



**SMART**  
GLOBAL HOLDINGS



**HPC User Forum  
Sid Mair, President  
Penguin Computing**



# Our Vision & Mission



*A subsidiary of SMART Global Holdings, Inc.*



## **Vision**

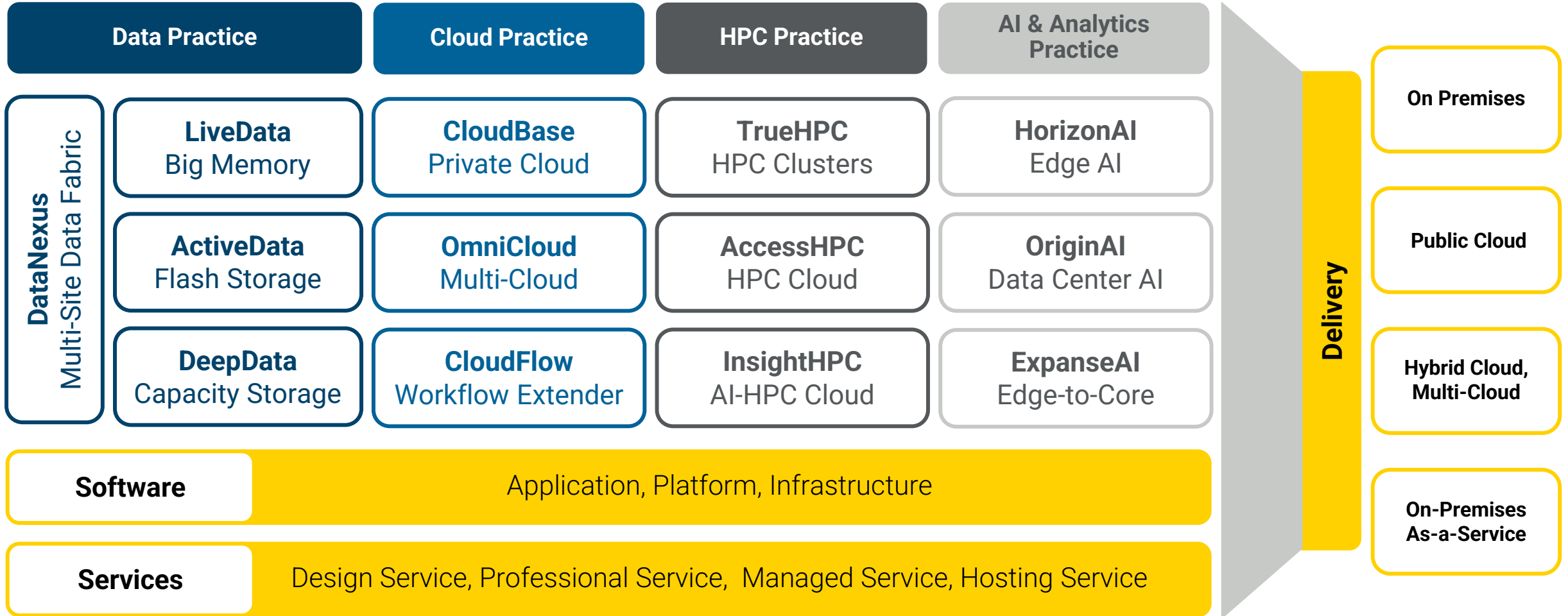
Expanding the world's  
vision of what is possible



## **Mission**

To provide an  
unprecedented  
customer experience

# Workload Optimized Architectures





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## Background

### Customer Type

Social Media

### Business Challenge

Urgent need for large scale AI/ML platform capability to support key product and regulatory initiatives

Leading edge technology

### Context

Need for internal platform design and optimization expertise

Expansion of data center facilities

Critical need for management and administration capabilities

## Case Study: AI / Machine Learning

### The solution



#### Platform

Highly scalable AI/ML platform designed for research, development and production workloads. **OriginAI with LiveData, ActiveData, and DeepData Reference Architectures**



#### Services

Design services, Professional services, Managed services and Hosting services



#### Differentiation

Experience in large-scale AI architecture for the enterprise, solution outperformed 15 other competitors



#### Usage Model

Remote hosted and on-premises  
Integrated Managed services and Hosting services

## Result

Single partner to fulfill a critical, missing component of customer's IT infrastructure in order to deliver on their top two corporate objectives of new product creation and regulatory monitoring.

Penguin's fully integrated capabilities in AI platform design, Professional, Managed and Hosting services enabled the customer to accelerate their project schedule by 10x in year one alone.

Have expanded to create one of the largest AI compute resources in the world





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## Background

### Customer Type

Federal Contractor

### Business Challenge

Falling behind competitors for AI capabilities

Urgent need for comprehensive scalable HPC, HPDA, and AI/ML platform capability to support key product and regulatory initiatives

### Context

Need for internal platform design and optimization expertise

Corporate shift to as a service model

Critical need to partner for management and administration capabilities to reduce time to market of technical compute products.

## Case Study: AI / Machine Learning

### The solution



#### Platform

Innovative, 3-stage HPC pipeline leveraging Hadoop, AI and traditional HPC leveraging multiple reference architectures from the **Data, Cloud, HPC, and AI practices.**



#### Services

Design services, Professional services, Managed services and cloud overflow



#### Differentiation

Experience in large-scale HPC, AI and Analytics architecture for the enterprise, solution awarded based on being a sole source for end-to-end technology capability



#### Usage Model

On-premises  
Comprehensive as-a-service

## Result

Single partner to deliver a critical, missing component on customer's top corporate competitive initiative of enhancing HPC and adding AI capabilities.

Penguin's fully integrated capabilities in AI platform design, Professional and Managed services and Datacenter design enabled the customer to accelerate their project reducing time to market by years.

Have expanded to create an advanced private cloud leveraging cutting edge with the OpEx benefits of cloud.

