The end of summer brings one of the most popular global sports events of the year -- the US Open.

More than 700,000 fans are expected to attend the matches at the USTA’s Billie Jean King National Tennis Center in Queens, making the US Open the most-attended, single sports event in the world. Even more viewers are expected to watch this year’s tournament on TV, topping the 53 million viewers who tuned in last year on CBS and ESPN.

And a record number of fans are expected to follow the US Open matches on their mobile devices, or seek out the latest match results, news or live streaming of tennis matches at www.USOpen.org on their computers at work or at home. We’re expecting to easily top the 15.5 million visitors who caught the action last year via the tournament’s website. These are big numbers all around.

You might not realize, however, that major sporting events like the US Open are not only exciting to watch and follow, but are also a living lab for how “big data” can translate into big business. This year, the USTA is using business analytics to improve the experience for everyone: fans, tennis players, event organizers and broadcasters.
We analyzed 39 million data points covering Grand Slam matches over the past seven years.

- Rick Singer

We’re all asking the same questions about the 2012 Open. What does Sam Stoser have to do to repeat last year’s women’s victory, or how can past winners Serena Williams and Maria Sharapova reign again? What can we expect from the men’s side? With Rafa Nadal sidelined by injury, will past US Open winners Novak Djokovic or Roger Federer win the men’s title? Or will Andy Murray break through, fresh from winning his gold medal at the Olympic Games in London. How can each of them outplay the others to bring home the trophy?

Answering those questions while connecting tennis fans to the action on the court requires a unique digital experience powered by analytics and cloud computing technologies. By offering deeper analysis and a better understanding of how players are performing and ensuring that USOpen.org can handle peak traffic when website demand picks up, my company is helping the USTA serve up an engaging and interactive experience.

For example, SlamTracker™ is an online dashboard that serves up statistics and information for every match being played. Not only can fans follow live scores, point by point, but they can click on a point on the match’s timeline for additional details.

But most importantly, a SlamTracker feature, “Keys to the Match”, provides insight into what each player needs to do in order to have a higher likelihood of winning. We analyzed 39 million data points covering Grand Slam matches over the past seven years to provide analytic assessments of players and what they need to do to succeed.

Based on head-to-head games in the past, the system filters and ranks the top three keys to the match for each player. Examples might be the need for an individual player to return a certain percentage of second serves in order to win or whether longer points favor one opponent over the other. Take a look at the keys before the match, then follow a player’s performance against them as the sets progress. You’ll see in real time that they keys are a great predictor of success.

Use of this technology is not limited to sports. The same analytic software is being used by hospitals to monitor babies in prenatal wards, police forces to prevent crime and financial services companies to improve customer service and cut costs.

Dating back to 1992, when my company became the official information technology provider, the US Open has embraced this type of cutting-edge technology in order to improve tennis fans’ enjoyment of the sport. And 2012 is bringing even more ways for fans to follow the action.

This year a new free iPad app has been added to the iTunes Store. It joins the existing US Open iPhone app, US Open Android app, and mobile version of www.USOpen.org at m.usopen.org to provide the latest news and scores. Last year, fans viewed a record number of 84 million pages from their mobile devices.

And while sports writers like to predict who they feel are the most likely to win the US Open, we’ll use the IBM Social Sentiment Index to measure what fans are saying and expressing about the tournament on Twitter. Later in the tournament, we’ll reveal unique insights based on our analysis of fan sentiment.

Enjoy the tennis no matter how you choose to follow it, since the experience will be immediate and insightful, thanks to technology.

For more information about IBM’s work with the US Open, visit www.usopen.org/ibm.