

**DELL**Technologies

**intel**<sup>®</sup>

# Unleash data-driven insights and opportunities with analytics.

How organizations are unlocking the value of their data capital from edge to core to cloud

# The power of data to differentiate

Industry analysts expect data creation to reach 463 exabytes every day by 2025.<sup>1</sup> All this data is bursting with the possibility of fueling better decisions across the entire organization, changing how businesses operate, redefining the way people work and transforming industries globally.

This is a transformational opportunity where the winners in today's data-driven marketplace will be defined by how quickly they can act on increasing volumes of data. This eBook highlights how Dell Technologies' customers are benefitting by using modern analytics solutions to digitally transform and unlock value from their data.



463

exabytes every  
day by 2025<sup>1</sup>

<sup>1</sup>Accenture, [Why you need to capitalize on the rise of the data driven enterprise](#), May 2021.

# McLaren Racing pushes the boundaries of performance.

Data-driven innovation is at the heart of McLaren® Racing's strategy, where competitive pressures demand that engineers always drive further performance gains. Analytics solutions from Dell Technologies help them simulate and perfect a racecar's aerodynamics.



“We’re in a race, on and off the track, with upgrades to our cars about every 17 minutes, and a Dell Technologies solution is involved in each one.”

— Jonathan Neale,  
Chief Operating Officer,  
McLaren Group



300  
sensors installed in  
every McLaren racecar



1.5TB  
of data generated by each  
racecar over a race weekend

100,000  
data points generated  
per second during a race

# Team Liquid dominates esports with blazing fast data access.

Team Liquid, one of the biggest names in the billion-dollar esports industry, gets a jump on competitors with high-performance and ultra-low-latency gaming systems plus globe-spanning analytics solutions from Dell Technologies, powered by Intel® Xeon® Scalable processors.

**“We have terabytes of data that must frequently be shared...having all this vital information on our PowerEdge server makes it very convenient.”**

— Bo Kryne,  
Director of Fan Management, Team Liquid



## Terabytes

of data shared frequently  
across the globe



## 6-7

moves per second  
made by gamers



## #1

most money won in  
the history of esports



# Duos Technologies uses edge analytics to keep trains moving.

With thousands of locomotives crossing North America pulling millions of railcars, the impact of stopping trains is substantial. Duos® Technologies deploys PowerEdge servers, powered by Intel Xeon Scalable processors, at the edge to handle sophisticated analytics that keep the trains moving.

“We count on PowerEdge servers to process and analyze the images and other data from the cameras and sensors 24x365.”

— David Ponevac,  
Chief Technology Officer,  
Duos Technologies

**duostech**

1.3TB

of data processed and analyzed daily per site



120:1

reduction in inspection time

US\$3,000

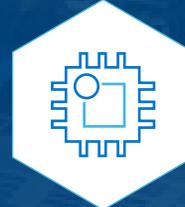
savings per instance

# Swansea University uses data to fight a global pandemic.

A team at Swansea University created an in-depth mathematical model to predict behavior during the COVID-19 pandemic. As a result, local governments made more informed decisions to protect their citizens.

**“The model works...this is really a case in which lives have been saved, thanks to the application of the model.”**

— Professor Biagio Lucini,  
Swansea University



13,080

cores across two HPC clusters



2PB

of storage connected  
across two HPC hubs



Real-world  
benefits

via research that changes the  
world and saves lives



# Medacrist advances healthcare analytics to save lives.

Medacrist® uses artificial intelligence (AI) and analytics to pinpoint unusual patterns throughout a drug's lifecycle. The company depends on analytics solutions from Dell Technologies, powered by Intel Xeon Scalable processors, to analyze data and deliver actionable insights quickly.

“Our clients can improve patient safety or even save lives because the Dell Technologies solutions support analytics based on massive amounts of data.”

— David J. Brzozowski Jr,  
Chief Technology Officer, Medacrist



13%

cost savings, while scaling to meet client and data growth



5 minutes

for analytics instead of 24 hours

Millions of dollars

saved by upholding 99.99% uptime agreements

# Durham University investigates of a universe of data.

With its rich mix of technologies, COSMA8 delivers the robust high-performance compute and storage resources that scientists require when they are trying to unlock the secrets of a very big and complex universe. This work involves enormous amounts of data that must be processed at high speeds. A single simulation can produce hundreds of terabytes of data.

**“By reducing the length of time that it takes to write and restart files...we can really concentrate on the core computation rather than waiting for files to be saved.”**

— Alastair Basden,  
Technical Manager, Durham University



## Petabytes

of data stored and analyzed

## 2.6PB

of usable  
storage capacity



## 200GB/s

I/O speeds achieved by the  
cluster storage system



# Dell Technologies IT delivers data-driven insights globally.

As a global technology company with approximately 165,000 employees, Dell Technologies generates an enormous amount of data. To derive value from this deluge of data, the Dell IT organization manages a massive data lake with a world-class set of tools for analytics.

“We’ve been pulling in an additional \$200 million a year... the improved efficiencies led us to bring in more dollars.”

— Darryl Smith,  
Chief Data Platform Architect and  
Distinguished Engineer, Dell Technologies



2.5TB  
per second data  
movement



7 seconds

or less to query a  
7 billion-row table

US\$100  
million

in cost avoidance

# Dell Technologies IT saves analytics time and effort with Splunk.

Splunk® is designed to remove the barriers between data and action, to help organizations thrive in the data age. Dell Technologies uses Splunk throughout IT operations to monitor, investigate, analyze and act on data at any scale.

**“Whether analytics is just query-based or algorithm-based machine learning, Splunk allows you to look for things that you don’t necessarily know exist.”**

— Darryl Smith, Chief Data Platform Architect and Distinguished Engineer, Dell Technologies



splunk>



Hours  
to minutes

to diagnose problems

Single  
location

for web server logs



91 out of 100

Fortune 100® companies  
use Splunk



## Unlock the value of your data capital.

Dell Technologies helps organizations of all types and sizes unlock the value of data capital with a solution portfolio that encompasses a wide selection of options, purpose-built for today's top data transformation goals.

Dell Technologies can help accelerate your digital transformation, with modern analytics solutions at any scale, so your teams can focus on creating measurable value from data.

Learn more.

[delltechnologies.com/analytics](https://delltechnologies.com/analytics)

# Dell Technologies and Intel

## Innovating together for today and tomorrow

Dell Technologies and Intel work together to drive innovation, powering a broad portfolio of trusted solutions for analytics, enabling you to move faster, innovate with abandon and operate more efficiently. These solutions are based on Dell PowerEdge servers and storage, workload optimized on Intel Xeon Scalable processors to provide the highest performance from the edge to the cloud to the core.

### Collaboration opportunities

- Design, test and bring your vision to life at [Customer Solution Centers](#) worldwide.
- Tap into collaborative expertise in the [HPC & AI Innovation Lab](#).
- Leverage best practices from our worldwide [HPC & AI Centers of Excellence](#).

### Services and financing

- [Analytics consulting services](#) provide a practical assessment how to achieve your goals.
- [Services](#) supplement your workforce with expert skills.
- [Managed Services](#) help reduce IT costs, complexity and risk.
- [Residency Services](#) provide expertise to help keep IT running at its peak.
- [Dell APEX](#) gives you a wide range of flexible consumption models.