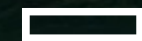# To Zettabytes And Beyond

**Preparing for seismic shifts in the storage landscape**

Chris Powers, Vice President
HPE Storage

**FUJIFILM**

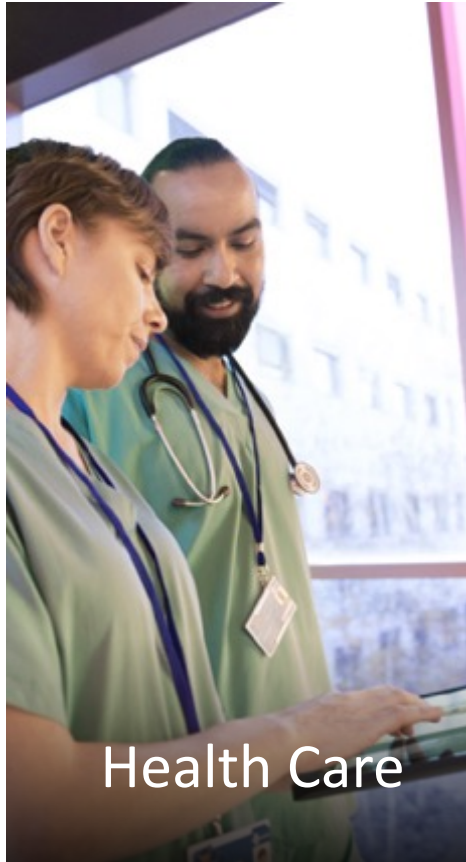11th Fujifilm Global IT Executive Summit

**Hewlett Packard Enterprise**

EVERYTHING COMPUTES

Hewlett Packard
Enterprise

# A faster, more intelligent world



**Credit Card**

**Health Care**

**On Line Retail**

**Collaboration**

**Utility**

**Expanding real-time payments** globally, while adhering to the strictest data sovereignty and performance requirements

Enabling hospitals to **better manage patient data** and comply with privacy and governance regulations

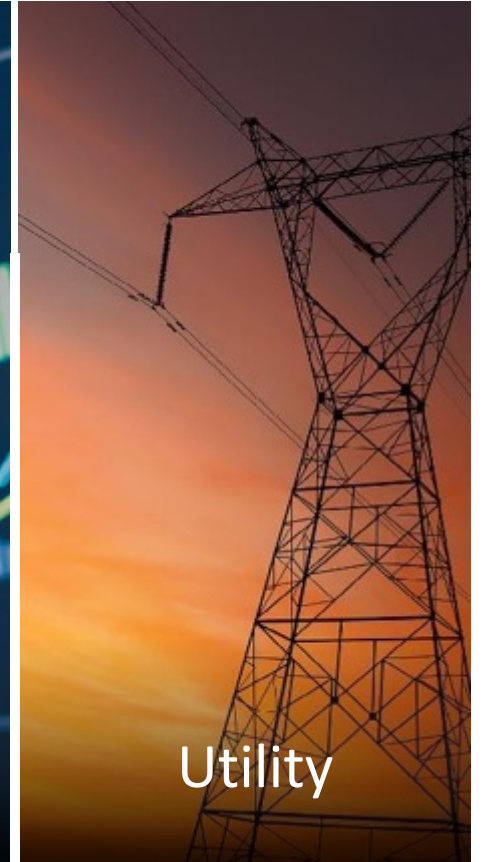Enhancing experiences for over 30 million online shoppers, **processing orders over 500% faster**

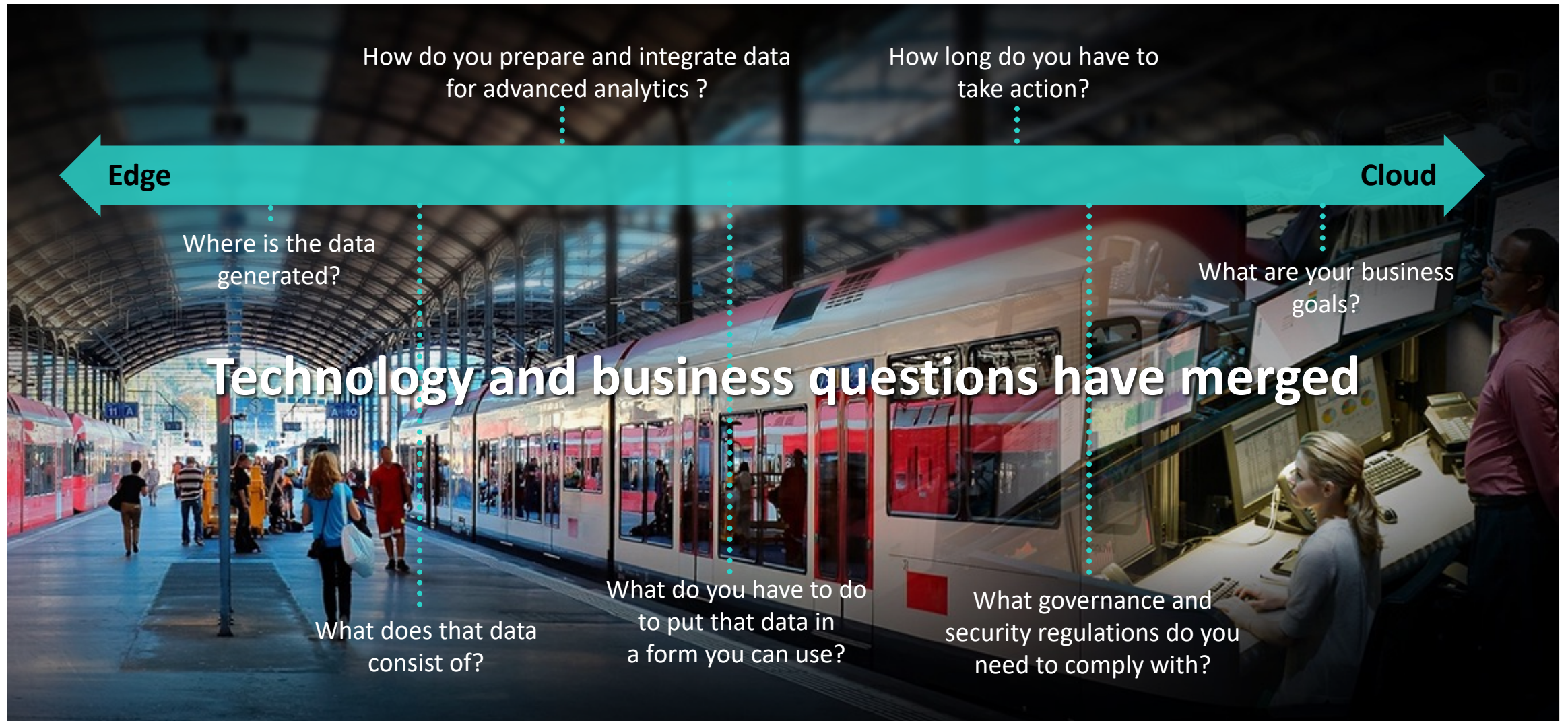Shifted strategic service from AWS on-premises, driving **greater control over costs**

Leveraging 2.3 million smart meters to **fix power outages faster**

**Hewlett Packard**
Enterprise

# Where what you **need** to do, defines what you **have** to do



How do you prepare and integrate data for advanced analytics ?

How long do you have to take action?

**Edge**

**Cloud**

Where is the data generated?

What are your business goals?

**Technology and business questions have merged**

What do you have to do to put that data in a form you can use?

What governance and security regulations do you need to comply with?

What does that data consist of?

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Enterprise

# DIGITAL DILEMMA

**Ability to create data is almost limitless - Edge, Mobile, IoT, HPC**

**Resources are not - $TCO x IT Time x Capacity x Data Center Space**
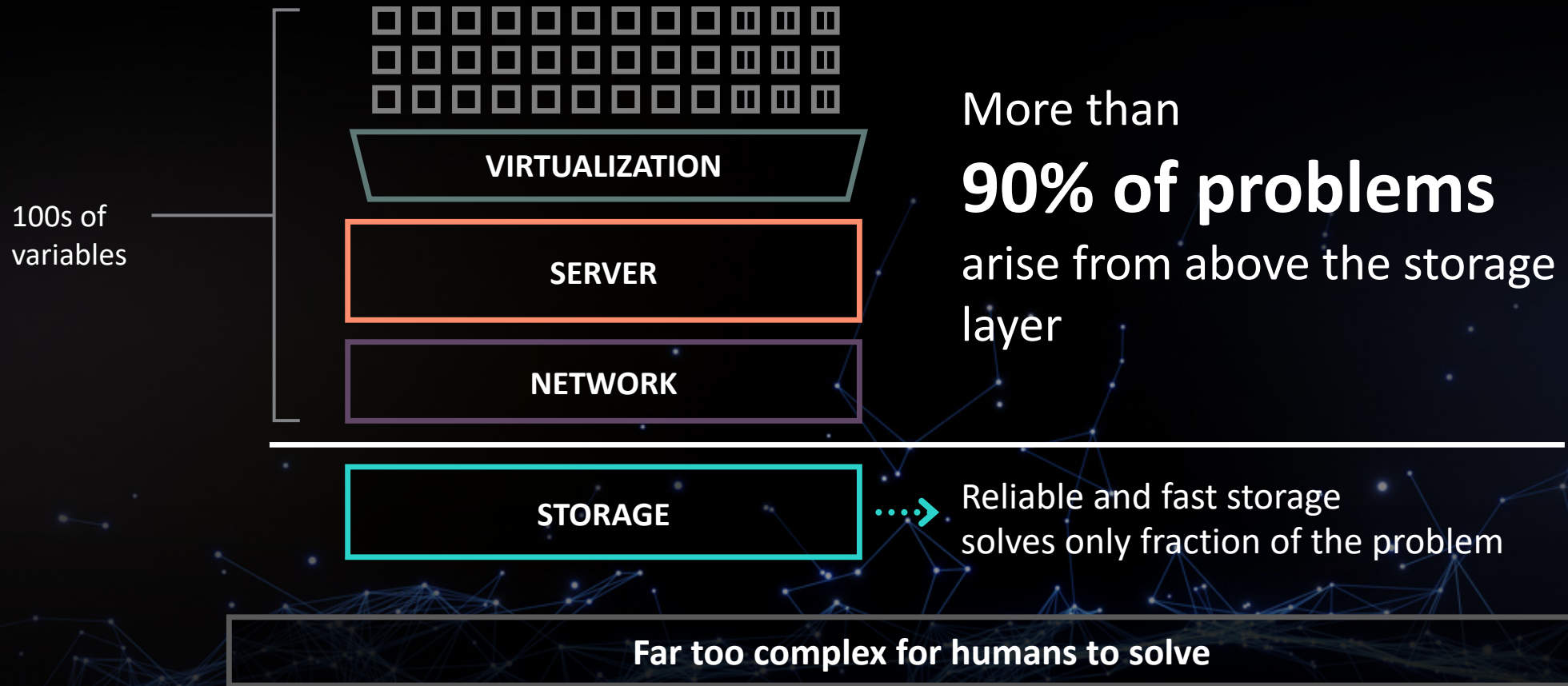
# INTELLIGENCE
CHANGES EVERYTHING

# The intelligent enterprise

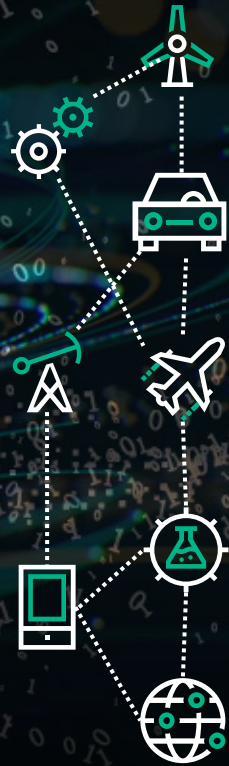**Always-on, always fast**

**Always agile**

**Built for innovation**

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# Intelligence is key for infrastructure management

100s of variables

VIRTUALIZATION

SERVER

NETWORK

STORAGE

More than
**90% of problems**
arise from above the storage layer

Reliable and fast storage
solves only fraction of the problem

**Far too complex for humans to solve**

HPE Discover More

# Intelligence is key for taming hybrid complexity

Big data, AI

Mission critical

General purpose

ON PREMISES

What workloads to move where?

Secondary

DevOps

Google Cloud

Azure

PUBLIC CLOUD
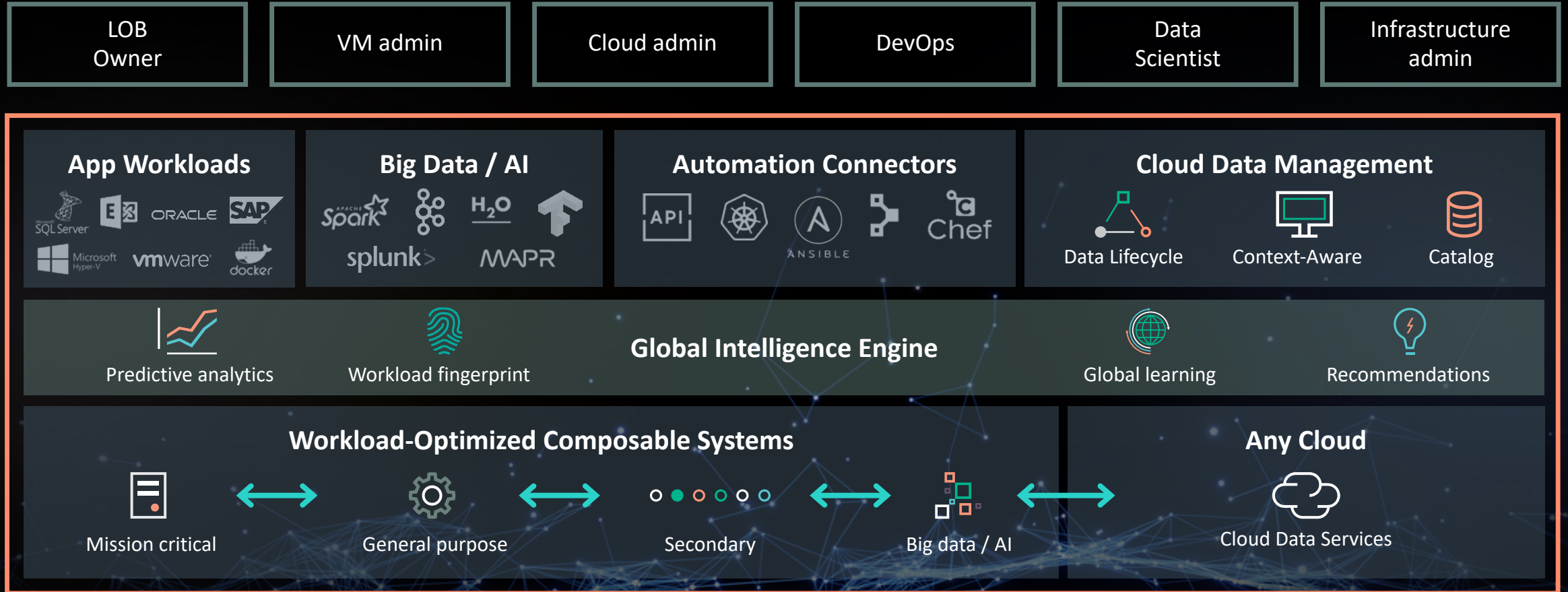
aws

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# Intelligence is key for extracting value from data explosion

Greater than
**40ZBs**
by 2020

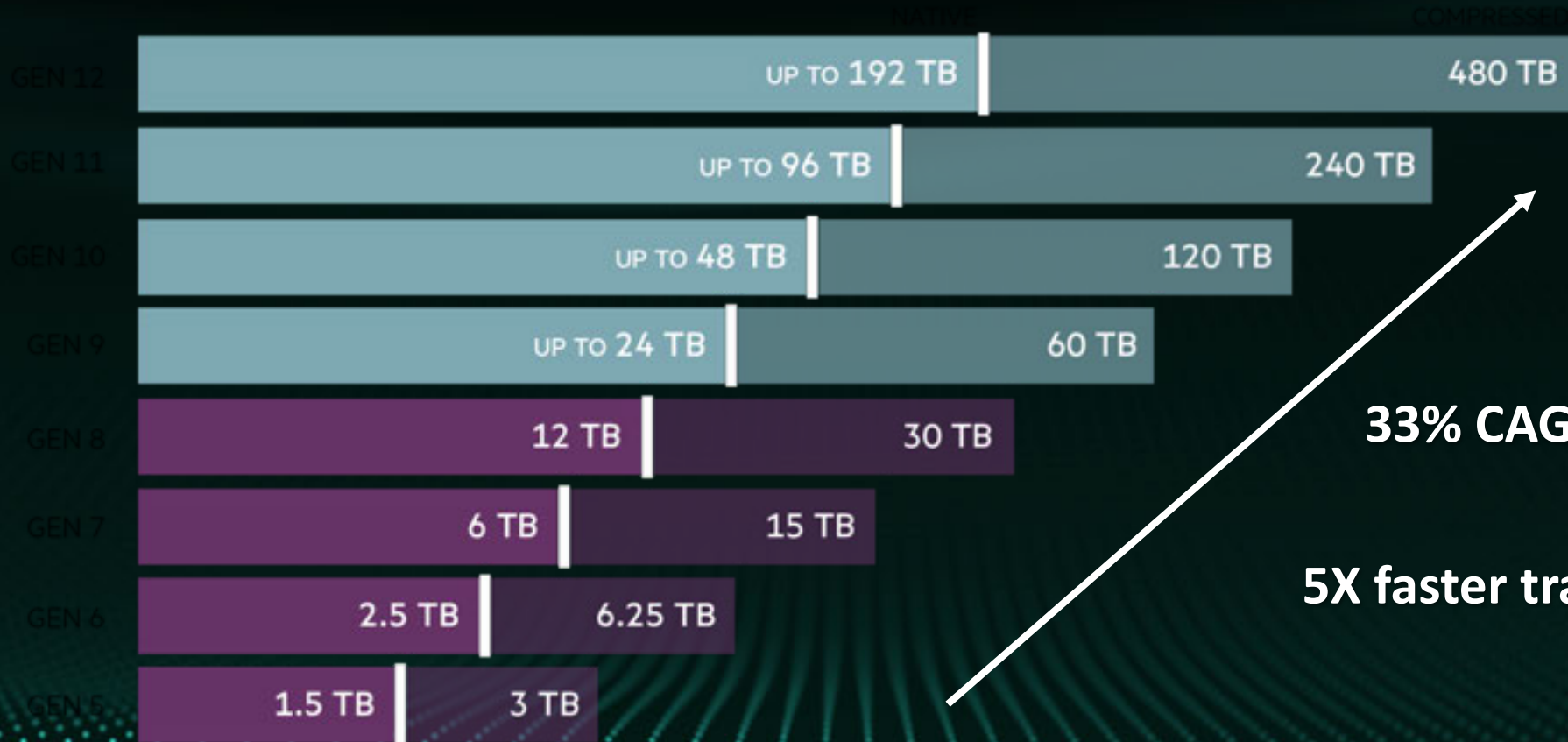How will **you** unlock hidden insights to drive competitive advantage?

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Enterprise

# Intelligent Data Platform

| LOB Owner | VM admin | Cloud admin | DevOps | Data Scientist | Infrastructure admin |
|-----------|----------|-------------|--------|----------------|----------------------|

## App Workloads

SQL Server · ORACLE · SAP · Microsoft Hyper-V · vmware · docker

## Big Data / AI

Spark · H2O · splunk> · MAPR

## Automation Connectors

API · ANSIBLE · Chef

## Cloud Data Management

Data Lifecycle · Context-Aware · Catalog

## Global Intelligence Engine

Predictive analytics · Workload fingerprint · Global learning · Recommendations

## Workload-Optimized Composable Systems

Mission critical · General purpose · Secondary · Big data / AI

## Any Cloud

Cloud Data Services

**Hewlett Packard Enterprise**

DATA ISN'T VAPOUR - IT TAKES UP

SPACE

# ECONOMIC TRANSFORMATION

**Create**
investment agility and
capacity to accelerate
innovation
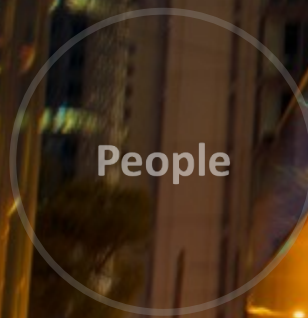
**Optimize**
cost models across
your asset lifecycle
and free up capital

**Reduce**
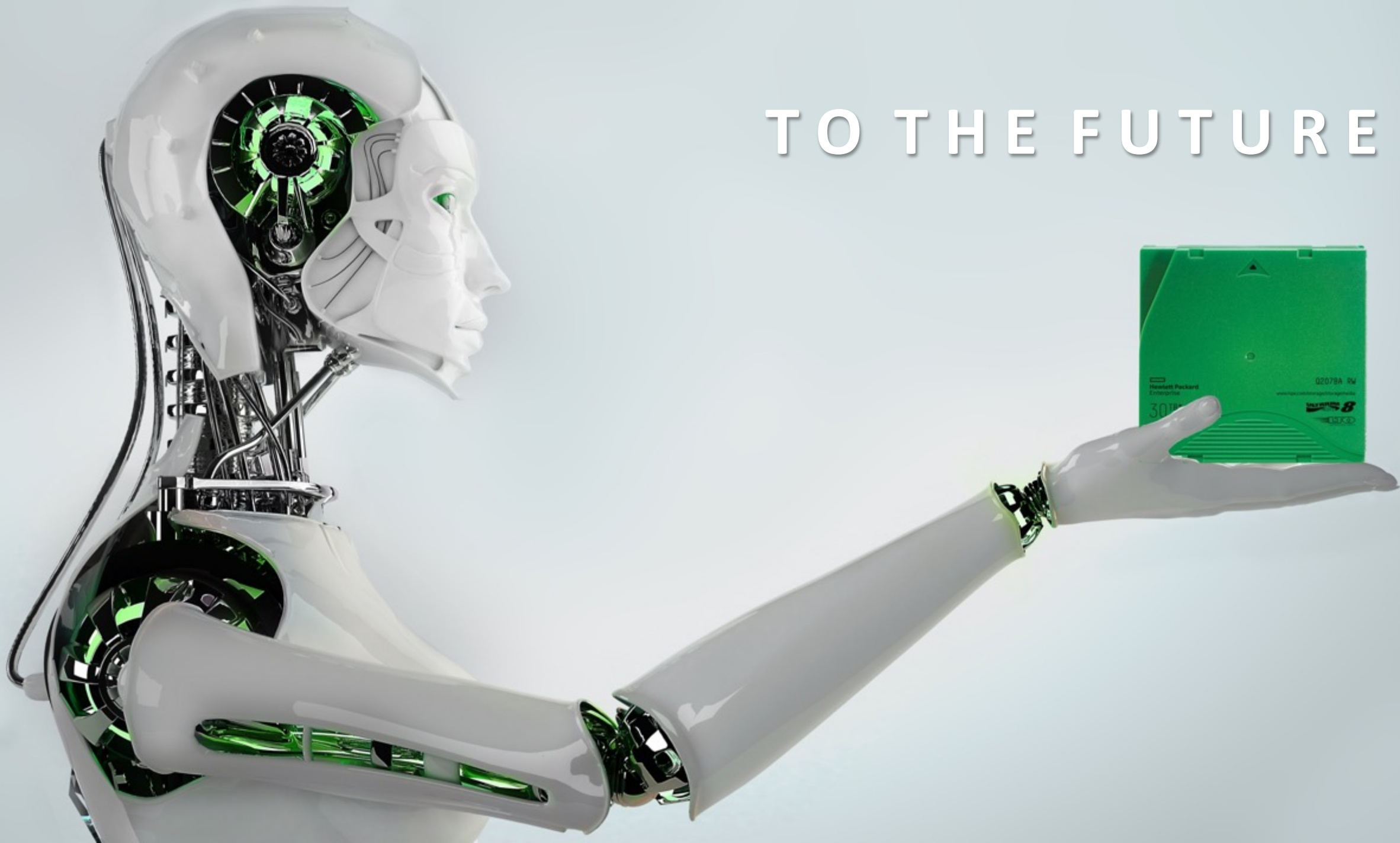investment risk with
new business models
that enable innovation

People

Technology
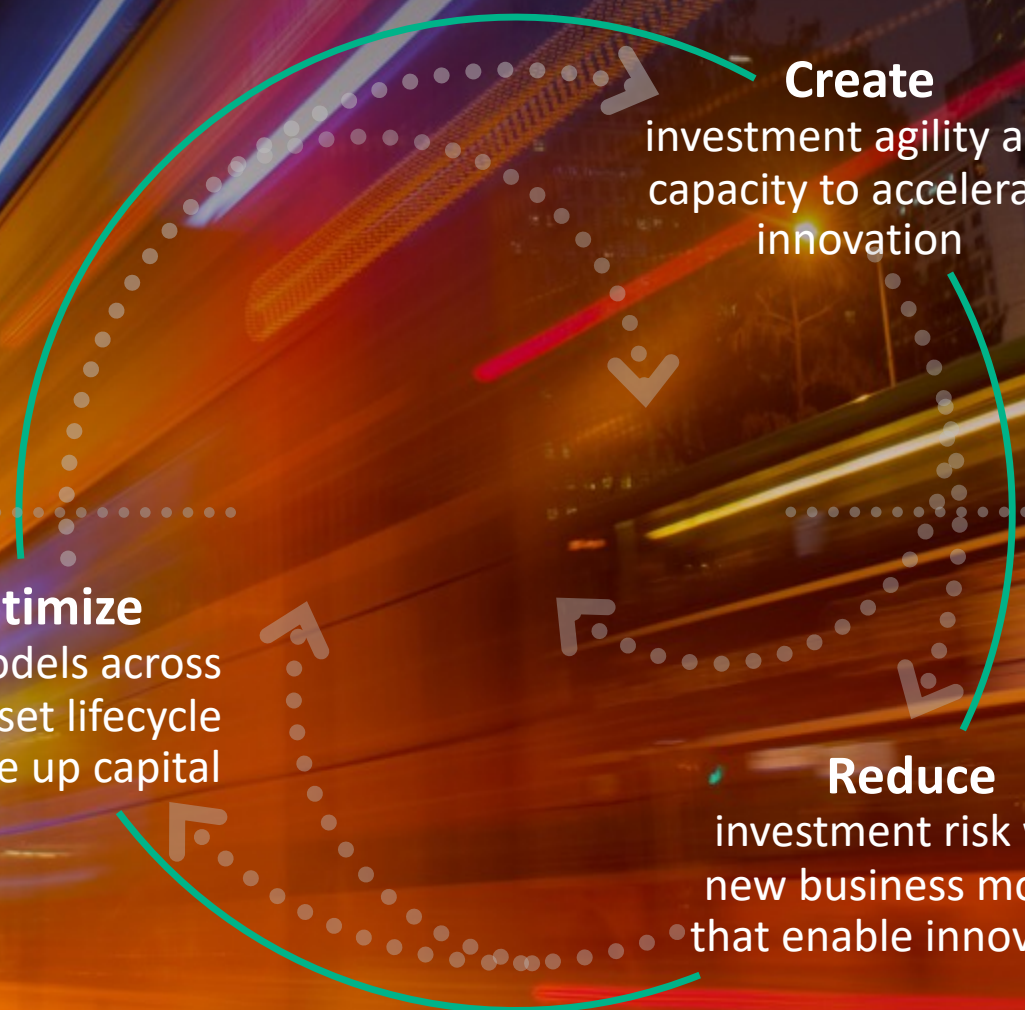
# A I R  G A P

Ransomware attacks happen every 40 seconds
**An offline LTO tape archive can prevent the spread of malware**

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Enterprise

TO THE FUTURE

# 100 MILLION

HPE LTO Ultrium data cartridges...and counting.

1 cartridge every **6 SECONDS** for 19 years

**195 billion** gigabytes

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Enterprise

**Hewlett Packard Enterprise**

A tower made from 100 Million
HPE LTO Ultrium data cartridges would be

# 23,065 times

higher than the Statue of Liberty

hpe.com/storage/storagemedia

**Hewlett Packard Enterprise**

The capacity of 100 Million HPE LTO
Ultrium data cartridges is over

# 195 billion gigabytes

hpe.com/storage/storagemedia

**Hewlett Packard Enterprise**

The tape inside 100 Million HPE LTO Ultrium
data cartridges would encircle Jupiter

# 81 times

hpe.com/storage/storagemedia

**Hewlett Packard Enterprise**

The weight of 100 Million HPE LTO Ultrium
data cartridges is more than

# 147 blue whales

hpe.com/storage/storagemedia

**Hewlett Packard Enterprise**

# Thank you