Look Out Industry Trends Sports

Winning in the 'new normals' with an integrated phigital fan experience



Megatrends in Sports



"COVID-19 has impacted sports ability to bring people together. With the right phigital strategies, blurring of the lines between the physical and digital worlds, the sports industry can emerge from the crisis stronger and more popular than ever. Technology and data can bring the positive emotion of sports to the fans, no matter where they are."

Patrick Adiba

CEO Olympics & Major Events - Head of Sales Public & Defense, Atos

The recent health crisis has accelerated digital transformation in sports. Organizations of all types are making deep and long-lasting changes as they adapt for the 'new normals,' finding new ways to keep users engaged yet safe and reinventing stadium services to comply with social distancing. Agility and flexibility remain essential.

Events will become more digital and contactless than ever. Medical certificates could become a routine part of the accreditation process in liaison with local and national public health authorities. And customers and fans may put a higher value on corporate social responsibility.

The goal posts have changed

Sports teams and governing bodies are seeking direct engagement with fans. Rights holders are facing more competition from other entertainment sources for fans' very thinly spread attention, while globalization is growing their market.

Increasing global engagement comes at a cost: strict observation of local and global data protection legislation, such as General Data Protection Regulation (GDPR) and Children's Online Privacy Protection Act (COPPA) data protection laws, to protect fan intimacy. Cybersecurity is also topping agendas. Fake news, brandjacking, impersonation, trolls or even organized violence could destroy a brand's or player's reputation. Smart security technologies can help police and sports ecosystems eradicate these activities.

Reinventing for the future

Digital is transforming the fan experience while changing the way content is produced, distributed and consumed. Mobile and social allow fans to dip in and out at any time, from anywhere and on any device.

Supported by High-Performance Computing, Big Data and artificial intelligence (AI) will change the world of sport, delivering the compelling phigital fan experience based on the information obtained from fan interactions.

The challenge is not how intelligent we can make machines, but how well the machines can ingest and use the deluge of data to catch fans' divided attention.



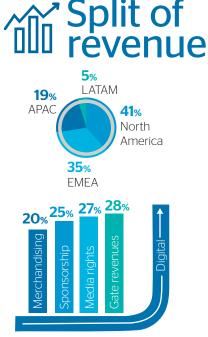
total value (global sports market) 3 years of annual growth ahead, driven by digital \$=USD



global sports technology market in 2018 \$=USD



revenue in esports to double between 2017 and 2020 \$=USD



松 Top 10

most popular sports globally in 2020 (14 billion sports fans globally) Popularity 2020 vs 2018

- 1. Soccer/Football (=)
- 2. Cricket (=)
- 3. Basketball (+6)
- 4. Field Hockey (-1)
- 5. Tennis (-1)
- 6. Volleyball (-1)
- 7. Table tennis (-1)
- 8. Baseball (-1)
- 9. American football/rugby (+1/new) 10. Golf (-2)

2 Trusted partner for your Digital Journey

3 transformation challenges and opportunities for the future of Sports



Transforming fan experiences

Create a captivating fan experience

The current virus outbreak is likely to be the first of several waves, with these happening in different places around the world at different times. We expect the 'new normals,' not a ' going back to normal.' Sports organizations need to leverage the right combination of **crowd safety and capacity management**, physical security, access control with temperature cameras, streaming, collaboration tools, social media and gamification to **allow fans to attend, but in a way very different from before.**

Sports organizations should place AI on their technology roadmaps to **increase fan engagement and personalize the fan experience**. AI technologies can automatically analyze in real-time the vast volume of data to see the patterns and make the correlations that would otherwise remain undetected. They also have the capacity to learn and become more accurate and insightful over time. **AI could let fans know about events** they didn't even realize they might be interested in or power discussion on intelligent bots.

During physical events, augmented reality (AR) mixes virtual objects with the real world, **bringing fans closer to their heroes** or placing content built on data into the crowd.



Reshape business and rights models

Digital disruption is changing the traditional sports business model where primary incomes came through **broadcasting rights, ticketing, merchandising and sponsorship**. Sports organizations will take control of content and data to personalize content for fans, taking revenue directly through **gamified viewership** such as live payments for digital items, new camera angles, volumetric video highlights or statistical analysis and betting.

As actors look for new sources of fan revenue, quantifiable tracking and new sponsorship assets enhance sponsorship opportunities. **New models derive greater value from relationships** with targeted challenges, for example, enabling a more authentic engagement that will spill outside of the venue.

Operators of data-driven stadiums are better equipped to offer data and added-value services for sponsors and partners. **A multi-sided approach** would allow data to be shared for the benefit of all participants (B2B, B2B2C and B2C) and allow the local economy to benefit from events organized in the city.

Improve operations

3

Smart operations and remote productions are now essential, not only for reducing costs and enabling efficiencies but also **ensuring compliance with health-related regulations and guidelines.** They allow sports event organizations to save money and monetize content to invest in other essential assets, such as talented athletes, players or coaches.

Adoption of AI for a sporting venue may **reduce outages, waste and energy usage** by predicting whether a device or asset is on course to break down or assessing how much food should be prepared.

Digital twins are virtual replicas of a product or an individual. They can, for instance, enable **predictive maintenance**. They can simulate new in-games situations to help coaches and participants identify what needs to be improved or protected in real-time. And they can also **predict crowd flows or monitor social distancing** so organizations can ensure sporting events are compliant with the latest health standards.

Provide predictive security & compliance

Innovations and globalization are generating new volumes of data and financial transactions, which require protection and confidentiality. Sports organizations need to adopt clear **cybersecurity and data protection strategies** to respond to evolving threats.

New threats require today's global sports organizations to implement **new mechanisms for defending data and communication lines.** Al can learn how to remove noise so it can detect abnormal activity. In addition, Al predictive threat analysis helps **keep events and venues safe** through the real-time analysis of crowds, for instance. Its pattern matching automatically detects and instigates appropriate actions to eliminate vulnerabilities in real-time.

Fraud also needs to be addressed, including preventing the reselling of tickets through non-official channels at highly inflated prices. **Brand reputation is critical** too, with exposure increasing due to social networks. Hackers, in some cases based on political motivations, now use bots to generate fake news and attack reputation.

Today's global sports organizations are also required to implement **new regulations around data privacy and protection**, with different local application characteristics and local protection laws in each country. **Using data responsibly**, in compliance with data privacy laws and with the respect of the customer, is paramount.

How to successfully modernize and digitize Sports



"Sports organizations that lead tomorrow will be the ones fully embracing digital to stay connected to fans, talking to them every day – personalizing the conversation based on data. Organizations retaining twentieth-century models will only decline and disappear."

Nacho Moros

Chief Operating Officer of Olympics & Major Events, Atos

Bringing fans an unforgettable experience fundamentally changes business and organizational strategies for event organizers, venue operators, sponsors and media rights holders. It impacts the very core of their technology foundations.

Bringing legacy tech into the digital era

For decades, event organizers and venue operators have relied on systems built in isolation, such as Enterprise Operational Systems, Event Management Systems and User Experience Systems. These fail to provide the reach and engagement needed to retain fans' attention. sports organizations face rapid losses if spectators ignore them; they can learn about full customer experience and multi-modal continuity from the media industry.

Technology investment in combination with innovation – especially where fans can watch a game in many different ways – is growing the fan base. Between 2018 and 2020, basketball moved from 9th place to 3rd place in terms of the number of fans globally. That traditional sport is at the forefront of technology today.

While broadcasters traditionally took the risk and benefits of TV rights, technology is changing the way content is produced, distributed and accessed. Organizations are stepping forward, taking control of their content and the conversation with fans.

Sports organizations may partner with a broadcaster, who would operate the business. Or they could produce their own content and operate their own business based on a mix of TV-digital or digital-only platforms, making smaller deals with other digital players. The increase in media consumption during the COVID-19 lockdown will likely accelerate the adoption of direct-to-customer services for distributing sports content.

More disruptive technologies will emerge. While some may only appear as dots on the horizon today, they may turn out to be transformational in the years to come.

Preparing for a game-changing future

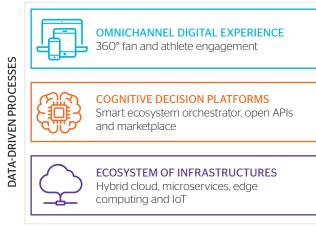
Preparing for the things to come requires event organizers and venue operators to embrace a data-driven world and take a winning position within it while building more resilience against future disruptions. They would be wise to:

- Become wholly fan-centric, ensuring 360° omnichannel engagement with today's easily-distracted, tech-savvy fans.
- Provide holistic data-driven orchestration, convening the largest ecosystem of partners to enrich events and monetize data.
- Integrate facilities management, IT infrastructure, security and services to operate the the future sports complex in a way that is efficient, flexible and evolves as technology advances.

The road ahead

Organizations should begin building their new architecture today. Begin your journey by rethinking your business model, reassessing your technology and then filling the critical gaps. Make the link between fans and operations.

Next-generation architecture for future-ready sports CUSTOMER CENTRICITY



OPEN PLATFORM FOUNDATIONS

10 strategic transformation initiatives that will shape the future of Sports



Sports operating model optimization

- Customer data platforms to know and serve phigital fans better and increase matchday and merchandising revenues. Controlled by the marketing team, such systems create a unified and persistent database that other technologies can access.
- 2. Make stadiums smarter and safer with the adoption of IoT technologies for tracing the flows of people and optimizing the management of the sporting venue infrastructure.

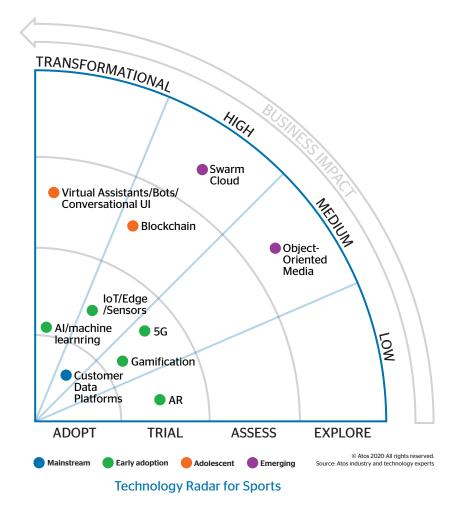
Sports operating model interconnection

- 3. Implement AI-based solutions for sports for a hyper-personalized fan experience (ticketing, in and between games) and sponsorship activations. Marketing powered by AI can elevate engagement among the fan journey and improve campaign results. Smart warehouses automation allows robotic
- 4. Leverage gamification for sports participation. 5G-enabled VR devices allow fans to experience live games from virtually anywhere and with friends across the globe. AR solutions for content production, broadcasting and referee assistance will also enhance fan engagement.
- Implement AI-based solutions and VR technologies for digital athletes to assist in boosting individual performance, reducing injuries and game-day decision making for the coach.
- 6. Ensure a connected stadiums experience with the adoption of 5G and edge computing for content distribution, athlete and fan data collection, and cashless payments.

Sports operating model reinvention

- 7. Feature eSports (professional video gaming) alongside traditional sport, including its participation in multi-sports events. eSports allowed leagues across the world to maintain interest and a sense of competition during COVID-19 shutdowns.
- 8. Drive new business models leveraging the Internet of sports. The connectedness and integration of numerous embedded and non-invasive sensors for extra dataset collection.
- **9.** Promote and support **decarbonization for sport** in general, and major sports events in particular. Reducing environmental impact building venues and infrastructure, gathering people from all corners of the globe, accommodating and feeding them.
- 10. Create animated or virtual characters, or even personalized mascots, for 'always on' entertainment and interaction that enhances fan experience and engagement while infusing the on-pitch/on-court action with brand values and messaging from sponsors and event organizers.





10 disruptive technologies that will shape the future of Sports

Customer data platforms tag and unify customer data from all channels and heterogeneous sources in a central repository before enriching them with attributes to generate audiences and 360° profiles to know the fan better. Sports organizations should set a data strategy and develop a new operating model with technology partners.

Artificial Intelligence/Machine learning will radically change the fan experience with hyper-personalized services. For digital athletes, it can assess performance, monitor movements and identify areas for improvement. Sports organizations should adopt these technologies within their data strategy.

Internet of Things/Edge/Sensors is making the smart venue a reality, capturing all data along the entire fan journey. Sports organizations should perform proof of concepts to identify relevant data along with ways to generate personalized experiences and to make the venue more efficient and secure.

Gamification opens new channels for converting spectators into active participants before, during and after the event, amplifying the impact of rewards programs. Sports organizations should leverage gamification to retain intimacy and drive revenue.

Augmented Reality enriches the live experience, mixing the real world with data so fans can better understand what is happening in the game. Sports organizations should start adopting AR today to enhance the fan experience. Virtual assistants/Bots/Conversational UI will radically change the experience with new personalized services based on fan and athlete data, results prediction and real-time translation for overseas visitors. Sports organizations should explore these technologies within their data strategy.

Blockchain can enhance traceability in sports, for digitalizing and securing ticketing and payments or distributing and controlling digital health certificates. Sports organizations should explore that technology to manage microtransactions, smart contracts, per-view payments, rewards and more.

5G promises broader bandwidth and high density, enabling vast volumes of data and video through the network, for example, within a venue with low latency. Sports organizations should investigate Telecom operators' new business models to provide local services and plan proof of concepts with technology partners.

Object-Oriented Media promises to change linear broadcasting into immersive broadcasting. Broadcasting and sports companies should explore how these technologies can create a more personalized broadcast while allowing fans to navigate into the action and watch the event from anywhere at any angle they desire.

Swarm Cloud strategies orchestrate the multitude of venue systems to create on-demand processing capabilities, allowing seamless experiences across stadiums and events. Stadium owners should consider offering this service to enrich experiences while lowering cost, attracting more events.

Creating your own Sports transformation journey

Follow these three steps for an effective Digital Transformation journey in your organization:



OPTIMIZE Streamline processes to restore revenues, reduce cost/income ratio and boost agility

Intelligent Cloud, Virtual Bots, Customer Data Platforms and IoT are essential in this phase. Establish your organization as a platform and enhance fan relationships

INTERCONNECT

Augmented Reality, 5G, Edge Computing and AI all have a key role to play here.

REINVENT

Put yourself ahead and reinvent to become the sports organization of the future

In this phase, explore the value of Gamification, Machine Learning and Object-Oriented Media to prepare for tomorrow.

Throughout these phases, an open approach to innovation, such as the Digital Business Continuum approach developed by Atos, will be paramount to success. In an ecosystem world where start-ups appear and spread at internet speed, openness is the best way to capture collective intelligence. Selective partnering with SportsTech players can accelerate time to value. To help sports industry players, Atos has set up a selection of SportsTech partners that sports industry players can team up with to co-create the ultimate interactive fan experience for tomorrow.

Where should you begin?

As the trusted partner for your digital journey, serving the world's leading sports organizations, Atos can help.



DISCOVER how our SportsTech program can help you co-create new Future Ready health approaches, fan experiences and content strategies

Leverage our advanced set of SportsTech partners. Meet our experts and stay one step ahead. > atos.net/sports



ENGAGE in a co-innovation workshop at one of our Business Technology & Innovation Centers.

Get off to a quick start with a personalized workshop. Ask for a meeting: > atos.net/btic



EXPLORE how the latest technologies can boost your own practice.

Use our experts and labs to build a proof of concepts tailored to your own business: > atos.net/sports

About Atos

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of \in 12 billion. European number one in Cloud, Cybersecurity and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications and Digital Workplace solutions. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos|Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

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Find out more about us atos.net/sports

Let's start a discussion together



For more information: marketing@atos.net

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