

GAME CHANGERS

IN THE LAND OF 10,000 INNOVATIONS, VISIONARIES FROM THE GREATER MSP REGION ARE CHANGING THE WAY SPORTS ARE PLAYED.

Trend: Big Data in Sports

The playing of sports generates tremendous amounts of data -and that data has great value for those who can capture and deliver it in useful ways. Find out how media, social media sites, fantasy sports and medicine are using big data in unique ways.

- THEMES > Big data in sports
- STORY THEMES > Sports technology Entrepreneurship
Fantasy sports Youth sports injuries
Fan experience

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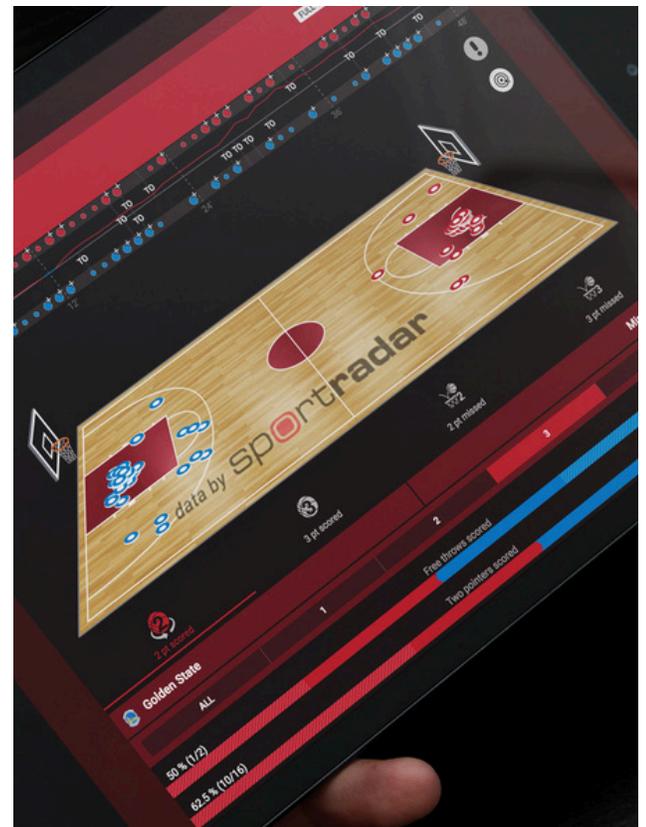
OVERVIEW > The playing of sports generates tremendous amounts of data – and that data has great value for those who can capture and deliver it in useful ways. Media, social media sites, fantasy sports, medicine – all of them have unique needs for sports data. Several businesses in Minneapolis are transforming the way people experience sport through the innovative use of data, including SportRadar US, the U.S. headquarters for the global Swiss firm, which has hundreds of specialists watching and entering sports data from games around the world, data which instantly is fed back out to users playing fantasy games or tracking their favorite teams, never knowing the effort it takes.

- KEY PEOPLE > Dave Abbott, senior vice president of technology and operations, SportRadar US
Rob Phythian, serial entrepreneur and founder and CEO, SportsHub Technologies
Justin Kaufenberg, co-founder and CEO, Sports Engine, youth sports management platform
Steve Washburn, co-founder and CEO, Prevent Biometrics, launching impact-sensing mouthguard
Tyrre Burks, founder and CEO, Player's Health, injury data tracking app

KEY QUOTE > *"As the data gets richer, the vocabulary changes, how we describe the game changes. We used to talk about yards receiving. Now we talk about yards after the catch, how fast the football gets from quarterback to receiver. Then you add in subjective stats, like 'catchable ball' or 'hurried.' It's a story, a never-ending story."*
- Dave Abbott

- WEBSITES > sportradar.us
sportshubtech.com

- MEDIA > [Minneapolis/St. Paul Business Journal](#)
[CBS Minnesota](#)
[Minneapolis/St. Paul Business Journal](#)
[Minneapolis/St. Paul Business Journal](#)



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Trend: Big Data in Sports



In an office building in downtown Minneapolis, on a Saturday afternoon in fall, you might see an amazing sight: over 100 college students ringed by monitors, simultaneously watching over 100 separate sporting events from around the world, intently entering data into workstations.

“All you’ll hear is click-click-click, nobody is talking, everybody is dialed in,” said Dave Abbott, senior vice president of technology and operations at SportRadar US, a key provider of sports data to fantasy sports companies, media companies and news streaming services. Data from this building is immediately funneled to SportRadar’s customers, and from there to the smartphones and news-feeds of fans coast to coast.

Big data is big business in the world of sports, and Minneapolis is home to businesses that create and consume all types of data in many ways. From start-ups to multinationals, they find the Twin Cities area has a number of features that make it a good home for these unassuming but far-reaching efforts:

- A large and skilled tech community, built upon the legacy of the area’s data-hungry Fortune 500 businesses that recruit and train top tech talent
- A steady stream of new talent and tech-savvy workers from the area’s many colleges and universities
- A more affordable business environment, which is important for both big data operations like SportRadar that need lots of people in large facilities and start-ups that need to make every dollar count
- And a growing sports-tech niche that both relies upon and generates all kinds of data, where the key players all know each other and percolate ideas and innovative collaborations.

The data we have about sports changes how people experience and understand a game. “As the data gets richer, the vocabulary changes, how we describe the game changes,” says Abbott.

“Think about it: We used to talk about yards receiving” he continues. “Now we talk about yards after the catch, how fast the football gets from quarterback to receiver. Then you add in subjective stats, like ‘catchable ball’ or ‘hurried.’ It tells a story.”

SPORTRADAR US: FROM TWIN CITIES STARTUP TO NATIONAL SPORTS DATA CENTER

Abbott knows a thing or two about how sports data has changed over the years. Along with his business partner Rob Phythian, who founded fantasy sports pioneer FanBall in Minneapolis in 1995, he co-founded SportsData in Minneapolis in 2010, originally running the business out of space provided by the University of St. Thomas.

From Phythian’s FanBall experience, the two knew that there was an emerging market for sports data, and a role for an upstart. The main

competitor had top-quality data, but was not as responsive as they felt it should be to newer data users, such as fantasy games and social media.

“Sports data has a reasonably high floor – startups really couldn’t enter the market,” Abbott noted. But the co-founders’ experience (Phythian at FanBall, Abbott at Internet Broadcasting, an early digital TV platform meant they had the connections, resources and knowledge to aim high.

SportsData developed its own proprietary data capture software and distribution system, but someone needs to do the capture. And modern college students, well versed in sport terminology from video games and used to multitasking, provide the data input ‘muscle.’

SportsData achieved a measure of success as a niche player in the sports data world, but wasn’t able to gain much traction with big sports data customers. Meanwhile, SportRadar, based in Switzerland, wanted to expand into the U.S. SportRadar acquired SportsData in 2013, keeping the headquarters and operations in Minneapolis while opening offices elsewhere in the country.

“It opened a ton of doors for us,” said Abbott. The firm was able to build out its facilities, hire more and more people, and ink deals not only with data users, but data sources: SportRadar US is now the official data partner for the NFL, NBA, NHL, NASCAR and others – meaning they have access to the raw data the leagues themselves collect, and in turn provide it back to the league in usable forms.

One new innovation is GameStream on Sports Illustrated’s website si.com, which takes positioning data from chips implanted in NHL players’ pads and can recreate in near-real time where every layer was on the field at every second of every play. This data, projected on a virtual field, helps fans visualize exactly how key plays in each game unfolded.

Abbott says SportsData never considered moving from Minneapolis, and after the merger, the city continued to make sense as a headquarters for SportRadar US. “I’m a Minnesota guy. I love it here,” Abbott says. “We have talent here that rivals Facebook, Google or Amazon. Maybe before our startup culture wasn’t so strong, but that’s changed in recent years. The angel capital is here. We’re centrally located, have a great quality of life and are far more affordable than the coasts.”

BETTING BIG ON FANTASY SPORTS AND DAILY BETTING SITES

For his part, Phythian has returned to his sports fantasy roots since the SportRadar acquisition. His new venture, called SportsHub Technologies, has grown to a headcount of 20 and moved into a new tech-centric building it shares with Amazon and other tech firms in Minneapolis’ North Loop neighborhood.



SportsHub Technologies has acquired a number of fantasy games in a mix of sports and helps them succeed by centralizing many of their common functions to improve efficiency. In addition, by having several games under one umbrella, revenue comes in all year long, rather than in a short season for a single-sport game. But the longer-term vision is to layer on a daily sports betting game that will appeal to the collective millions of players in those games.

“There’s been a lot of static and uncertainty around fantasy sports, a lot of scrutiny,” Phythian says. But to him, that looks like opportunity: As the legality and licensing of online fantasy games gets ironed out, his business looks to be in a position to have permission to operate in as many states as possible. Just as importantly, SportsHub Technologies aims to have a mix of games to appeal to different player types, from casual to hardcore. “The appetite for fantasy sports has now transcended generations – it’s here to stay.”

With his fantasy background, Phythian has a deep appreciation for the value of data. “Two main points affect sports data – speed and depth,” he says. “You need real-time scoring so the speed matched how people consume it,” often watching a game with phone in hand and expecting to see their points tally up instantly.

“It’s one thing to have speed on the current score. But there’s a depth you need for fantasy. You might need 75-100 data points to score a fantasy game.” That’s especially true for the most intense players, who might want to play games that match their passion for every detail of a sport.

Phythian sees Minneapolis as a good place to operate for many of the same reasons Abbott expressed – a plethora of skilled tech talent attracted to the area by its big corporations, quality business leaders groomed by local businesses and business schools, a strong marketing community and investors who want to see local businesses succeed.

Quality of life matters, too. For recruiting the hottest tech talent, he said, there’s a tried and true formula: You can get them to come to Minnesota if they have kids.

Overall, Phythian concludes, “we have an environment in the Twin Cities where you have a fighting chance to build a business right. We have this interesting spike in sports tech in this town. For some reason, the recipe was right for this sector.”

OTHER USES OF SPORTS DATA FOR THE HEALTH OF INDIVIDUALS AND SPORT

Throughout the Twin Cities sports tech community, companies large and small are finding ways to use, repackage and move data.

Sports Engine, a leading platform for managing youth sports leagues and teams, adds value by standardizing, simplifying and transferring data between teams, clubs and leagues, previously a challenge for national sports organizations.

Prevent Biometrics, which has created an impact-sensing mouthguard that will be used to watch out for possible concussions in players, is aggregating its data and providing it back to concussion researchers to help them identify causes, patterns and outcomes in head injuries, with the aim of making sports safer.

Player’s Health, an injury-tracking app and platform for youth sports, is also collecting data on reported injuries, first and foremost for use by parents and athletes to understand better how to stay healthy as they play.

It all starts with data, but it ends up impacting lives. “There are so many numbers in sports,” Abbot says. “And so many stories come out of that.”

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