

# Smart solutions let Penske Entertainment transform data into an exceptional fan experience

## Client profile

Penske Entertainment Corp., a subsidiary of Penske Corporation, owns the NTT INDYCAR SERIES, the Indianapolis Motor Speedway and IMS Productions.

The NTT INDYCAR SERIES continues to be the premier open-wheel racing series in North America and is one of the most competitive championships in the world.

The Indianapolis Motor Speedway has hosted the world's largest single-day sporting event – the Indianapolis 500 Mile Race – for more than 100 years. The venue has also hosted NASCAR, Formula One, MotoGP, and many other events throughout its storied history.

## Which services?

- NTT Smart Solutions
- Application Development & Maintenance
- Cloud Professional Services
- Data Intelligence and Automation
- Security, Consulting and Professional Services



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**Roger Penske**, Chairman, Penske Corporation

## Summary

Together with Penske Entertainment, we're delivering digital innovations for their businesses; including INDYCAR (the sanctioning body of the NTT INDYCAR SERIES); and venues such as the iconic Indianapolis Motor Speedway (home of one of the world's most famous sporting events, the Indianapolis 500).

The NTT INDYCAR SERIES is one of the most competitive racing series in the world, with fans across the globe. To bring their fans as close to the action as possible, they partnered with us to leverage the data generated during races and deliver it to fans in innovative ways. Through the INDYCAR Mobile App powered by NTT DATA and the media wall, fans can follow the action in real-time; with unparalleled insights into the action.

At the same time, INDYCAR took advantage of artificial intelligence-powered systems to turn the Indianapolis Motor Speedway (the world's largest sports venue), into a Smart Venue. This allows them to monitor the activities at the circuit and proactively manage any issues before they impact the fans' experience.

## Business need

### Driving innovation for fans and race organizers

The NTT INDYCAR SERIES is one of the most competitive racing series in the world. With followers spanning the globe, the leaders of Penske Entertainment and the NTT INDYCAR SERIES wanted to give all fans an experience that matches the technology that powers the race cars themselves.

Delivering this meant that they had to reach the fans wherever they are: at the racetrack, at home or on the go. This required adopting technology to ensure that wherever the audience was located, they'd feel like they were trackside.

"The fan is at the center of everything we do; we have to constantly look at how we can improve our relationship, deepen their engagement and make sure that we understand what they think, what they want, and get it to them," says Mark Miles, President and CEO, Penske Entertainment Corporation.

INDYCAR is driven by data and, as such, they needed a partner who'd be able to leverage data to create innovative experiences for fans as well as help organizers and teams get the most out of the data that was already being generated.

## Solution

### Accelerating fan experiences

To bring their fans – at the venue and around the world – as close to the action as possible, we worked together to take the data generated during the race and deliver it to the fans.

"In an Indianapolis 500-mile race with 33 cars going 200 laps, we take something like 8-million data records through telemetry off the cars. Fans are very much on their A-game; they want more data, they want to know what's going on. It's not just watching cars go around the track; it's how come this happened or why this is happening; what's going on with this driver or that driver," says Roger Penske, Chairman, Penske Corporation.

This data forms the foundation of the INDYCAR Data Experience at the Indianapolis Motor Speedway (IMS), which provides fans with real-time data on the state of the race, presented on the IMS Media Wall, on YouTube and via the INDYCAR Mobile App powered by NTT DATA. Leveraging more than 140 separate data points, fans can track the progress of the race with insights into featuring head-to-head battles; race team and pit stop performance impact; as well as highlighting race events such as the green flag, yellow flags and the checkered flag.

Over the 2021 Indianapolis 500 race weekend, the INDYCAR Data Experience had more than 55,000 unique viewers with 7,400 hours of footage watched.

"The goal of the INDYCAR Data Experience, whether here at IMS on our media wall; or at home through the INDYCAR Mobile App powered by NTT DATA, is to enhance our fans' experience," says SJ Luedtke, VP of Marketing, INDYCAR.

For fans attending a race, we worked together with Penske Entertainment to create a Smart Venue at IMS, the largest sports venue in the world as measured by capacity, and includes grounds that covers more than 1,000 acres. With the ability to host attendance of more than 350,000 at a time, artificial intelligence (AI) provides them with full visibility of the venue; with data calibrated every 30 seconds at greater than 90% accuracy.

This includes using AI-enabled optical detection technologies, combined with real-time entry gate flow rate data; to give their operations and security teams better visibility into current and possible scenarios. With a real-time view of the venue (including visitor and vehicle traffic flow and congestion and social distancing), they're able to optimize their resources in real-time; with faster and more data-driven decisions, allowing them to focus their resources on optimizing race-goers' experiences.

This unified, digital solution also allows them to process transactions – like digital ticketing and parking transactions – anywhere at the venue, creating an enhanced experience for fans.

These experiences are powered by NTT Smart Solutions, our secure, distributed platform that captures video and sound data via sensors and micro data centers in designated areas. Integrating this information with historical and other real-time data sources such as traffic, weather and social media, allows them to leverage cognitive analytics to spot patterns and alert operations teams to any potential issues.

## Outcomes

### Driving innovation for the future

The partnership between Penske Entertainment and NTT has enabled the ability to deliver next-generation experiences to their fans, anywhere, anytime.

This has helped them accelerate their digital transformation; exploring new and exciting ways to engage with their fans and optimize their operational efficiency.

### Seeing value in technology

Working together has allowed Penske Entertainment and NTT to drive innovation in the NTT INDYCAR SERIES. With the strong technological foundation underpinning motor racing, INDYCAR provides the perfect environment to explore the limits of what technology can deliver.

“The sport of INDYCAR racing has always been built on technology innovation. Our relationship with NTT is so important for the future of INDYCAR as they can take us in new directions with their commitment to technology; as we work with them to develop new ways to engage with our fans,” says Penske.

### Smart Stadiums

Increasingly sophisticated sports fans demand an exceptional experience and events taking place at the Indianapolis Motor Speedway need to deliver this. The NTT Smart Solutions Platform provides Penske Entertainment with full visibility of the massive, iconic venue; enabling them to manage crowds, anticipate issues and provide fans with an exceptional overall experience.

### An expanding partnership

The spirit of co-innovation between NTT and Penske Entertainment means that we’re continuously looking for ways to innovate. Be it improving their operational efficiency or finding new ways to bring the fans closer to the racing, the close cooperation between the two organizations means that they’re always looking to push the boundaries of what’s possible.

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