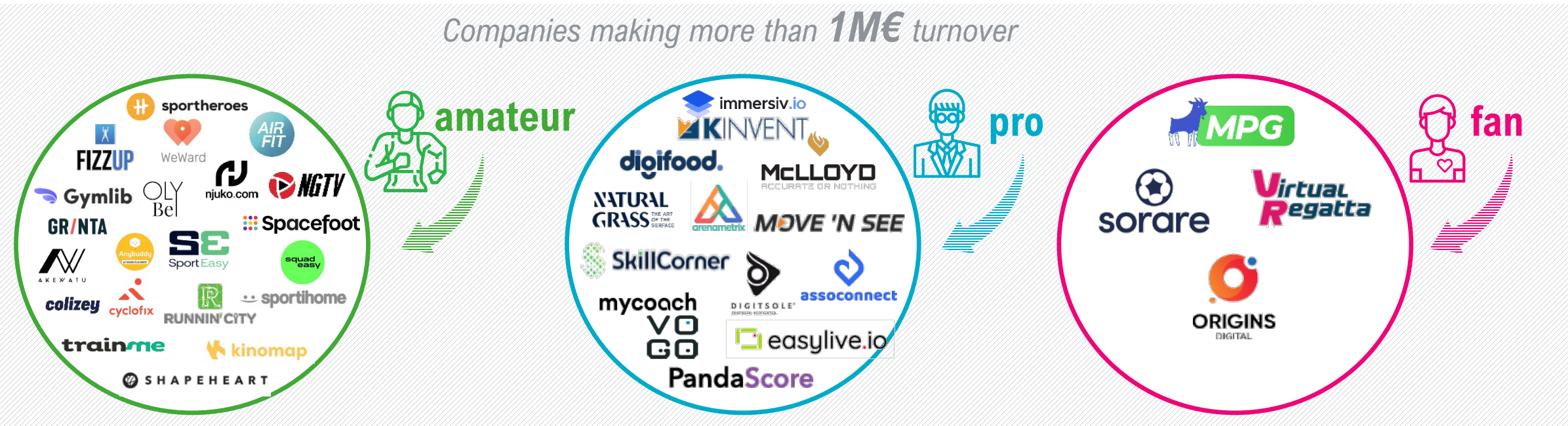
	 Amateur	 Pro	 Fan
 Unicorn Turnover: >50m Fundraise: >100m			  <i>unicorn</i>
 Scale-up Turnover: 5m to 50m Fundraise: 0m to 100m	  	 	
 Growth-stage Turnover: >1m to 5m or unknown Fundraise: 0m to 10m	                	           	  
 Seed Turnover: <1m or unknow Fundraise: <5m or unknow	                	           	      

1) the absent companies have an unknown turnover and amount of fund raised

Within the collective, 39 startups already have an annual turnover of over 1 million euros and 4 have raised more than 5Me since 2020

French SporTech's startup making more than +1M€ p.a. and main 2021 fundraisings

2020-2021 main fundraisings



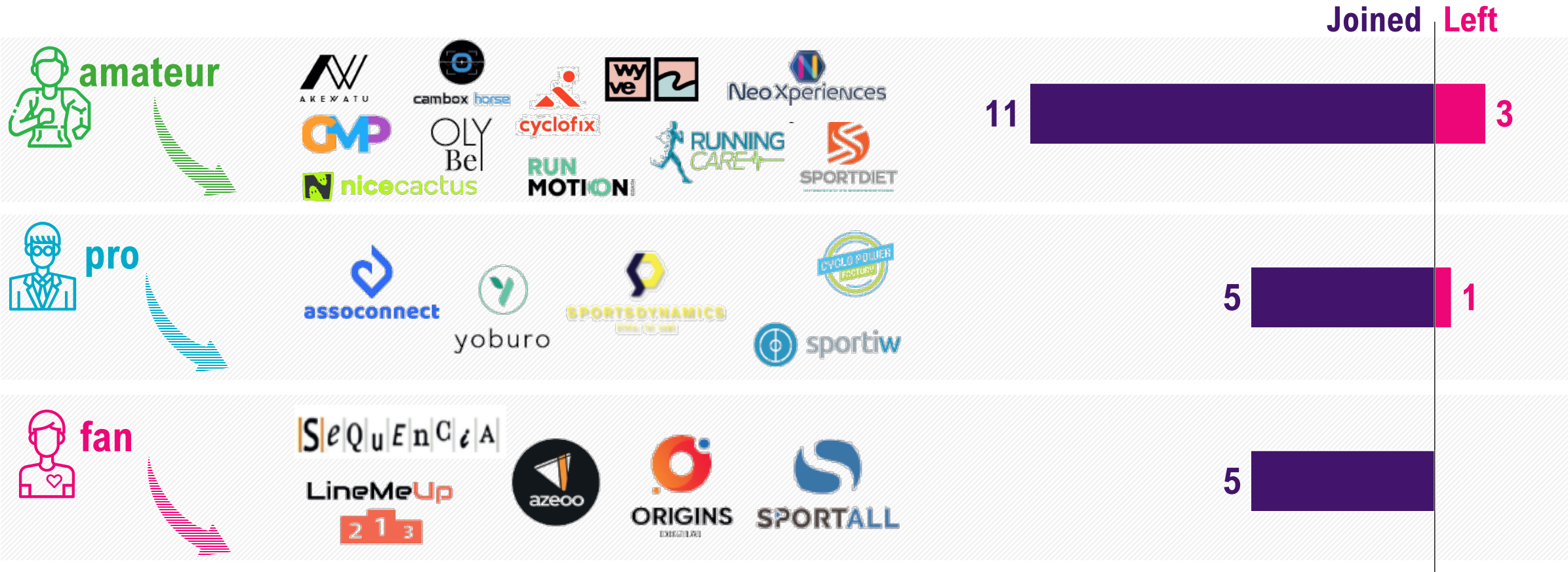
French sportech is a dynamic sector, already planning to raise more than 49 million euros by 2022

Fundraising in progress for 2022-2023

Logo	Name	Description	Fundraising in progress (millions €)	Until	Segment
	Gymlib	Gymlib offers a sport and well-being subscription for employees giving access to over 4000 facilities	15 million €	2022	 amateur
	Sportheroes	Creation of a community around sport and wellness	10 - 15 million €	2022	 amateur
	be sport	Social network of sport at the service of clubs sportsmen and their fans.	8 - 10 million €	2022	 amateur
	GoMyPartner	Helps people participate in the sport of their choice without constraint. Cashback offer on sports expenses.	5,5 million €	2022	 amateur
	Sportihome	Platform for booking sports trips between individuals	Serie A	06/2023	 amateur
	Footbar	Allows soccer players to evaluate their performance thanks to sensors placed on the legs of the players, reconstructs the entire game.	3 million €	03/2022	 amateur
	NGTV	Camera on soccer field to give stats to players	2,5 million €	02/2022	 amateur
	CycloPower Factory	Offers collective and playful fitness sessions by associating environmental and social issues.	2 million €	2022	 pro
	NeoXperience	Immersive and interactive playgrounds.	1,5 million €	S1 2022	 amateur
	Wyve	Eco-friendly 3D printer surfboards	1 million €	2022	 amateur
	RunMotionCoach	Digital running coach	500k - 1 million €	S1 2022	 amateur
	ArtDesignStory	Paintings 100% connected / Metaverse AR	1 million €	2022	 amateur

The French Sportech ecosystem has demonstrated a strong resilience to covid crisis with only 4 departures and 21 new entrances

Evolution of the collective since 2020



C

Key trends in the sportech sector



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In 2021, we identify 3 macro trends as key drivers of the sportech industry development

1



Connected fitness

2



Sport at work

3



NFT & Fantasy sports

Following covid outbreak and lockdowns, sportech start ups have developed numerous solutions to help users practice at home

Connected fitness development

Connected fitness

SPORTECH

- Connected fitness = **the use of digital technology and smart devices** applied to **fitness and wellness** activities
- **Booming market during lockdowns:** Fizzup x20 users in the first week of 2020's lockdown
- **105** start ups funded in 2021 worldwide
- **3.4b\$** raised in total in 2021
- **40.6%** share of 2021 total funding in Sportech



Major fund raising in connected fitness



Keep
360M\$



Fitur
300M\$



Tonal
250M\$



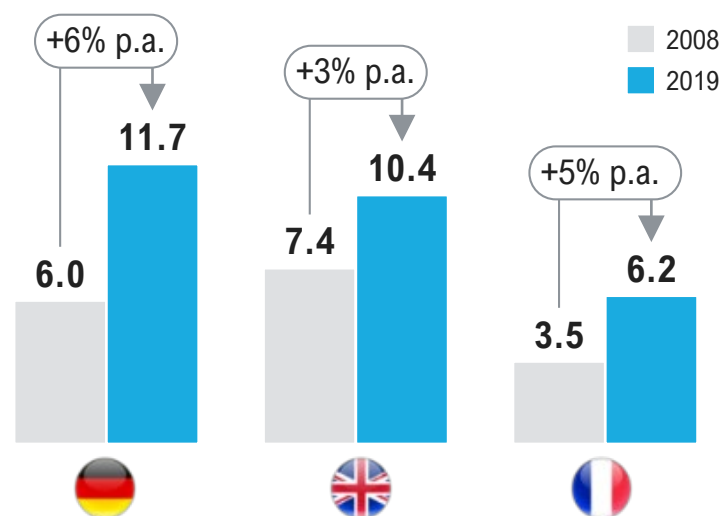
Beachbody
225M\$

Fizz-up: an innovative way to practice sport at home



- App of online personalized coaching
- Over 5m users
- Available in **40** countries and in **8** languages

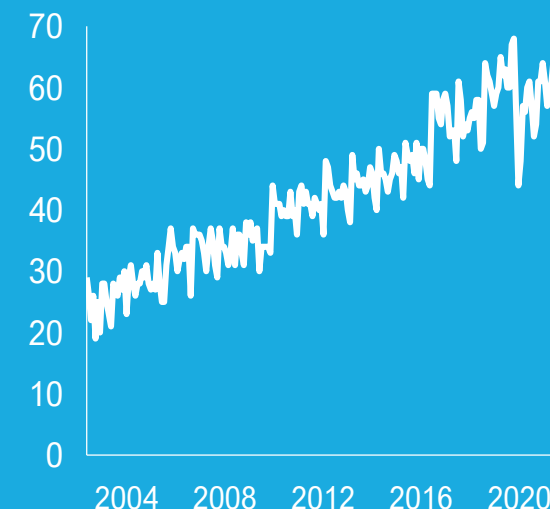
Number of fitness memberships in Europe between 2008 and 2019 [in millions]



Number of members in fitness clubs worldwide went from **120m** in 2009 to **185m** in 2020 (+4%p.a.)

The main driver is the rising awareness on **mental health issues** and the will to take better care of oneself, since sport helps to release stress

Wellness trend (Google)



Numerous start up such as fizz up build on this growing wellness trend to propose innovative solutions to fitness members

SPORTECH

Selection of French SporTech startup in the wellness/ fitness Tech trend

Logo	Name	Description	Fund raised (millions €)	Annual Turnover (>1 million €)	Segment
	Gymlib	Gymlib offers a sport and well-being subscription for employees giving access to over 4000 facilities	14 millions €	✓	 amateur
	SportHeroes	Creation of a community around sport and wellness	12 million €	✓	 amateur
	OLYBe	Yoga, pilates or meditation classes	1,5 millions €	✓	 amateur
	Squadeasy	Solution of engagement / sport practice of the employees. Proposes solidarity challenges to "reforest the planet"	1,2 millions €	✓	 amateur
	Azeoo	Innovative fitness management platform that allows gyms and sports coaches to develop and monetize their services.	1,3 million €	X	 pro
	AirFit	Equipment and free sports coaching application	0,6 million €	✓	 amateur
	Trainme	Platform of sports courses that connects professionals with individuals and companies to find the right classe	1 million €	✓	 amateur
	Diago	Diago is a digital solution to help sports and health professionals to industrialize their coaching.	0,2 million €	X	 pro
	Fizzup	Online sports coaching	1,4 million €	✓	 amateur
	Kinvent	Combines physical therapy and connected objects. For sports and rehabilitation professionals	2 million €	✓	 pro

Sport in workplace is being promoted by the government as it decreases absenteeism and stress and increases productivity

Main trends in the sport in workplace environment

Beneficial impact of sport in workplace:



For the employee

- Between **5%** and **7%** savings on annual health expenses
- **30 to 34** euros/year savings on health expenses
- **+3** years of life expectancy



For the company

- Practicing sports leads to a **30-40%** decrease in absenteeism
- Up to **12%** of productivity gain for the employee.
- **87%** of leaders say it facilitates integration into the company and 85% that it builds team spirit



For the society

- **308 to 348** euros savings in health expenses
- Between **7%** and **0%** savings in health care costs

Recent initiative to increase the practice of sport in workplace



- **12/11/2020: new amendment**, to promote the practice of sport in companies and no longer consider it as a benefit in kind, with the support, this time, of the Government.



- **170 measures in favor of sport**. The objective is ambitious: to reach 3 million additional participants **by Paris 2024**, by democratizing the practice of sport, either through school or through companies

Gymlib: democratizing sport in the workplace



- **Fund raised:** 10M EUR
- **Turnover:** 10 to 20M EUR
- Gymlib offers **sport and well-being subscriptions for employees** giving access to + 4000 partner infrastructures

Major fund raising in Sport in workplace



- **Gympass 220M\$**

French Sportech's startups take advantage of the promotion of sport at work to develop innovative solutions



Selection of French SporTech startup in the sport at work trend

Logo	Name	Description	Fund raised (millions €)	Annual Turnover (>1 million €)	Segment
	Gymlib	Gymlib offers a sport and well-being subscription for employees giving access to over 4000 facilities	14 millions €	✓	 amateur
	OLYBe	Yoga, pilates or meditation classes	1,5 millions €	✓	 amateur
	Squadeasy	Solution of engagement / sport practice of the employees. Proposes solidarity challenges to "reforest the planet"	1,2 millions €	✓	 amateur
	SportHeroes	Creation of a community around sport and wellness	12 million €	✓	 amateur
	AirFit	Equipment and free sports coaching application	0,6 million €	✓	 amateur
	Trainme	Platform of sports courses that connects professionals with individuals and companies to find the right classe	1 million €	✓	 amateur
	CycloPower Factory	Cyclo Power Factory offers collective and playful fitness sessions by associating environmental and social issues.	1 million €	X	 pro

1) the absent companies have an unknown fund-raising amount

NFTs are surging in sport, in France Sorare has signed the biggest round of fundraising in the history of French Tech (600m)

NFT in Sport and Sorare overview

NFT innovation in Sport:

- **Non-Fungible Tokens** can be anything digital and each one is registered as a unique token on the Ethereum blockchain.
- NFT's are an innovative way for athletes and club to raise money, develop their career, interact with fans
- **Big raises in 2021:**
 - Sorare: **728m**
 - Dapper: **550m**
 - Animoca brand: **200m**



Sorare business overview

Fantasy football platform based on **NFTs**, where each digital card is registered as a unique token on the **Ethereum blockchain**.

Players can **buy and sell cards** from other players, **manage a squad of players and earn** points based on real-life performances.

Key metrics

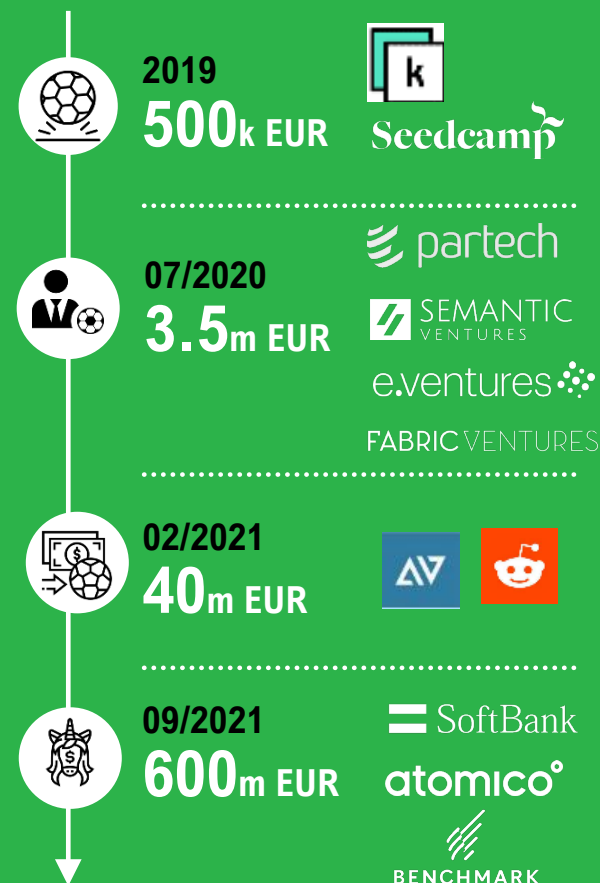
600 000 registered users and **150 000** buying a card or composing a team every month.

Sales growth **by 51x** between the second quarter of 2020 and the second quarter of 2021.

Partnered with **180** football organizations

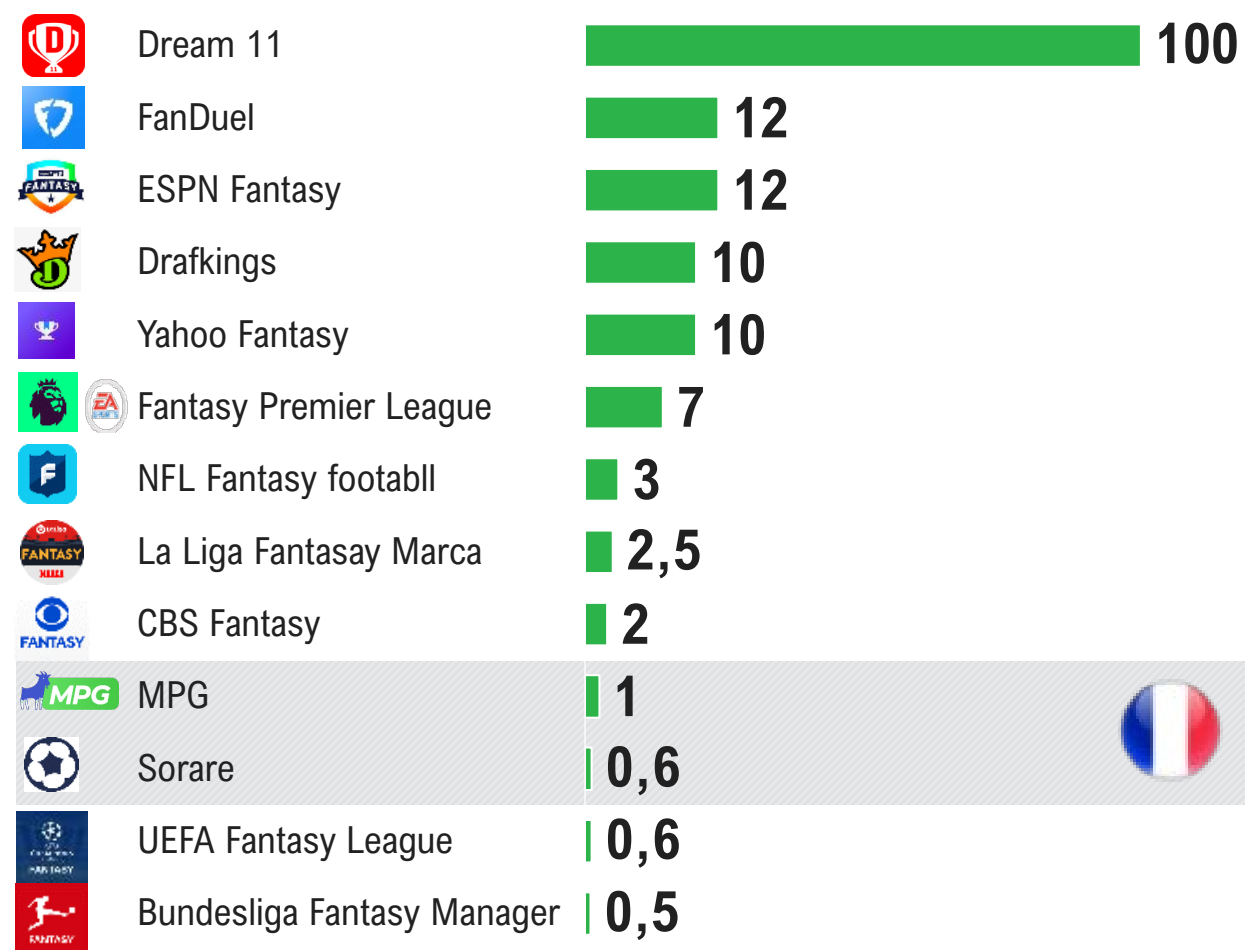


Historic of fund raised since the creation of sorare



Fantasy league platforms, connecting real and digital world are now a key element of fan base engagement and monetization

Number of registered users on popular fantasy league sports platforms [in millions]



A booming trend worldwide :

North America

US: **about 40 million** people play fantasy football

Europe

- **+5.9m** Fantasy League players in UK ; 2018
- **+46% registered users** in sept. 2017 in Germany : the **largest monthly growth** to-date

Asia

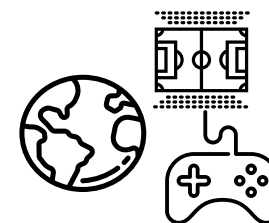
- Indian market is growing fast: **compound annual growth rate of 32%**
- The cricket fantasy league game Dream 11 has known a huge success **(+2 million users since 2016)**
- Dream 11 has **recently raised 840m \$**

Mon Petit Gazon is a leading company of the French Fantasy Leagues

Turnover: Between **1** and **2M**

Fund raise: **1M**

Description: MPG is a fantasy soccer game at the crossroads of gaming, betting, social networks and media.



The French ecosystem of fan engagement is very dynamic, with large fundraising and the first French sportech unicorn

Selection of French Sportech start-ups related to the fan engagement trend

Logo	Name	Description	Fund raised (millions €)	Annual Turnover (>1 million €)	Segment
	Spacefoot	Sport social networks, e-commerce and advertising	2 million €	✓	 amateur
	MPG	MonPetitGazon is a fantasy soccer game at the crossroads of gaming, betting, social networks and media.	1 million €	✓	 fan
	Fanprime	Platform for esports and sports teams to reward their fans based on their level of engagement	2,1 million €	X	 fan
	bFan Sports	Fan engagement platform pre-connected to the digital sports ecosystem	0,83 million €	X	 fan
	Sorare	Trading digital cards of soccer players via blockchain	600 million €	✓	 fan
	be sport	Social network of sport at the service of clubs sportsmen and their fans.	6 million €	X	 amateur
	Wissl Media	Solution to interact in a stadium on giant screens via your phone	1,5 million €	X	 fan
	Arenamatrix	A data marketing solution for clubs, federations and leagues to aggregate all their fan data	2,5 million €	✓	 pro
	Rematch	App for to capture only the most beautiful actions of their favorite teams	0,55 million €	X	 fan
	Vogo	App dedicated to the fan experience in the sports arena.	20,3 million €	✓	 fan
	Digifood	Food/drink ordering solution at its place in the stadium.	1 million €	✓	 pro
	Immersiv	AR/VR to give fans complete control over their live experience	0 million €	✓	 fan

1) the absent companies have an unknown turnover and amount of fund raised

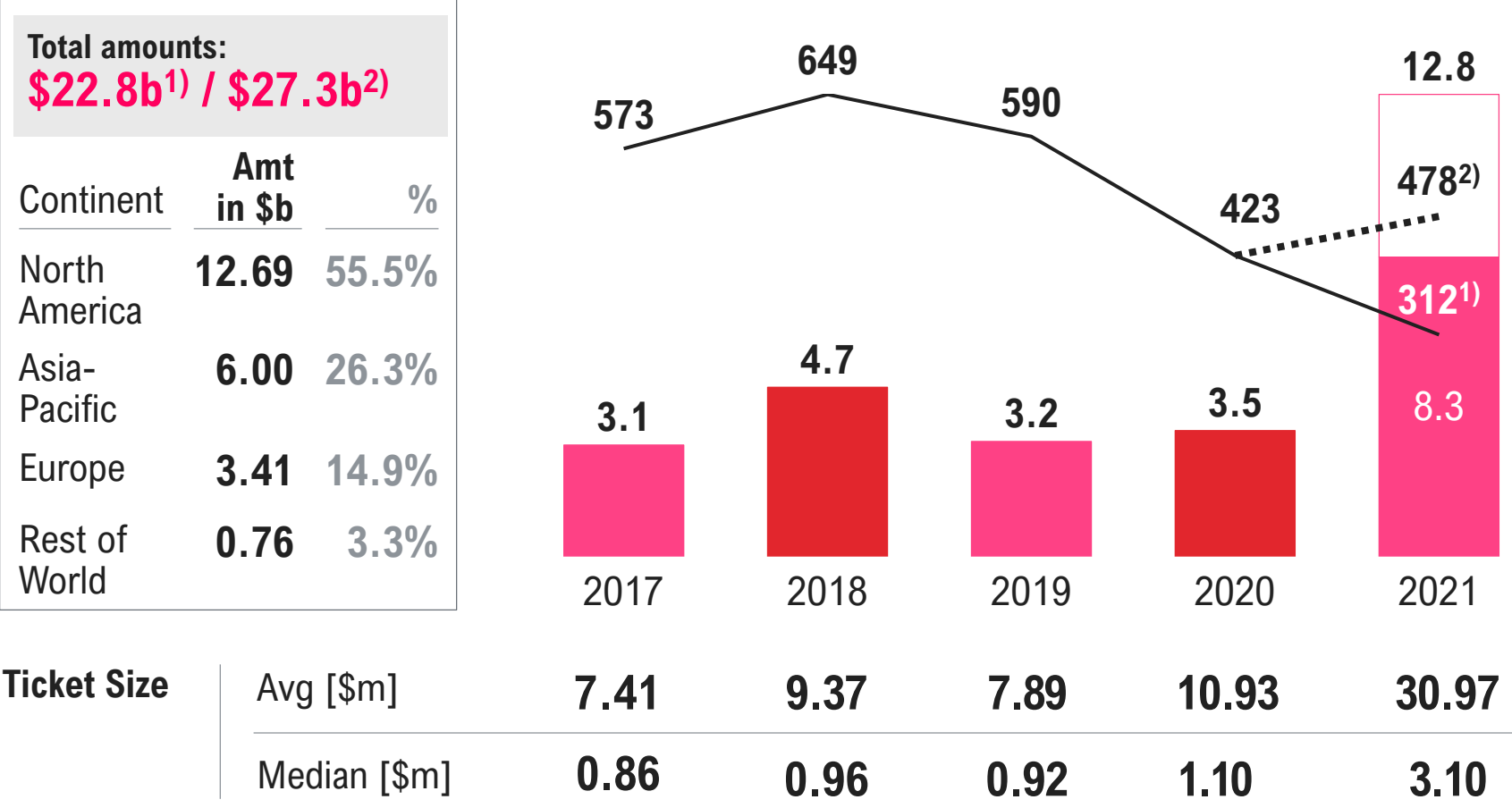
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Global SportsTech Overview – with SportsTechX



SportsTech ups game in 2021 with a record high investment (+360% since 2017)

Funding amounts & Number of rounds 2017-2021 in global SportsTech



1) As of Oct 1 2021
 2) End of year estimate

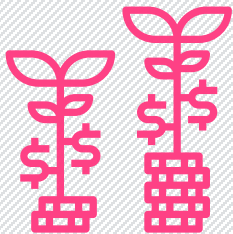


Investment surge on the back of mega trends

Digital and connected fitness

Sports NFTs

Betting and Fantasy sports



With Sorare's massive funding France enters top 4 in 2021, but would be far below without this one mega deal

Ranking of countries by funding in global SportsTech

Countries by Funding 2017 - 2021 in Global SportsTech

		Country		Amount [\$m]	Rank by number of start-up
1	0	USA		11,604.3	1
2	0	China		3,520.6	11
3	0	India		1,938.2	3
4	+4	Canada		1,061.1	5
5	+1	France		962.8	7
6	-2	UK		814.6	2
7	-2	Brazil		755.4	9
8	-1	Germany		534.9	6
9	+1	Sweden		238.3	12
10	-1	Romania		200.1	58

Rank change compared to previous year

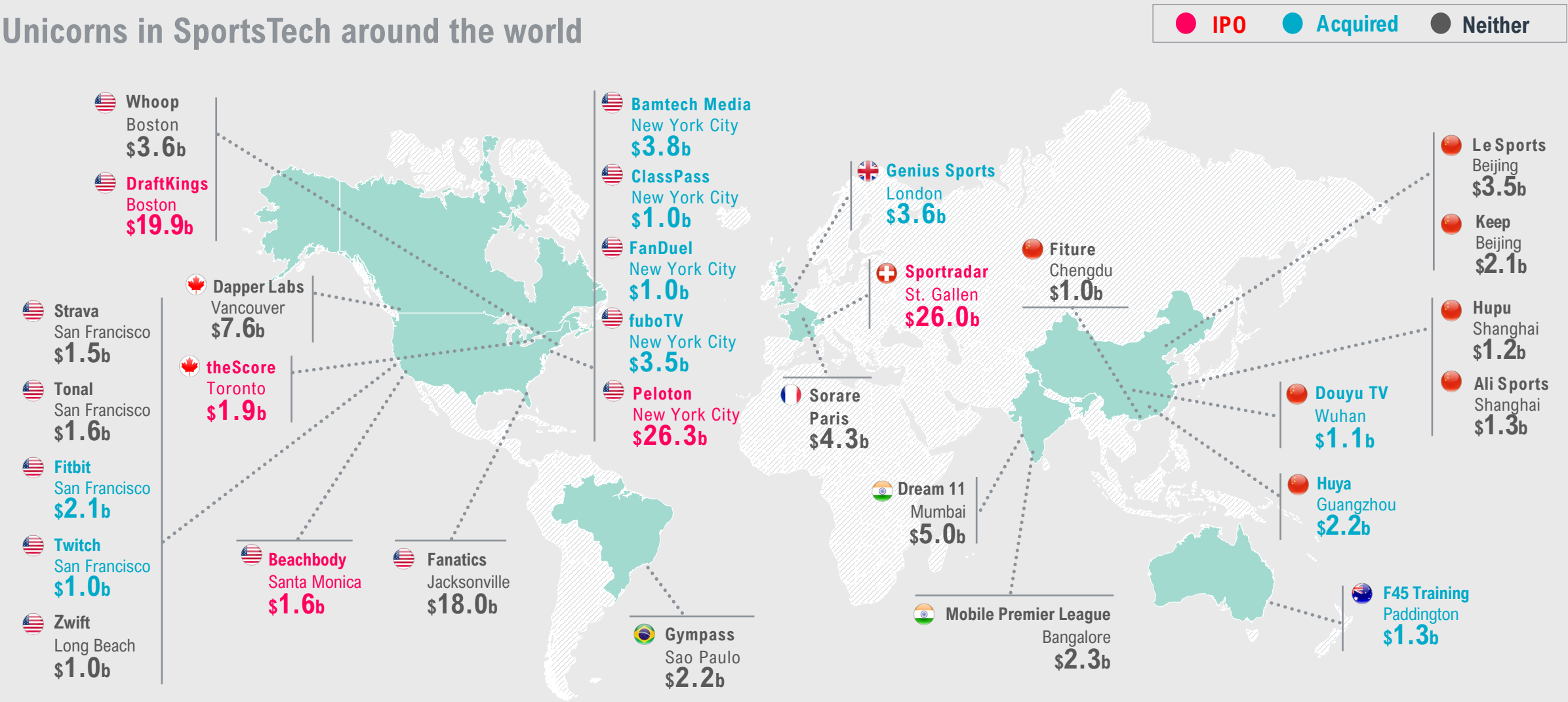
Source: SportsTechX

Countries by Funding in 2021 in Global SportsTech

		Country		Amount [\$m]	Share of top deal
1	0	USA		3,782.9	17.1%
2	0	India		951.2	42.1%
3	+1	Canada		797.2	69.6%
4	+6	France		745.5	97.7%
5	-2	China		676.1	53.2%
6	0	UK		364.0	90.7%
7	-2	Germany		252.9	38.3%
8	+23	Brazil		221.0	99.6%
9	+7	Hong Kong		138.9	100.0%
10	-2	Finland		100.0	100.0%

Record high investment lead to 11 new unicorns in SportsTech in 2021, total now at 30 with only 3 in Europe

Unicorns in SportsTech around the world



60% of SportsTech focused investors are from the US, but diversified funds such as Softbank (Sorare deal) also play a key role

Overview of SportsTech focused investors worldwide

North America					Asia Pacific		Europe	
ADvantage Sports Tech Fund 	KB Partners 	NEXT VENTÜRES 	Stadia Ventures 	Beyond The Game Network 	Dream Sports Investments 	Fitness Ventures 	ADvantage Sports Tech Fund 	Remagine Ventures
Bruin Sports 	Konvoy Ventures 	Rabil Ventures 	TitletownTech 	Ludis Capital 	Lumikai 	Wilcard Ventures 	Aser Ventures 	Seventure Partners
Causeway Media Partners 	Lake Nona Sports & Health Tech Fund 	RSE Ventures 	WhiteRock Capital 	Oregon Sports Angels 	Kalaari Capital 	Athletic Ventures 	BITKRAFT Esports Ventures 	Trust Esports
Courtside Ventures 	Lalotte Venturess 	Rx3 Growth Partners 	Will Ventures 	Phoenix Sports Partners 	VARCIS Capital 		Hiro Capital 	Unbound
Elysian Park Ventures 	Mark Cuban Companies 	Sapphire Sport 		The Players' Impact 			Indigo Capital 	
Jazz Venture Partners 	Mindspring Capital 	SeventySix Capital 						

Funds Networks

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