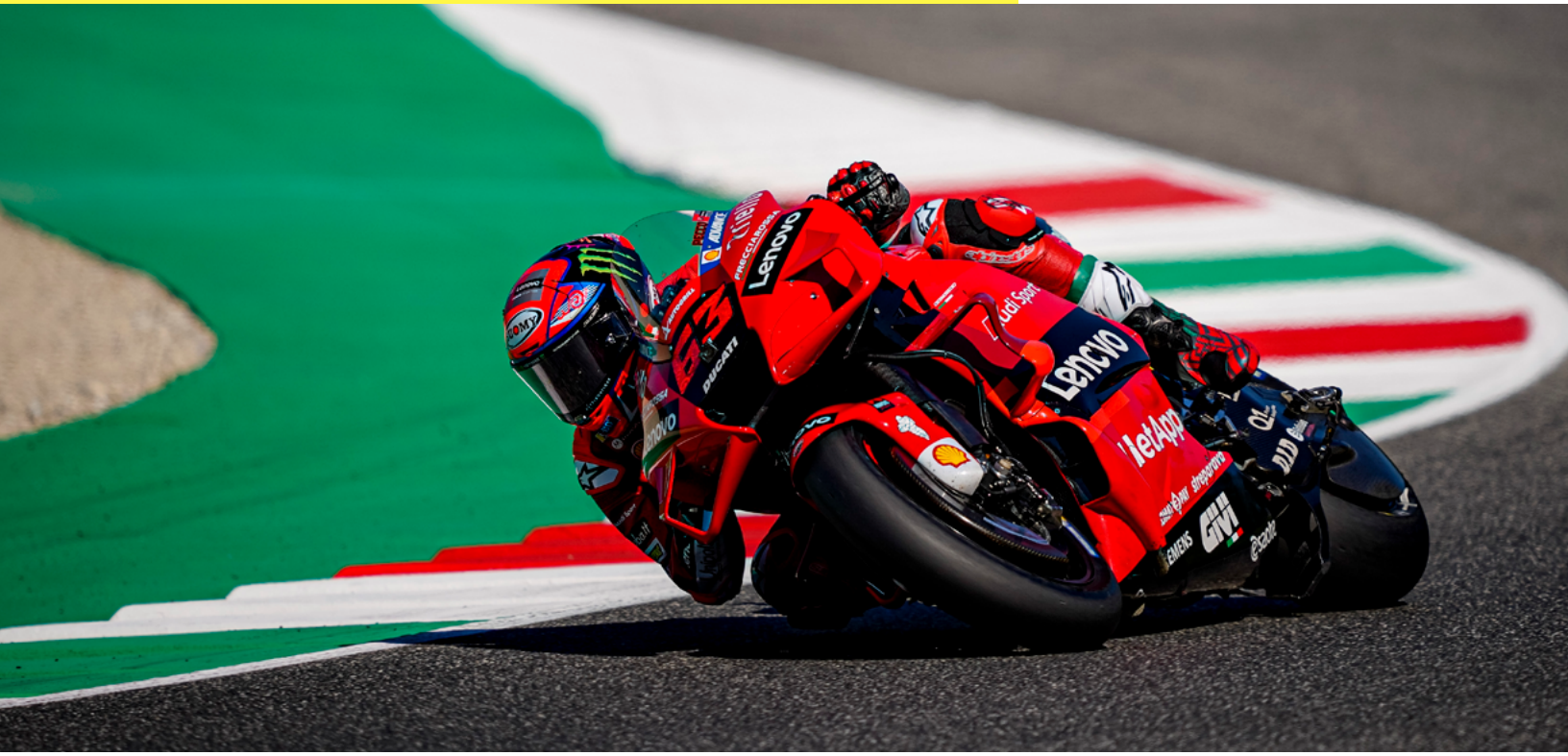
CUSTOMER SUCCESS STORY

Ducati and NetApp build a data fabric to accelerate innovation, deliver high performance, and win races



Problem solved

NetApp helps Ducati build a data fabric by activating massive volumes of data from around the world, using it to optimize motorcycle performance, elevate the customer experience, and position Ducati for sustainable innovation in a data-driven future.

In the competitive, fast-paced world of high-end motorcycle manufacturing, rapid innovation is foundational to success. Ducati knew that the data being generated by its bikes around every turn and straightaway—both on the track and on the street—could be captured and used to optimize racing performance. The data could also help to elevate elevate the full, 360-degree experience that the company delivers to loyal customers worldwide.

90

90 virtual machines in disaster recovery center

200

Runs more than 200 applications

"NetApp is one of the few companies we know that can help virtually every part of our business. Data is only the beginning. NetApp has showed us the power of its comprehensive suite of solutions, from all-flash storage systems to all opportunities offered by cloud data services. NetApp has helped us capitalize on today's business opportunities while we innovate for tomorrow."

Andrea Spina, Chief Information Officer, Ducati Motor Holding

Ducati is defined by sleek Italian design, MotoGP domination, and curve-hugging (and checkered-flagged) motorcycles that are icons of high-end performance worldwide. Since its founding in 1926, the company has designed every one of its bikes in Bologna, Italy. Ducati meticulously manufactured just over 48,000 motorcycles in 2020. To put that in perspective, one of its primary competitors—both on and off the track—sold approximately 19.5 million motor-cycles in the same year.

"Our biggest challenge is competing with global companies that produce millions of vehicles per year, while innovating faster than our competitors," says Stefano Rendina, IT manager, Ducati Corse. Although Ducati might be an underdog in marketing dollars spent, the company more than makes up for it in the volume of performance data gathered, both on and off the track. The data is dynamic, diverse, and distributed, structured and unstructured, streaming in real time around the world, and stored on servers, and Ducati needed a way to tap into its full value.

Rendina explains, "Data was crucial to accelerating our success, both on the track and in the design and management of our products and services. That's why we were looking for a partner like NetApp, to accelerate our digital transformation journey using a mix of solid technologies, leaving us free to leverage any opportunity in the cloud."

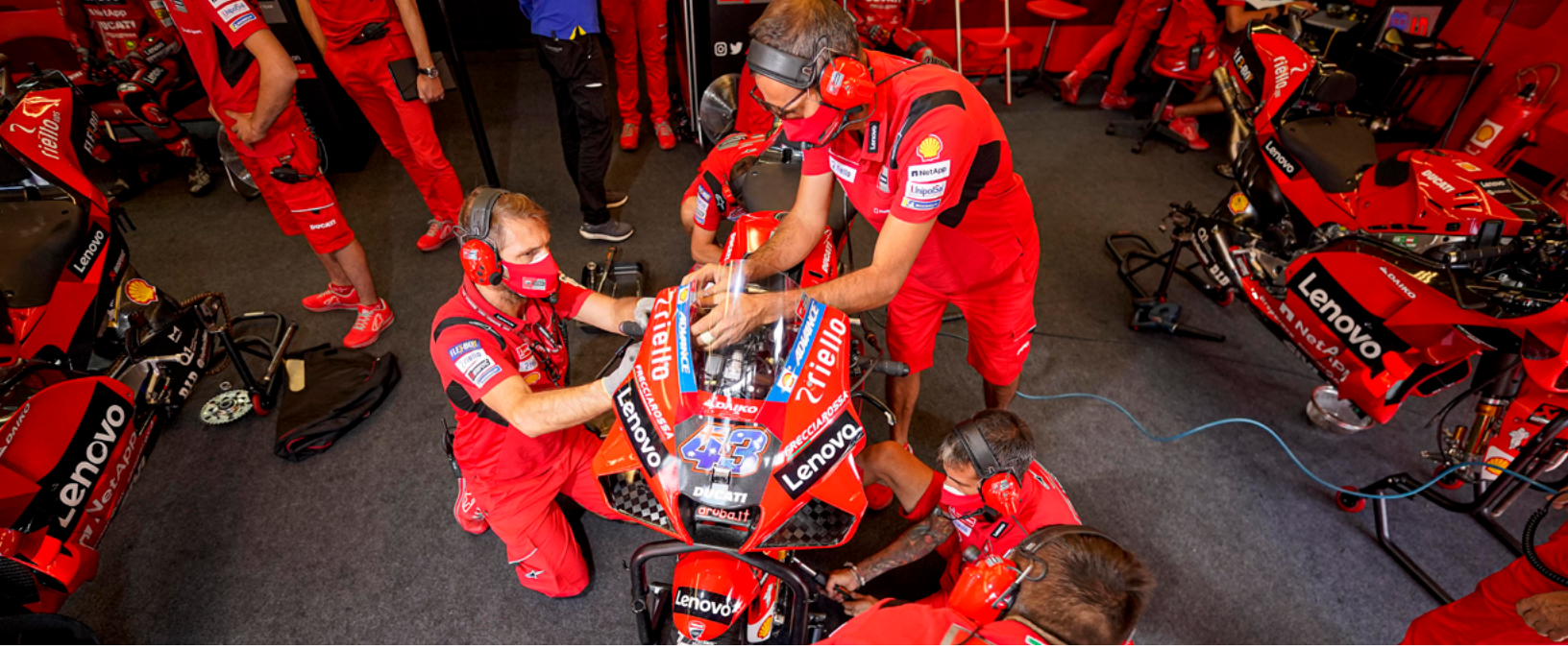
Using race-day analytics as a catalyst for consumer innovation

Starting on the racetrack and eventually moving to the open road, Ducati tapped into the data-generating opportunity from every straightaway and s-curve. By equipping its MotoGP racing bikes with roughly 40 physical sensors, Ducati captured performance data from every possible angle. Using NetApp® technologies and high-performance computing clusters, engineers conducted telemetry processing directly inside the box—on the track during tests, accelerating the development and improving the effectiveness of the private and official tests. The technology also allowed engineers to perform deeper analysis in research and development to improve every detail of the racing bikes and the product bikes.

Rendina says, "NetApp technologies provided us with huge speed and capacity that we can now use to not only manage the branch operations, but also to perform data analysis on site during tests, free practices, qualifying, and in the race. In this way, we can support our official and satellite teams with the same technology and guarantee better performances to all Ducati bikes on track in MotoGP."

Based on the company's success with NetApp technologies, Ducati rolled out the concept of "connected bikes" to consumers, initially harnessing and analyzing performance data from more than 15,000 motorcycles around the world. And that's just the beginning, according to Andrea Spina, chief information officer, Ducati Motor Holding. "Within a few years, we might be able to collect data from over 100,000 bikes, accelerating knowledge transfer from the road to product development as we currently do from races to the product bike."

Thanks to NetApp high-performance computing, and by moving data to a hybrid cloud, Ducati has reduced by 30% the time required to develop prototypes and get new motorcycles to market. By leveraging these speed-to-market benefits, combined with the wealth of data insights gained through participation in MotoGP, Ducati has been able to bring many of the game-changing innovations from the track to the consumer market, offering loyal fans a next-level riding experience on their street-legal road bikes.



"We increased our performance and improved cost efficiencies in ways we never imagined. The data is taking us in a new direction that will take the company to new heights," Spina says.

In addition to the improvements in product and experience innovation, Ducati reduced by 70% the cost of powering and cooling the company's data center.

A winning strategy for better data control, disaster recovery, and security

NetApp also enabled Ducati to leverage the enterprise-class features of NetApp ONTAP® software, helping to improve the sophistication of the company's data management strategy, including versioning, security, and NetApp Snapshot™ copies. They gained the ability to integrate with Active Directory to simplify and automate the management of data access.

With improved application of data comes a deeper understanding of the importance of a powerful data security strategy, including an effective disaster recovery solution. Spina says, "NetApp provides us with solid foundations to guarantee data protection and integration with the main data protection software solutions. As we are approaching software as a service, NetApp will be able to guarantee that this data is retained and protected. We are widely using applications like Office 365 and Salesforce.com, and in the future, NetApp will support us with cloud data services to ensure data mobility and availability to our users."

Positioned to thrive in a hybrid, multicloud world

To meet its storage demands, Ducati chose NetApp AFF to help consolidate a wide range of workloads and more than 200 applications. This consolidation makes all of the data assets available in a single, unified system that offers optimal productivity, minimal footprint, and improved access to all the enterprise-grade functionalities to meet the company's needs.

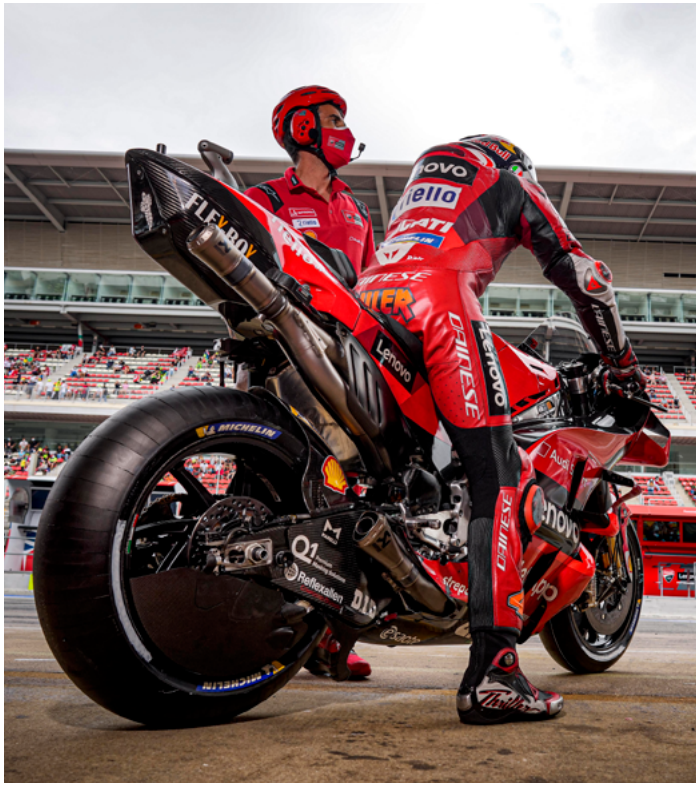
NetApp's assistance with Ducati's data center modernization led to new opportunities outside of the engineering and design departments that Ducati might never have imagined otherwise. Overall, Ducati has worked with the NetApp team on four projects to date: data center consolidation, a high-performance computing cluster renewal, the implementation of a disaster recovery and data protection strategy, and the research for a new IT infrastructure model to support all of the company's branches.

Rendina says, "For all these projects with NetApp, we achieved great results in three primary areas: footprint reduction, data awareness, and speed. Our high-performance cluster reduced footprint by 20 times, and our entire data center had an overall reduction of 7 times. With compaction, deduplication, and compression, we could achieve a data optimization of 27:1 for some workloads and of at least 10:1 overall."

The transformative value of the data fabric
According to Spina, "Once we consolidated our data center, we understood that data could be used by a wider group of users. This led us to perform an assessment of our data capital to enable engineering, marketing, and sales. We're able to leverage the potential of data more broadly. We could not do this before we reshaped our data center."

As NetApp and Ducati continue to evolve their partnership, they will work together to discover new ways to leverage Ducati's data fabric to drive and inspire innovation across every aspect of Ducati's pacesetting global organization, including the potential for machine learning and AI opportunities.

Spina shared his aspirations. "NetApp is one of the few companies we know that can help virtually every part of our business. Data is only the beginning. NetApp has showed us the power of its comprehensive suite of solutions, from all-flash storage systems to all opportunities offered by cloud data services. NetApp has helped us capitalize on today's business opportunities while we innovate for tomorrow."



Solution components

- NetApp AFF
- High-performance computing
- Hybrid cloud
- Machine learning and artificial intelligence

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About NetApp
In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere. To learn more, visit www.netapp.com