When fractions of a second separate the winners from the forgotten, it’s the team that knows how to approach every inch of the track and anticipate competitors’ moves that has the best chance of a point-scoring finish.

Genpact is partnering with Envision Virgin Racing - a founding member of the world’s first fully electric, international, single-seater championship - to provide more granular and accurate insights into the team’s own drivers and its rivals. In just a few weeks, the partnership has used artificial intelligence (AI) and advanced analytics to address challenges the team has grappled with for years.
Without data, Envision Virgin Racing cars can’t leave the garage. It’s the bedrock of car design, strategy development, and race-day performance. And as is the case for any business, accurate, actionable insights - on the team’s own performance and that of its competitors - provide a critical advantage. But the ability to find and analyze relevant data is a challenge.

Ahead of each city E-Prix, Envision Virgin Racing drivers Sam Bird and Robin Frijns spend hours in high-fidelity simulators, practicing for each race, learning the braking points, where to accelerate, and how to manage energy. The team could examine the data from the simulator runs, but would struggle to uncover deep insights into lap-time performance that the drivers could learn from.

And it’s not just insights into Robin and Sam’s driving strengths that the team needed. Predicting the tendencies of the other 20 drivers in the championship is even more difficult because data is at a premium. While GPS offered an available, alternative source of race data on every driver, the team considered it too noisy to yield valuable insights. Until now.
Genpact’s data science capabilities amplify Envision Virgin Racing’s expertise, providing detailed insights that had been hidden in data.

To help the race team get more from its simulator sessions, we used AI and analytics to reveal detailed results as to who performs best on each part of the track. Robin and Sam can now learn from each other’s strengths, take the best line, consistently deliver the best lap times, and win.

Next, we turned our attention to sharpening the team’s intelligence on its rival drivers by generating value from an unused data source. We scrubbed and normalized the GPS data to prepare competitor profile cards using heatmaps to visualize insights into each competitor. The cards show Robin and Sam how their opponents use energy, brake, accelerate, or take turns in a race, so that they can anticipate their moves.
Within weeks of starting the simulator analysis, Genpact’s data scientists uncovered new patterns and insights that now make it easier for Sam and Robin to learn from each other as they prepare for a race.

For example, in the lead-up to Robin’s maiden victory, our analysis of the virtual runs found that Sam would brake more aggressively going into a specific turn on the Paris track, and accelerate earlier when coming out of it. Robin put these insights to good use when he overtook Sébastien Buemi from Nissan e.dams on that turn to take the lead and win the race.

“For the past five years we’ve been looking for deeper insights from our drivers’ simulator data so they can learn from each other ahead of every race,” says Gil Abrantes, strategy engineer at Envision Virgin Racing. “With Genpact’s advanced analytics skills and understanding of our needs, the team uncovered valuable competitive insights in just two weeks.”

Additionally, by working with the team to use and visualize GPS data, Envision Virgin Racing can see its rivals’ tendencies and weaknesses. In the Mexico City 2019 race, our combined approach enhanced a series of overtakes, including one where Robin strategically let Sam pass while defending against other drivers, allowing Sam to secure a point-scoring finish.

The combination of Genpact’s data-science skills with Envision Virgin Racing’s motorsport expertise brings the team a new, sharper edge in an ever-more competitive sport.
From the racetrack to the boardroom
Banks must meet consumer demands to design products that combine digital convenience with an in-bank, full-service personal touch. And while banks have deep data on customers’ activities and financial standings, they can struggle to turn the numbers into meaningful insights.

We provide better visualization of customer actions from the underlying data. With easier access to insights, banks can turn customer-behavior data into improved services design, enhanced customer conversion and retention, and a well-honed channel strategy.

Envision Virgin Racing uses all available data so that it can be at the top of its game in every race. Insurers also juggle large pools of data from many sources, but can struggle to uncover useful insights and make quick decisions.

Genpact applies AI to analyze millions of images of auto damage so that insurers’ customers receive almost real-time estimates on the cost of repairs, and whether the vehicle is a total loss. Claims decisions are made in minutes rather than weeks, getting insureds back on the road more quickly.

Just as Envision Virgin Racing manages its race strategy’s risks by analyzing alternative data to understand its rivals’ driving habits, companies must use data to protect themselves from third-party risk.

Genpact designs and enhances third-party risk-management programs with insights from internal and external data, including unconventional sources. Machine learning algorithms provide tangible insights for mitigating third-party risk through controls, audits, and remediation plans.
Manufacturing
Stay ahead with alternative data

As customers’ demands increase and competitors make bold developments, manufacturers can’t get left behind.

By analyzing alternative sources of data, including external information and social media, leading companies are uncovering insights that allow them to adjust production schedules, supply chains, and go-to-market strategies to boost customer satisfaction and stay competitive.

All industries
Changing direction without crashing out

Envision Virgin Racing analyzes simulator data so that its drivers can execute every maneuver - whether planned or in-the-moment - successfully and safely. Similarly, companies must prepare for complex projects, so that they don’t disrupt customers by wiping out the services they depend on daily.

Genpact helps manage large-scale change initiatives with scenario simulations that identify the likely impact of process transformation. And by capturing data from one project phase to inform the next, companies can improve outcomes, reduce costs, and enhance the customer experience during and after transitions.
About Genpact

Genpact (NYSE: G) is a global professional services firm that makes business transformation real. We drive digital-led innovation and digitally-enabled intelligent operations for our clients, guided by our experience running thousands of processes primarily for Global Fortune 500 companies. We think with design, dream in digital, and solve problems with data and analytics. Combining our expertise in end-to-end operations and our AI-based platform, Genpact Cora, we focus on the details – all 90,000+ of us. From New York to New Delhi and more than 30 countries in between, we connect every dot, reimagine every process, and reinvent companies’ ways of working. We know that reimagining each step from start to finish creates better business outcomes. Whatever it is, we’ll be there with you – accelerating digital transformation to create bold, lasting results – because transformation happens here.

Get to know us at Genpact.com and on LinkedIn, Twitter, YouTube, and Facebook.

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