Put your data first & enhance your business with ARTIFICIAL INTELLIGENCE
Artificial Intelligence (AI) is dramatically altering every industry. And we’re just beginning to tap the potential of these capabilities.

AI is used to describe technologies where computers and algorithms make decisions or perform tasks that typically require human intelligence.

Examples include visual perception, speech recognition and predicting customer behavior.

AI initiatives maximize the value of your data and help deliver innovative new products and services to market.
Based on ESG research: Nearly three fifths (59%) of organizations are increasing their spending on AI in 2019.¹

In the world of AI, each experience is synthesized and then utilized to make decisions or take actions that are smarter, faster and more precise—24x7.

In addition to identifying new revenue streams, AI positively impacts:

- Customer Experience
- Cost Reduction
- Internal Operations
- Risk Management
There is a perfect storm driving AI demand.

**Data growth**
According to IDC, the global datasphere will reach 163ZB by 2025. There is increased data available to fuel AI — with more generated every second. Most of this is data is unstructured.

**Compute power**
The massively parallel architecture of GPUs and CPUs deliver the computational capacity required by modern AI for revolutionary breakthroughs in performance.

**AI innovation**
AI toolkits and skillsets are becoming ubiquitous enabling more organizations to train machines to use data to sense, learn, reason, make predictions and evolve.

**Scalable, high performance storage**
The newest Network Attached Storage technologies store larger datasets and remove I/O bottlenecks, providing data scientists with quick access to data on a higher performing, larger scale.
ESG surveyed 750 strategic IT Decision Makers about the relationship between their infrastructure modernization efforts and AI initiatives. ESG segmented the respondents into three categories based on their success driving revenue through AI initiatives.

The most successful group of respondents have been categorized as Data Capital Leaders – the 39% of respondents that reported AI initiatives are responsible for more than 10% of total revenue.³

Data Capital Leaders are gaining a competitive advantage by successfully extracting insights from their data through AI and using those insights to enhance customer experience, efficiency, automation, predictive risk management, etc.

Advantages of embracing AI.

More than 42% of organizations surveyed reported having reduced cost of business operations through AI-enabled automation.³
Best practices for optimal AI infrastructure.

Run AI workloads on flexible storage infrastructure that delivers performance at scale and intelligent data tiering.

Data Capital leaders are nearly 3x more likely to extensively use all-flash storage for AI workloads.

Data Capital leaders are 2x as likely to deeply leverage 3rd party professional services for AI – to help close the Data Science skills gap.

Data Capital leaders are 6x more likely to extensively use scale-out NAS to support AI workloads.

Data Capital leaders are 3x more likely to employ comprehensive AI data pipeline protection.
We help our customers align business and IT with a data-first culture by delivering the expertise to improve the data literacy of your entire organization, along with our broad technology and services portfolio that bridges edge, core and cloud. This enables you to use the power of AI to make smarter decisions faster and to identify, curate, manage and protect any data, anytime and anywhere to align your organization to the most important asset – data.

We empower our customers to put data first. We do this by powering your choice of AI workloads with modern infrastructure that supports on-premises, cloud or hybrid environments. This infrastructure delivers the throughput, capacity, and computational performance critical for data-intensive workloads.

We enable our customers to sustain a competitive advantage as you grow by continuing to innovate across our broad portfolio to deliver the products and services you need to stay on top of change – regardless of the size of your organization and where you are in your unique AI journey.

Dell Technologies Consulting Services helps organizations of all sizes, industries and maturity levels adopt and accelerate analytics and AI capabilities from strategy through execution. ProConsult Advisory Services provide a facilitated workshop to develop a plan to modernize your analytics platforms and architectures for scalability and performance through our proven AS-IS / TO-BE methodology. ProConsult Advisory Services provides an unbiased, end-to-end assessment that delivers actionable outcomes aligned to your corporate vision and strategy.

Learn more about ProConsult Services for AI.
As part of the Dell EMC PowerScale family, Isilon F800 All-Flash Scale-out NAS delivers the analytics, performance and extreme concurrency at scale to consistently feed the most data hungry deep learning algorithms.

Isilon’s features for data management, data security, data compliance and data protection help your AI solution meet regulatory and security requirements.

Learn more about Dell EMC PowerScale for AI.

**Why Dell EMC PowerScale for AI?**

**All-Flash performance**
Eliminate the I/O bottleneck for AI with up to 18x more bandwidth \(^4\) than the competition. Up to 15 GB/s per chassis; up to 540 GB/s per cluster.

**Flexibility**
Bring the analytics to the data with in-place analytics leveraging multi-protocol support such as SMB, NFS, HTTP and native HDFS to support multiple uses.

**Extreme scale**
Simple and seamless scaling up to 21x more capacity \(^4\) than the competition, scaling from 10s of TBs to 10s of PBs with industry leading storage efficiency up to 85%.

**Enterprise features**
PowerScale OneFS delivers robust data protection and security options with guaranteed resiliency. Automatic tiering between All-Flash, Hybrid and Archive nodes via SmartPools.
A complete, robust AI Infrastructure built on Dell EMC PowerScale is the perfect solution to power and feed your most demanding data hungry algorithms. But what should you do as your data ages and increasing amounts of active data enter your AI pipeline and workflows? An ideal solution would be to tier that data to less costly object storage for backup and archival. This way the data you own stays persistent without filling up your NAS platforms needed to accommodate the newer incoming data pipeline.

This is where Dell EMC ECS comes in. It offers enterprise grade object storage aimed at streamlining your storage infrastructure to gain new insights and power next generation solutions, with the ability to consolidate archives and free up your primary storage. By moving inactive, older data to a low-cost storage tier you can reduce primary storage capacity requirements significantly. And when ECS is added to your AI infrastructure along with Isilon you can auto-tier the cold data from primary to object storage.

Did you know Dell EMC PowerMax has built-in AI and ML capabilities?

Modern applications have requirements that conventional All-Flash storage arrays struggle to deliver. The greater the consolidation of workloads on a single array, the higher likelihood of fault domain risks – so platform resiliency is critical.

ML enables PowerMax to maintain service quality throughout a shifting workload mix, and it will optimize data placement between NVMe Flash and Storage Class Memory (SCM) drives. Built in AI capabilities will automatically recognize I/O profiles and move data in real time to the appropriate media types – enabling it to seamlessly support traditional and modern applications in a single array.
Unlock your Data Capital with Artificial Intelligence.

Learn more about how organizations that are unlocking their data capital with AI are differentiating from their peers, and why.

Read the ESG Report:
How Organizations Unlock their Data Capital with Artificial Intelligence.

Disclaimers and Sources
1. ESG Master Survey Results, 2019 Technology Spending Intentions Survey, March 2019
4. Compared to closest competitor based on Dell EMC internal analysis, June 2018. Ad # G17000096