



**Hewlett Packard  
Enterprise**



# AI & IoT

2019 Best of Breed Conference

Robert C. Patterson Jr.  
Chief Strategist AI & IoT

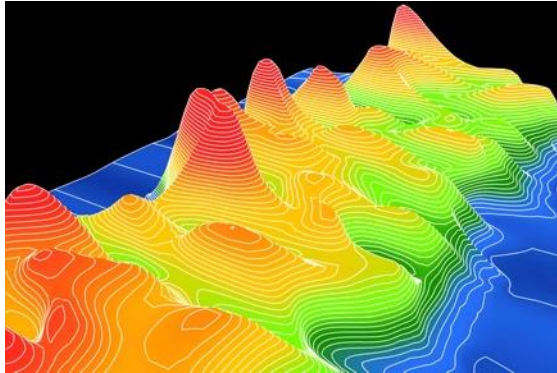
# What's driving the data explosion?



<sup>1</sup> Driver assistance systems only

# HPE knows there are hidden insights from an abundance of data across many vertical domains

## Weather



- Timely and more precise weather forecasting
- Improved understanding of climate change

## Energy



- Wind energy optimization
- Better photovoltaic efficiency

## Aerospace



- Video analytics—airport surveillance
- Flight data from thousands of sensors

## Manufacturing



- Predictive and prescriptive maintenance
- Data from monitoring temperature and vibration within equipment

**AI & IoT dramatically improve the way we live, work, and innovate**

# WINNING WITH AI NOW



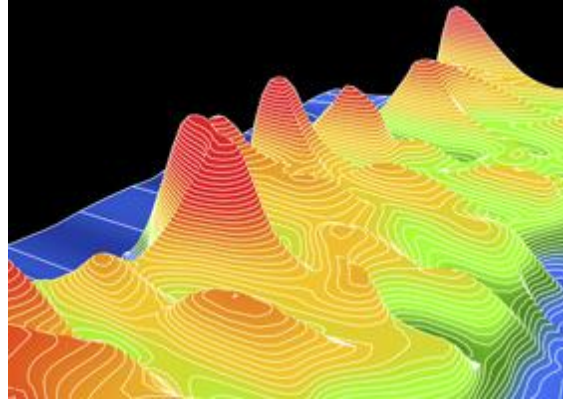
## Financial services

Fraud detection, ID verification



## Government

Cyber-security, smart cities and utilities



## Energy

Seismic and reservoir modeling



## Retail

Video surveillance, shopping patterns



## Health

Personalized medicine, image analytics



## Consumer tech

Chatbots



## Service providers

Media delivery



## Manufacturing

Predictive and prescriptive maintenance



# HPE PUTS AI IN ACTION

---



Shaving milliseconds off race times



Transforming manufacturing quality assurance using deep learning from edge to cloud



Automating worker safety and facility condition monitoring with predictive maintenance and video analytics



# ACCELERATE YOUR AI ADOPTION WITH PROVEN SOLUTIONS

## Digital prescriptive maintenance

- Determines condition of in-service equipment in order to prescript when maintenance should be performed



## Surveillance using video analytics

Provides operational insights based on captured video data, ranging from:

- Facial recognition
- Queue monitoring
- Unattended items



## Speech to Text natural language processing

Communication surveillance

- Speech to Text
- Biometric search
- Live Call monitoring



## Quality control

Manufacturing quality assurance

- Applies AI techniques to visually identify defects in products and flag the areas of interest when it comes to the quality of the product



# BIG DATA TRENDS

## Business drivers



### Consumption-based experience

A managed infrastructure with flexible growth and pricing structures.



### Stream analytics

Moving beyond MapReduce to analyze data in flight from the edge, to the core, into the cloud.



### Deep learning

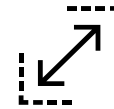
Machine learning algorithms are being applied to big data to solve business problems in every industry.

## Technology enablers



### Multi-tenancy

Drive toward reducing cluster sprawl with density-optimized servers, serving diverse workloads on a single data platform.



### Hyperscale

Faster networks and flash storage allow for independent scaling of compute and storage, enabling new compute platforms for analytics.

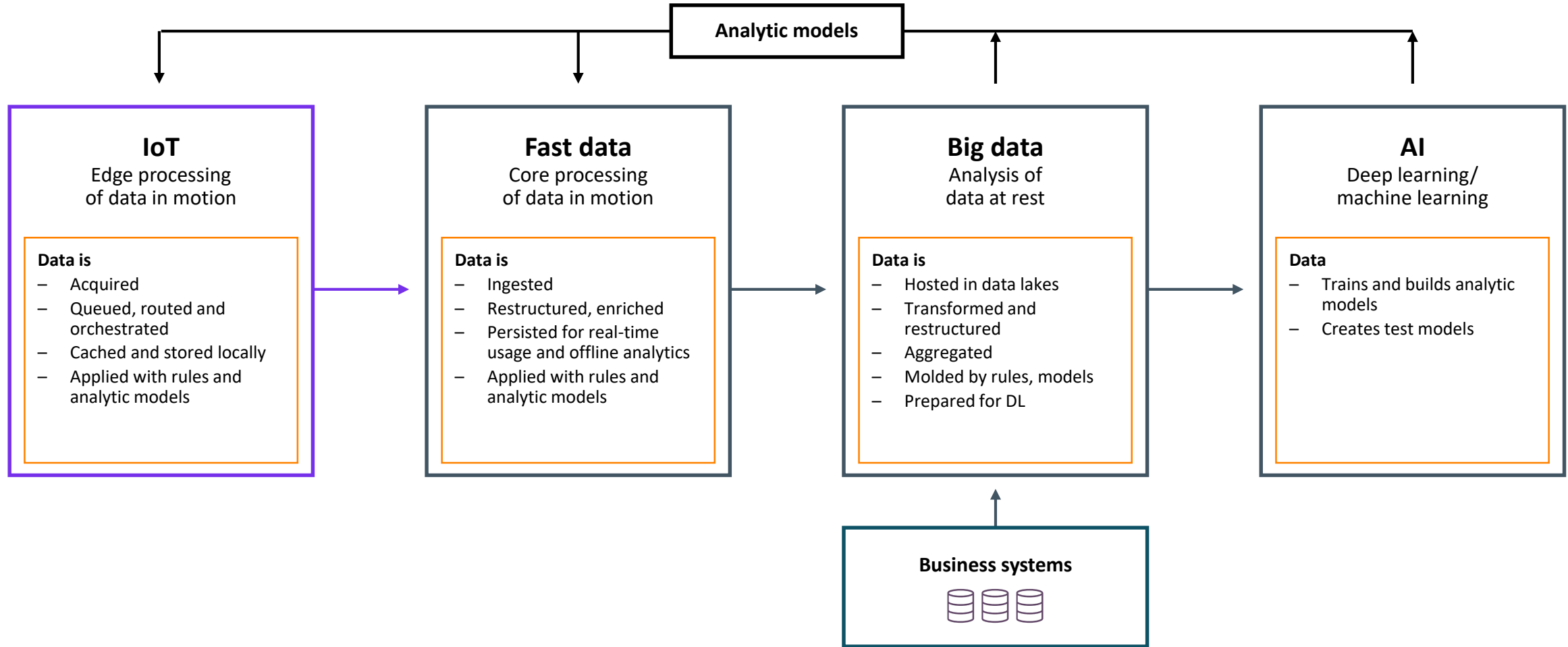


### Containers

Enable infrastructure and business agility with Docker, Mesos, and Kubernetes.



# DATA IN ACTION: AN END-TO-END DATA PIPELINE

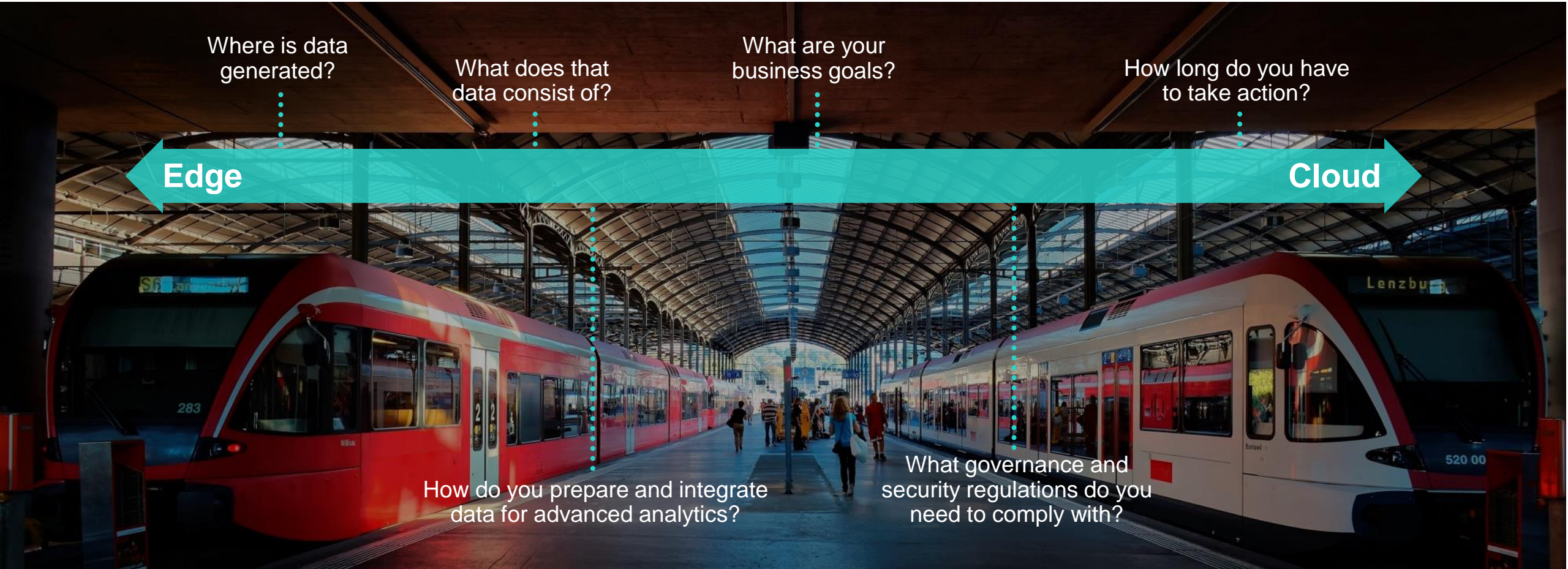




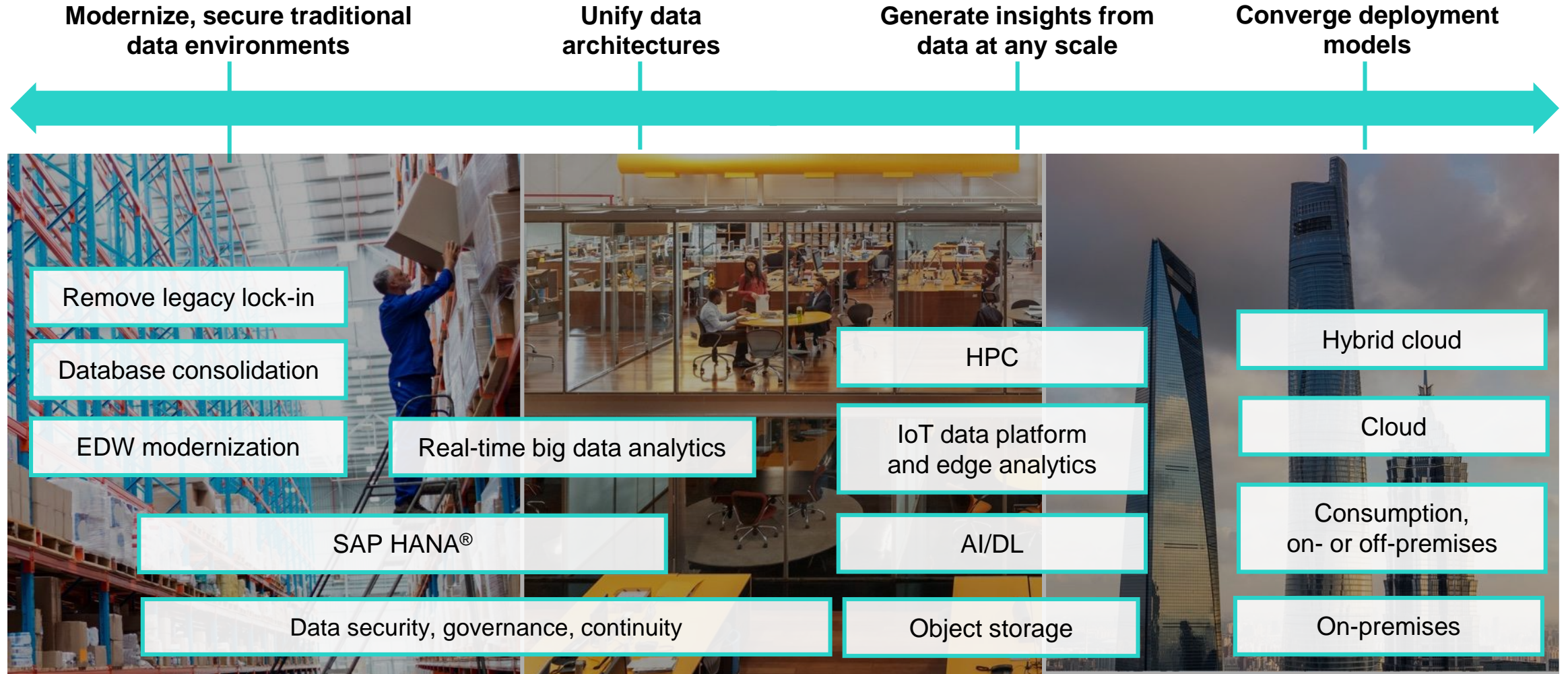


# Why HPE?

# Our vision is about data - from edge to core to cloud

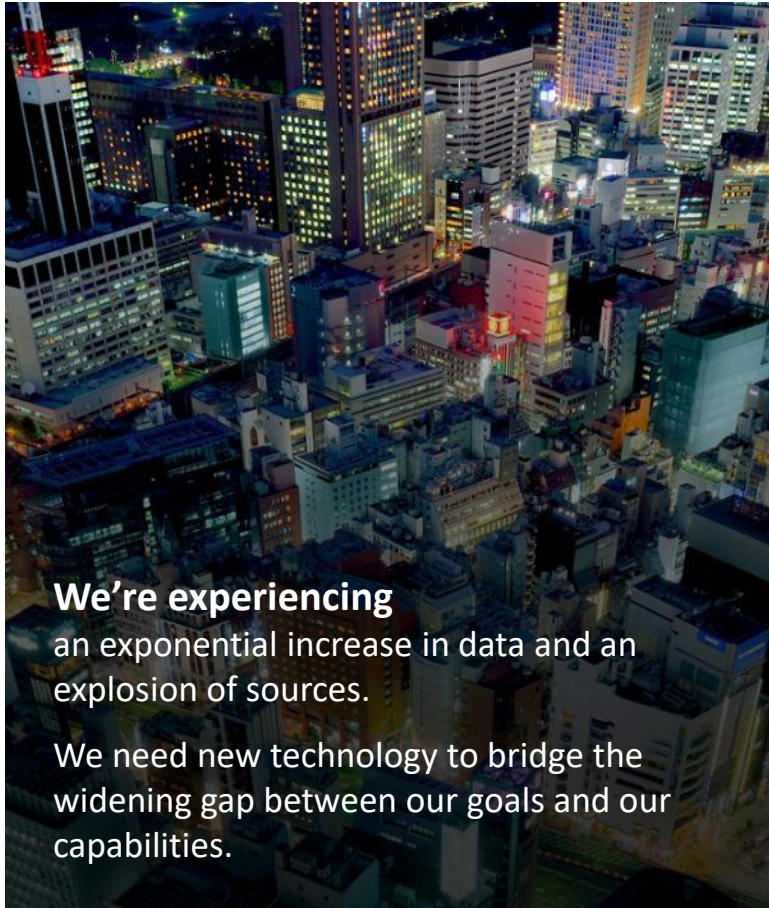


# HPE can help you wherever you are in your data journey



# MEMORY-DRIVEN COMPUTING WILL POWER THE DATA-DRIVEN FUTURE

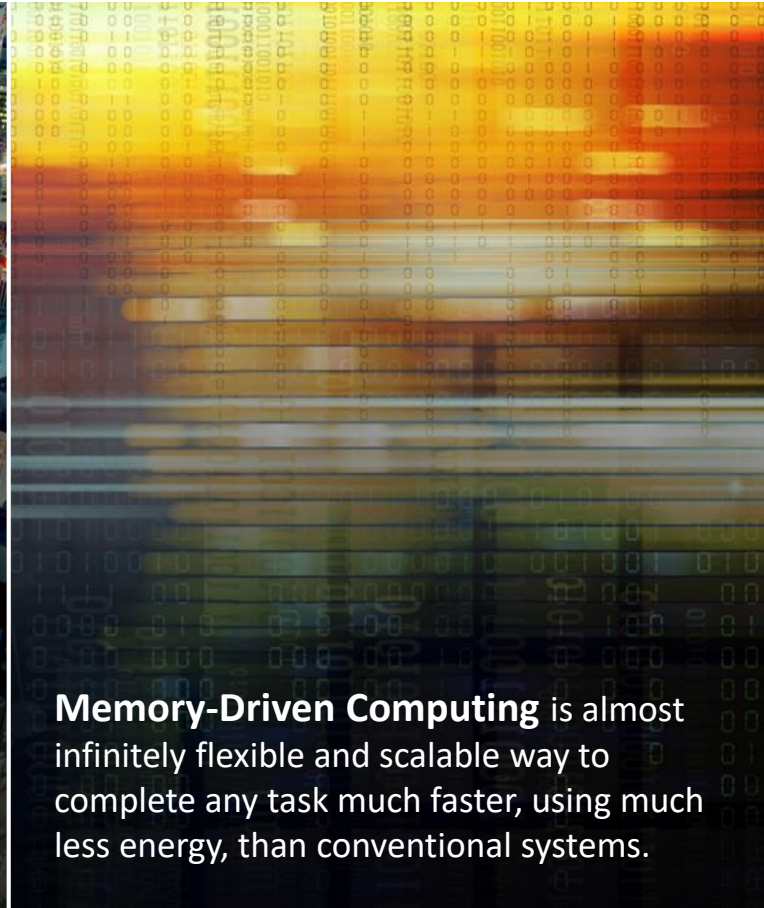
---



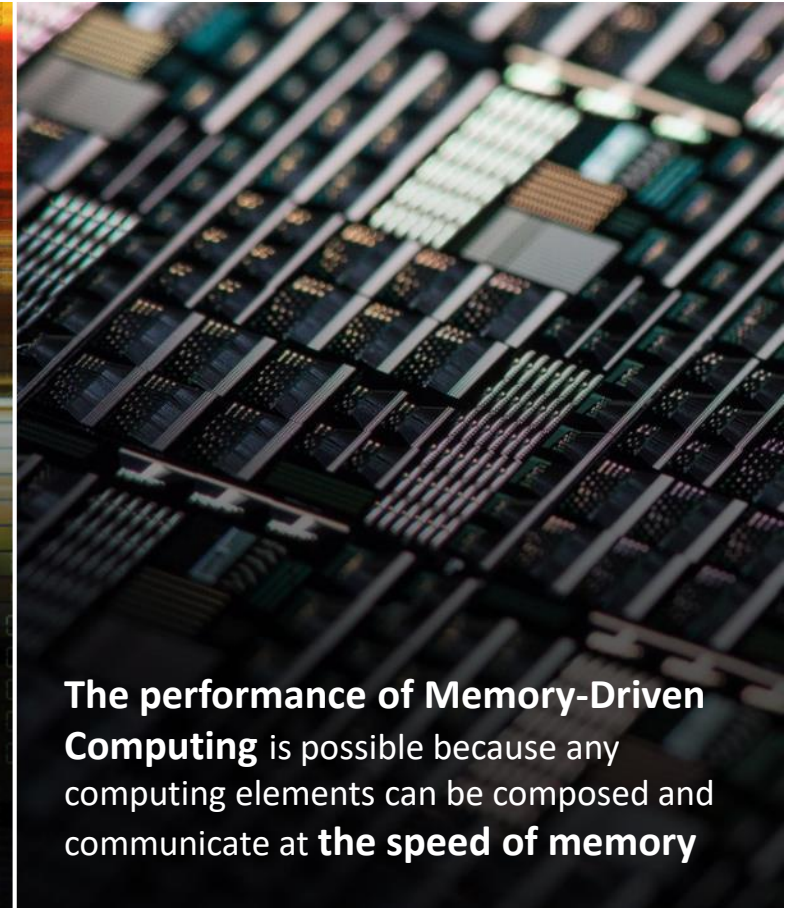
## **We're experiencing**

an exponential increase in data and an explosion of sources.

We need new technology to bridge the widening gap between our goals and our capabilities.



**Memory-Driven Computing** is almost infinitely flexible and scalable way to complete any task much faster, using much less energy, than conventional systems.



**The performance of Memory-Driven Computing** is possible because any computing elements can be composed and communicate at **the speed of memory**



# IF YOU THOUGHT YOU WERE HAVING TROUBLE KEEPING UP TODAY, IT'S ONLY GOING TO GET WORSE

Exponentially-  
increasing data

X

Exploding  
data sources

X

Shrinking  
time to action

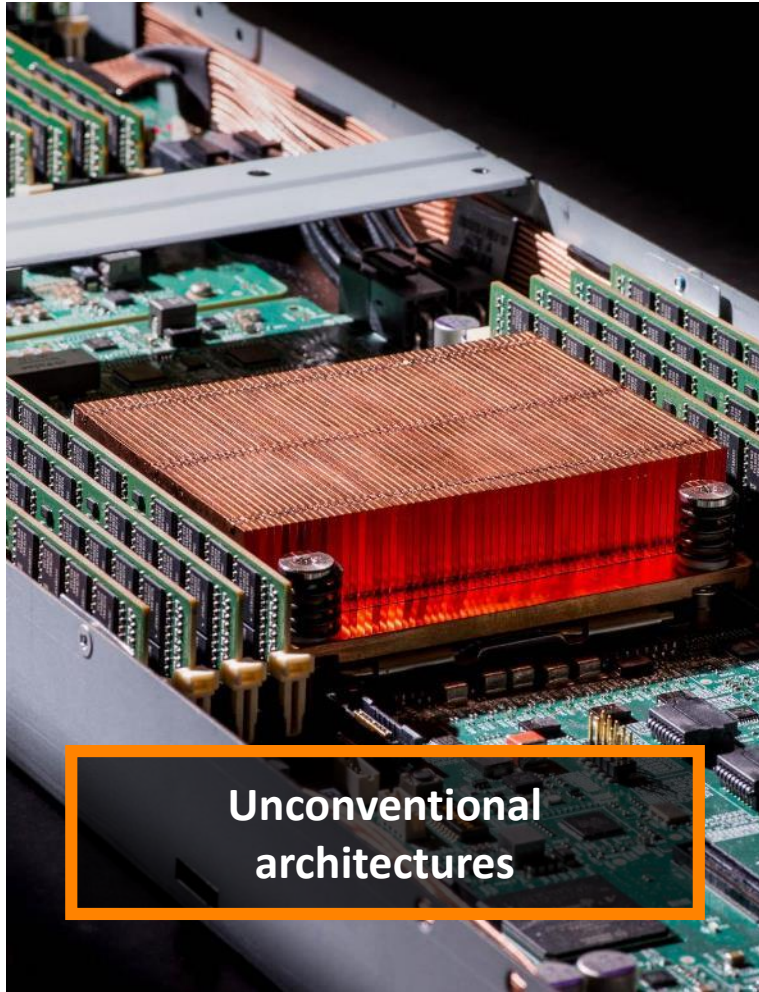
=

Massive advances  
in computing power  
needed everywhere

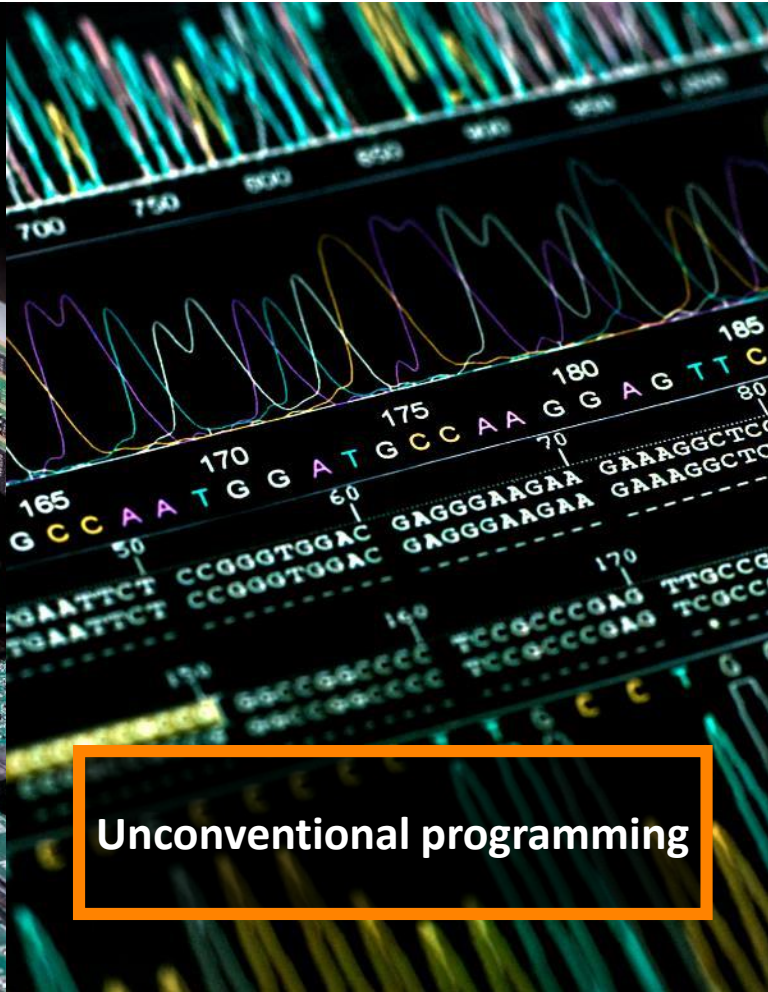


# WE ARE RADICALLY RETHINKING OUR APPROACH TO COMPUTING

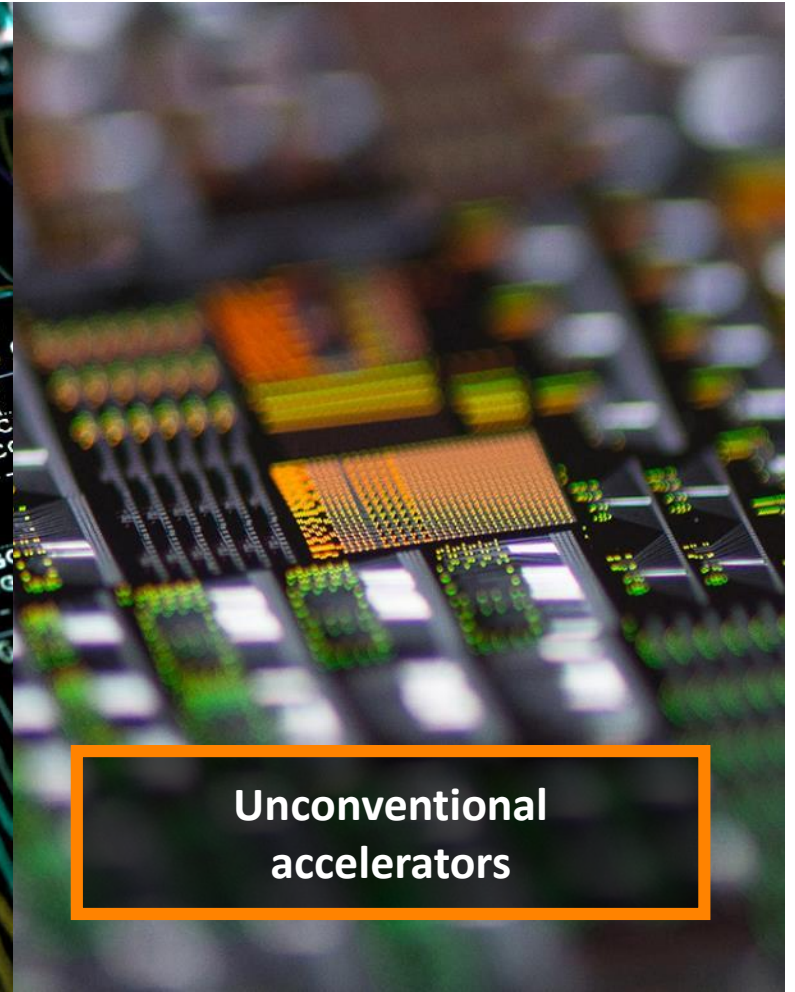
Advancing computing without relying on Moore's Law



Unconventional architectures



Unconventional programming



Unconventional accelerators





# How to get engaged

# Begin the journey

Do you want to know more about:

- Our AI CoE, adoption models and use cases
- Our pay-as-you-go consumption model with GreenLake
- Our industry solutions and partner ecosystem

Please contact us at [iot-ams@hpe.com](mailto:iot-ams@hpe.com),  
and our experts will get back to you!





# Make IT happen with HPE Pointnext

HPE  
POINTNEXT

**Advisory**

Envision and define

**Professional**

Design and implement

**Operational**

Consume and simplify



Cloud  
Technology  
Partners

Helping enterprises evaluate and move workloads to public and private cloud platforms

# Clear economic hurdles

## Engage HPE Financial Services

### Economics

Investment strategies and business models to speed growth

### De-risk investment

Mitigate risk with great control to scale, change, or step away based on result of project rollout and adoption success or failure

### Phased deployment

Investment flexibility to extend rollout of new platforms over an extended period, and only pay for systems when configured, tested, and fully operational

### HPE innovation through investment model

- Tailored model focused on customers needs
- Risk mitigation for experimental/untested programs, schedule review intervals, and a shared risk model
- Deployment customizable to project timeline/scope; extends to 12 months
- Includes both investment and asset lifecycle solutions including legacy removal



**Hewlett Packard  
Enterprise**

**Thank you**