Making Breakthroughs with Data

Learn how agility and data help Mercedes-AMG PETRONAS Formula One Team make bold, winning moves.

Official Team Partner

PURESTORAGE®

///AMG
PETRONAS
FORMULA ONE TEAM

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What's in a Breakthrough?

**Breakthroughs are revelations—
bold moves that lead to great things.**

We believe your biggest breakthroughs start with your best instincts. With the right data to guide you and the tools to take action, those instincts can become huge wins. At Pure Storage, we're here for it—for the disruption, for the innovations, and for the game-changing growth.

Every day we're inspired by breakthroughs made with data. But too often, we hear how complexity gets in the way of those breakthroughs. We've made it our mission to change that—and we're sharing how in this guide.

Hear how the Mercedes-AMG PETRONAS Formula One Team, one of the leading F1 racing teams in the world, found the agility they needed with uncomplicated data solutions from Pure. Then, find out how you, too, can uncomplicate data storage, forever, and make breakthroughs in your organization.

Buckle up. It's time to turn your instincts into action.

AJAY SINGH, CHIEF PRODUCT OFFICER, PURE STORAGE

Agility and Data Drive Instincts and Outcomes

Formula One racing requires gut instinct and split-second decision-making. It's a precise sport where seconds matter. That means data—and fast, agile access to it—is key to competitive edge.

For The Team, having operational agility is like being aerodynamic off the track. Where F1 cars are designed to slice through the air with minimal drag, an organization free from complexity can move faster, be ready for anything, and go after big wins.

- **On the track**, data powers instinct and insights, helping teams to fine-tune cars' performance, keep drivers safe, inform pit-stop strategies, and more. Cars' instrumentation generates more than a billion data points and terabytes of data.

- **Off the track**, The Team uses detailed metrics in almost every aspect of its operations, from simulators and sustainability to lean manufacturing. Data is a core part of each decision-making process.

All of this means that data has to be highly accessible, not trapped in silos.

Here's where the agility and power of Pure come in.

**MICHAEL TAYLOR, IT DIRECTOR,
MERCEDES-AMG PETRONAS FORMULA ONE TEAM**

"Many organizations talk about being data-driven, but we want to go one step further to knowledge-driven. To make real breakthroughs with data, we needed a modern data architecture."

How Mercedes-AMG PETRONAS F1 Team Put Data in Pole Position

The Bottleneck

Complexity and Operational Overhead

When The Team began experiencing exponential growth in data, their infrastructure was spread out among multiple vendors, making it complex and expensive to manage. The use of new services such as simulators generated even larger volumes of data in addition to the trackside data. This led to operational overhead, siloed applications provisioned onto different systems, and inconsistent levels of performance.

> "We needed to find a way to better serve the needs of all parts of our business, which triggered our strategic standardization—onto one vendor and the migration of 3 petabytes of data onto two platforms, FlashArray and FlashBlade."

MICHAEL TAYLOR, IT DIRECTOR, MERCEDES-AMG PETRONAS FORMULA ONE TEAM

The Breakthrough
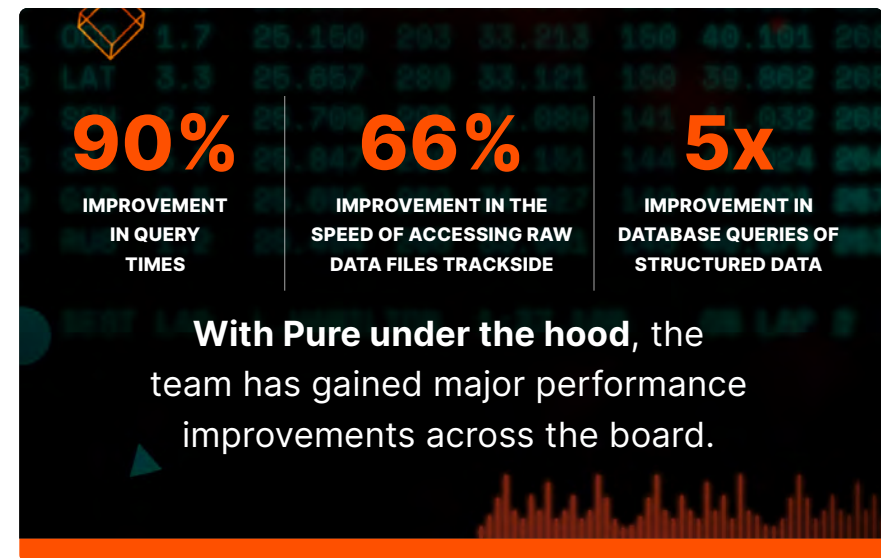
A Focus on Outcomes, Not Infrastructure

The IT team shifted its focus to outcomes. They needed to provide data services to the organization at an effective cost point, but they also needed better controls for security data and consistent performance.

The team found Pure Storage took an "F1 approach to storage," with a modern vision and other synergies. Pure's reduced physical footprint, built-in automation, infrastructure as code, and snapshot technology would allow the team to enhance performance, iterate faster, and build data protection into every process.

The Win

Pure Performance, Agility, and Innovation

The Team's relentless focus on innovation made Pure the ideal partner for a cutting-edge and competitive data center. Consolidating to a Pure-based storage infrastructure gave The Team the confidence to make truly bold moves backed by data.

90%	**66%**	**5x**
IMPROVEMENT IN QUERY TIMES	IMPROVEMENT IN THE SPEED OF ACCESSING RAW DATA FILES TRACKSIDE	IMPROVEMENT IN DATABASE QUERIES OF STRUCTURED DATA

With Pure under the hood, the team has gained major performance improvements across the board.

The Team now has the agility to make decisions that influence race outcomes and make the car go faster, with input from computational fluid device (CFD) systems and algorithmic data. It's also opened up bandwidth for more innovation, such as smart sensors that process car-generated data closer to the edge.

5 Steps to Make Breakthroughs

1. Get Your Data off Legacy and Into the Fast Lane

The value of your business is in your data, but that data has to be agile. Legacy infrastructures built on spinning disk, slow networks, and outdated application architectures limit agility. If more business processes and decisions will be powered by modern data, will the infrastructure you build today keep up? It's time to leave behind products you have to maintain, upgrade, and eventually forklift-replace.

2. Focus On Outcomes and Agility, Not Infrastructure

Be aware of how much time and resources are spent looking after traditional data technologies and managing sprawl. Is it possible to deploy API-driven technologies that require fewer specialized skills to set up and manage? This can reduce dependency on hard-to-find resources and allow you to focus on high-value projects with a likelihood for success.

3. Embrace Simplicity and Mobility

As-a-service models offer unparalleled rapid agility and flexibility. With a service-level agreement (SLA) and transparent pricing model, you get exactly what you pay for and the flexibility to spin up new workloads as needed. Eliminate the complexity of operating siloed private- and public-cloud environments so you can seamlessly move workloads as business needs change.

4. Demand That Longevity Is Built In

Legacy purchasing models force organizations to rebuy capacity they already have and pay for complex operational overheads, including data migration fees. Opt for technologies that provide multigenerational upgrades without business interruption. This means you can refresh your infrastructure once and then upgrade without planned downtime or disruption to your business operations.

5. Align Today's Infrastructure With Tomorrow's Goals

Work with a trusted partner who can best advise you on long-term strategies to achieve your goals. Your technology strategy shouldn't just support the goals of the business—it should help inspire innovation. Today's innovations will be tomorrow's practical applications. Be sure you have the future-proofed foundation to support them.

"The agile organizations are the ones who have built agility into the data center."

MICHAEL TAYLOR, IT DIRECTOR, MERCEDES-AMG PETRONAS F1 TEAM

Pure Turns Bottlenecks into Breakthroughs

Instincts Into Results

In a data-fueled world, Pure Storage gives winners the confidence to follow their gut and turn instincts into results.Rapid agility and industry-leading consolidation allow organizations to transform sprawling data into clear-cut business opportunities and outcomes.

Application Performance and Consistency

Speed up DevOps and achieve consistent uptime and response times for mission-critical applications and databases.

99.9999%

BENEFIT FROM 99.9999% AVAILABILITY WITH FLASHARRAY™

Modern Data Protection

Data infrastructure must safeguard you against threats to resilience and cyberattacks. With always-on, end-to-end protection, you can say goodbye to siloed legacy solutions and eliminate the complexity of keeping your data safe. Mitigate risk with Pure Storage SafeMode™ snapshots, which protect backup data while providing fast recovery at scale.

Real-Time Analytics and AI/ML

Accelerate time to insight and simplify data management everywhere. Easily unify data silos and scale massively for deeper business insights. Accelerate problem-solving and decisions for immediate survival and future innovation with rapid agility and efficiency.

Make Breakthroughs with Pure Storage

With Pure Storage, simplicity and sustainability aren't attributes—they're an architecture that replaces antiquated storage systems with fast, flexible resources that fit modern operating environments.

Cloud-Ready

Pure offers everything as a service for flexible consumption, predictable costs, and cloud economics. Our solutions are multicloud-enabled, so you can seamlessly extend your data services into the cloud with modern apps and Kubernetes orchestration.

Innovation Leadership

Pure is a pioneer in the all-flash data center, delivering the most modern data-protection solutions, with security and rapid recovery against ransomware threats. Our Evergreen™ subscription model helps keep you always running and upgraded without rebuying, disruption, or major CAPEX. It lowers the total cost of ownership (TCO) by 30-50%.

Sustainability

For The Team's trackside operations, a small footprint is critical—leaving space for more spare car parts. For you, reducing your data center footprint with Pure reduces space and energy for power and cooling.

The Best Experience

Work with a partner who knows data infrastructure inside out, with a highly skilled technical and support organization that will make a customer-first strategy a reality for you. What really sets Pure apart is our white-glove treatment of customers and partners alike.

7th
CONSECUTIVE YEAR

For over seven years, Pure Storage has maintained a **Net Promoter Score (NPS) in the 80s.** This year, we achieved an NPS of 85.2, which puts us in the top 1% of all B2B businesses tracked by Medallia.

Top 1% of B2B Businesses **83.5**

0   100

Put the Pedal to the Metal

Formula One is a sport where split-second decision-making matters and this is no less true when it comes to business and the bold moves that define winners. Make data your competitive edge with Pure's leadership in innovation and cloud-ready solution and strengthen your business for today, tomorrow, and the challenges to come.

- Visit the Solutions Lab to identify your breakthrough.

- Test drive Pure to see how your breakthrough feels.

- Get an assessment and proposal from your Pure advisor to understand the costs and next steps to achieve your breakthrough.

Learn More about the Mercedes-AMG PETRONAS F1 Team and Pure Storage Partnership

purestorage.com

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PURESTORAGE®
Uncomplicate Data Storage, Forever