



## Changing the game:

How analytics & AI are influencing the world of sports and beyond

**Deloitte Analytics**

Behind the scenes, on the playing field, and in the grandstands, artificial intelligence is changing the world of sports for professionals, amateurs, and fans alike.

It's a natural fit: the world of sports thrives on statistics, new data is constantly being generated, and high levels of competition drive constant innovation and exploration of new technologies.

Applying artificial intelligence (a term used interchangeably with cognitive technology) to automate processes is adding value

and driving disruption in every industry. In fact, in a recent Deloitte survey those who have already begun adopting and using cognitive technologies are highly enthusiastic about the role of these technologies in their organizations—today and in the future. <sup>1</sup> For sports organizations, technology illuminates valuable insights that help improve

performance, accuracy, and efficiency. Fans and sports enthusiasts are enjoying increased engagement, improving their own play, and simply having more fun.

# Manufacturers of equipment, from running shoes to tennis racquets, are delivering new ways to interact with customers and create exceptional experiences

Here's a closer look at how artificial intelligence is changing the game in sports and beyond.

**Automating data collection and analysis.** AI applications, including *robotic and cognitive automation*, make it possible to collect data from thousands of sources and facilitate value-added analysis. College and professional sports organizations, like baseball, basketball, football, and soccer, are widely using machine learning platforms to compile athlete data, evaluate individual performance, and target recruiting efforts.

Once mostly limited to game scores and player stats, the data available to sports organizations has exploded, thanks to innovations in sports science and new technologies like motion recording and sensors.<sup>2</sup> Cognitive technologies now help teams to better understand and reduce the risk of injury by giving physicians the tools to search medical records and identify common risks, then optimize training.

**Generating insights.** AI-related technologies allow organizations to mine the data they are collecting to generate *cognitive insights* and make sharper and faster decisions. Sports organizations, like the story told in the movie "Moneyball," are using analytics to select teams, inform playbooks, and drive on-field strategy and split-second decisions. Team managers may soon be able to assemble teams based on the combinations of players with complementary characteristics that are predicted to be most successful.

Behind the scenes, analytics provides insight into the business of sports. Marketing and sales operations rely on analytics to help target promotions and advertising, set ticket prices, reach out to new audiences—even set game times and schedules. Advances in

technology, from digital ticketing to biometric check-in, help organizations know who is sitting in the seats, tailor their in-stadium experience, and target marketing incentives. Accurate attendee profile data can also help attract sponsors and create opportunities for interaction.

**Engaging fans.** Today, consumers everywhere expect a more personal experience, and sports fans and participants are no exception. AI technology is helping sports organizations with *cognitive engagement*, allowing organizers and sponsors to better connect with customers, anticipate needs, and spot potential issues. As fans become more digital, social, and mobile, leveraging artificial intelligence for engagement allows fans to engage with players and events, increasing participation, generating additional revenue, and building loyalty. Even manufacturers of equipment, from running shoes to tennis racquets, are delivering new ways to interact with customers and create exceptional experiences.

At the 2017 U.S. Open Championship at Erin Hills, Deloitte and the United States Golf Association (USGA) used analytics and cognitive technologies to personalize the fan experience by collecting and analyzing data at the event. A mobile app allowed fans to track their favorite players and explore data about other competitors. A heat map, generated from the location-sensing technologies, allowed fans to gauge the fan density at each hole to help determine the best place to watch their favorite players.

It's an application of automation, insight, and engagement, and it's only one way that cognitive technologies are helping to deliver powerful new outcomes to the world of sports. [Learn more](#) about how cognitive technology is creating value and delivering a competitive advantage on the playing field and beyond.

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## Endnotes

1. Deloitte, 2017 State of Cognitive Survey. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/deloitteanalytics/us-da-2017-deloitte-state-of-cognitive-survey.pdf>
2. Benjamin Alamar and Vijay Mehrotra. "Beyond Moneyball: Rapidly evolving world of sports analytics." Analytics Magazine. September/October 2011. <http://analytics-magazine.org/beyond-moneyball-the-rapidly-evolving-world-of-sports-analytics-part-i/>

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