

# Solution Brief

## Mining and Natural Resources Industry

Platform  
**DIGITAL™**

The digital economy is remaking how global enterprises create and deliver customer value. For all industries, this forces IT to re-architect towards a decentralized infrastructure, enabling global distributed workflows at centers of data exchange to remove data gravity and scale digital business.

**Mining and natural resources companies rely on digital transformation to automate tasks and workflows, improve productivity, and boost output and recovery ...**

**... that transform upstream, midstream, and downstream operations through the use of robotics, sensors and telemetry, as well as advanced analytics and AI—reducing the industry’s environmental footprint, improving worker safety, turning uneconomical reserves into profitable fields, and making work less repetitive and strenuous ...**

**... and leverage decentralized infrastructure that interconnects and streamlines business functions from upstream to downstream activities while removing data gravity barriers at the network edge that optimize real-time data exchange and analysis.**

### INSIGHTS

#### 40% of mining and natural resources companies

indicate they cannot keep pace with competitors unless they invest in digital transformation

Source: Accenture, 2019

#### Single day of downtime for a mining and natural resources company can cost up to \$25 million

Source: Forbes, 2019



Source: Gartner, 2018; McKinsey, 2018

#### 75% of data

will be created and processed at the edge by 2025—mining and natural resources comprise highest number of industry use cases.

**2 terabytes of data** are generated daily, on average, by a typical oil platform

Source: Forbes, 2019

Geoscientists, petroleum engineers, data managers, and others spent **upwards of 70%** of their time pouring over mountains of data—equating to **over \$8 billion** annually in wasted time

Source: Teradata, 2018

### CHALLENGES

- Lack of integrated and remote management controls to deliver a consistent and resilient infrastructure experience required for business-critical operations, such as extraction, recovery, processing, and delivery—with operational disruptions and outages equating to millions of dollars in losses.
- Unable to leverage breadth of data generated by IoT sensors and telemetry for predictive analytics used to improve mining and extraction recovery and throughput that optimizes operations while expanding fields of operations.
- Traditional infrastructure approaches that centralize datacenter operations lack the agility and extensibility needed to facilitate data processing and analysis at points of business presence, such as extraction and recovery (viz., sources of data generation).
- Legacy infrastructure broken across separate teams responsible for production, maintenance, planning, and other activities creates data gravity barriers that inhibit sharing and analysis of smart intelligence between each of those teams—isolated from data aggregation that drives collaboration and innovation.

### SUMMARY

Digital transformation in mining and natural resources requires a decentralized, interconnected digital ecosystem that matches workflow profiles and workload attributes across upstream, midstream, and downstream operations for sustained business continuity and resiliency while breaking down data barriers that separate and inhibit data intelligence analysis, as well as sharing between ecosystems of business presence, such as extraction and recovery, used to optimize business operations.



# HOW PlatformDIGITAL™ SCALES DIGITAL BUSINESS

PlatformDIGITAL™ provides a global data center platform to host critical infrastructure and interconnect digital ecosystems, providing a trusted foundation to scale your digital business.

## SUMMARY

In order to capitalize on the advantages digital transformation offers, mining and natural resources companies require a decentralized, pervasive infrastructure that facilitates distributed workflows at critical points of business presence across upstream, midstream, and downstream operations, breaking down data gravity barriers for interconnected smart intelligence and distributed workflows. PlatformDIGITAL™ is a fit for purpose solution that enables IT infrastructure deployments, matched to business needs, irrespective of data center size, scale, location, configuration or ecosystem interconnections.

## PERVASIVE DATACENTER ARCHITECTURE (PDX)

The foundation to scale digital business in mining and natural resources.

### PLAN ZONES

Plan distributed workflows at business points of presence requiring centers of data exchange

### DEPLOY FOOTPRINTS

Deploy fit for purpose footprints matched to workflow profiles and workload attributes interconnecting participants at centers of data exchange zones to enable distributed workflows



### IDENTIFY PARTICIPANTS

Identify the users, applications, data and things that will participate in distributed workflows

### MAP WORKLOADS

Map workload types with Performance Attributes required to support participants in distributed workflows

A Pervasive Datacenter Architecture results in a decentralized IT architecture, enabling distributed workflows at centers of data exchange implemented on PlatformDIGITAL™

### 1- NETWORK HUB to

Rewire the Network

### 2- CONTROL HUB to

Implement Hybrid IT Controls

### 3- DATA HUB to

Optimize Data Exchange

### 4- SX FABRIC to

Interconnect Global Workflows

