# Industrial Al and the autonomous supply chain.













# Global Supply Chains and \$100T of Infrastructure are Under Stress.

Evolving Supply Chains | Underperforming Assets |
Aging Workforce | Climate Change | Urbanization |
Defense Readiness | Skill Gaps | Supply Disruptions
| Resource Scarcity | Population Growth |
Cyberattacks | and more...

### Industrial focus on 4 verticals and 1 horizontal

### INDUSTRIAL **AI PLATFORM**

Al-powered products on a unified data platform to unlock the full potential of infrastructure, assets, and supply chains—driving actionable insights and delivering workflow transformation



### **ENERGY**

Sufficient, sustainable, and reliable Oil & Gas and Renewable energy production



**AEROSPACE & DEFENSE** 



**Defense** readiness and seamless **Commercial Aviation** operations

### MINING

Build, design and automate the next-generation tech forward mining operations



RETAIL & CPG



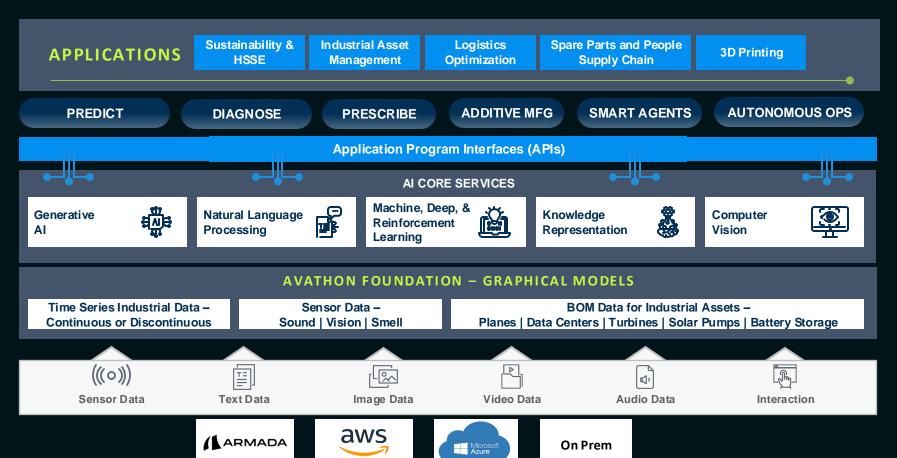
Optimize logistics, reduce cost, meet customer demands while maintaining zero-tolerance employee health and safety

### MANUFACTURING & SUPPLY CHAIN →

Planning, sourcing, quality, production, and distribution across all focus markets

### Agentic Industrial AI Platform





### Scalable Applications to Keep Infrastructure Running.

### Al Enabled Supply Chain Orchestration

### Autonomous Planning

- Al Demand predictions
- Increased supply reliability and efficient inventory at all echelons
- · Reduced exception risk and increased customer responsiveness and delivery reliability

### **Dynamic Sourcing**

- Suppliers risk & performance
- Network sourcing intelligence
- Dynamic supplier selection and performance collaboration
- Al enabled part quality inspections

### **Smart Factories**

- Normal behavior prediction for machinery reducing downtime
- Optimize process
- · Smart AR enabled quality inspections

### Intelligent Logistics

- · Real time visibility reduces expedited overrun costs
- · Reduce exception cost and optimize spend management
- · Streamline customs and trade compliance
- · Predictable delivery reliability

### AI CORE SERVICES

Generative



Natural Language Processina



Machine, Deep, & Reinforcement Learning



Knowledge Representation



Computer Vision



### DATA AND MODEL SERVICES

Data Integration & Management

Horizontal Scaling

Container Management

ML Ops









Unstructured Data



Quality Data



Transactional data



Customer/material master data



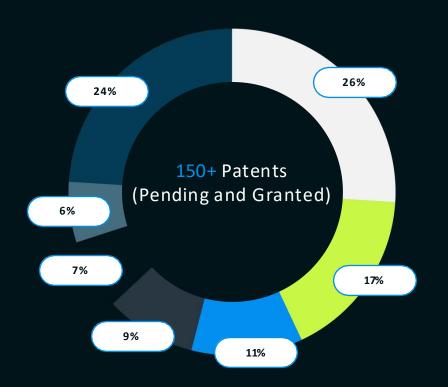
Internal data



External data

Inputs

### Our Science Underscores the Robustness of Our Offerings.



Deep IP Portfolio with a differentiated focus on solving Industrial challenges for critical infrastructure

26%
Neural Networks

11%

Land/Sea/Air Mobility Al

17%
Data Processing, Clustering and Classification

9% - Machine Learning

7% - Knowledge Models and Other Computing Techniques

6% - Natural Language Processing

24% - Other

# Bringing Industrial AI to life at HyperWerx—where the Physical and Digital worlds Converge.

- 50-acre campus outside of Austin, Texas to design, prototype, build, test, deploy and showcase the physical integration of Industrial AI
- Avathon, along with customers and partners, can perfect Alenabled solutions—from drones to humanoids, theory to reality, and small steps to moonshots
- Imagine, develop, and prove Industrial AI technology under real-world conditions, so that AI can flourish in the real world





### Trusted by World-Leading Clients.

### avathon.

### **ENERGY**

























### **AEROSPACE & DEFENSE**











### RETAIL & CPG















DIAGEO

### MANUFACTURING & SUPPLY CHAIN









































## Air Force F-16 Operational Readiness with Avathon Prescriptive Maintenance

- \$4.1B spent annually on F-16 maintenance with declining mission capable rates and skilled workforce shortages
- Product is reducing man-hours, upskilling maintainers, and informing critical operational decisions on parts, inventory, asset, and mission planning
- Avathon's solution is built to work on every system and subsystem of the F-16 to bring fleet management capabilities that connect prescriptive intelligence with autonomous planning
- Scalable to all Defense aircraft, ships, submarines, and ground vehicles—a \$100B+ US market

25K

Man-hours saved per F-16 fighter squadron

>91%

Accurate fault-code diagnosis and improving as more data is ingested into the Platform

>50K

Unstructuredd maintenance logs and technical manuals digitized and ingested





### A scaled Digital Knowledge Platform for aircraft supply chain at Bill of Material level

- Partnered with Airbus to deliver the Airbus Cognitive Platform "AIRKOG" to encode subject matter expertise using Avathon's knowledge graph capabilities
- AIRKOG provides solutions for engineering, procurement, logistics, quality, program management, and rapid analysis for plant and final assembly line improvements
- Orchestrates a range of tools to assist in development and deployment of intelligent applications to answer critical technical questions across Airbus fleet models
- From managing parts introduction for aircraft changes to optimizing electrical harness configuration changes to reduce scrap across plants, Avathon's solution is delivering deep and broad enterprise value

400K

Users across a wide range of enterprise functions

30%

Reduction in digitalization platform costs

Delivering significant customer ROI across
Supply Chain and
Manufacturing by
leveraging Avathon's unique Knowledge
Graph capabilities built on a unified Platform

**BAE SYSTEMS** 

### Resolution of FADEC repairs with Avathon Prescriptive Maintenance

- Resolution time for Full Authority Digital Engine Control (FADEC) repairs is extensive, resulting in penalties and lost revenue; stems largely from labor shortage and knowledge loss
- Avathon Industrial AI Platform derives repair solutions to increase 1<sup>st</sup> and 2<sup>nd</sup>-time yield using historical test and repair data, which was often limited, incomplete, and inconsistent
- Solution is user-centric, built into customer workflow, and is improving operational planning via improved FADEC asset insights
- Roadmap to expand onto all FADEC families and other avionics and aerospace products at BAE Systems

**25** 

FADEC programs on-ramped to the Platform over the next 4 years

20%

Improvement target in first final pass yield metric (ratio of units that pass final quality inspection on the first repair attempt)

FADEC repair solution with expansion into inventory and supply operations for more holistic asset mgmt. and supply chain value creation



### Accelerating exploration through Generative Al

Subsurface imaging and data analysis is time-intensive and costly, relying on terabytes of data, high-performance computing, and complex physics-based algorithms to analyze and identify exploration opportunities.

### SOLUTION

The Avathon Industrial AI platform implemented by developing a domainoptimized stable diffusion Gen AI algorithm augmented traditional exploration workflows with advanced machine learning

Requires as little as 5-10% of data compared to traditional approaches

### **IMPACT**

Al-enabled solution capabilities allowed for fast RTM (Reverse-Time Migration) imaging by using generative Al to denoise few shots migrations

- Accelerates seismic imaging by at least 20-30x
- Delivered image at a fraction of the cost & time

20-30X

Acceleration of seismic imaging with FRTM compared to traditional approach

95%

Reduction in data required compared to traditional approach

Broad application across

energy exploration as well as
additional industrial
applications such as mining



### Avathon Asset Performance Management for Renewable Energy

- Orsted needed to improve North American asset management, reduce downtime, and optimize energy output for 5.5 GW renewables portfolio (global capacity >31 GW)
- Avathon provides full operational and real-time visibility into hundreds of wind turbines and inverters
- Predicting equipment failures and minimizing disruptions using sensor data from all of Orsted's North American renewable plants
- Deployed energy optimization models to improve energy production and maximize revenue across onshore and offshore wind, solar farms, and battery energy storage (BESS) assets

90%

Improvement in visibility into the data and operations

**7**%

Reduction in unplanned downtime

A diverse APM platform that will enable Asset Management solutions to drive significant customer value across planning, sourcing, and logistics



## Avathon Computer Vision for Health, Safety, and Supply Chain

- Pepsi and Woolworths desired Computer Vision capabilities to deploy across all their retail, warehousing, and bottling sites to provide preventative safety, site security, and supply chain efficiencies
- Solution extended beyond any in-house or competitive offerings in Computer Vision models and capabilities
- Avathon's solution deploys quickly within any operational framework and existing edge-devices
- High customer interest in expanding on the Avathon Platform into Supply Chain and sustainability initiatives

200

Distinctive, pre-built computer vision use-cases modeled by Avathon

7

Unique product modules for priorities such as surveillance, workplace hazards, vehicle analytics, customer analytics, emergency response, weapons, and yard mgmt.

Significant expansion opportunity on the Avathon Industrial AI Platform as use-cases transition into asset management and supply chain operations

### BOARD OF DIRECTORS



Lord John Browne Board Member / Chairman Former CEO of BP, Former President of the Royal Academy of Engineering

Dr. Hamid Bialari



John Thornton **Board Member / Lead Director** Executive Chairman, Barrick Gold, Board Member, Ford Motors, Former President of Goldman Sachs



Board Member Sr. Partner and Chairman of Asset Mgmt. & Financial Sycs, at RedBird Capital Partners, Former Vice-Chairman Citi



**Board Member** Former Under Secretary of the United States





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Beckett Jackson **Board Member** Principal, AE Industrial Partners



Pankaj Patel **Board Member** CEO of Nile, Former Chief Development Officer & EVP at Cisco Systems, Inc.



Pervinder Johan Board Member CFO Avathon

### MANAGEMENT



Pervinder Johan Chief Executive Officer Previously CEO of Blume Global. Former executive with HP. SteelWedge, and Manhattan Associates.



Nivati Kohler Chief Strategy Officer Former SVP of Strategy and Operations at Blume Global, Strategic Sales at Infosys and Xerox.



Santosh Pant **SVP** Engineering Served as SVP of R&D at Blume Global and Rez-1



Ibrahim Gokcen Chief Business Officer Previously Chief Data and Analytics Officer of Aon, Formerly at Schneider Electric, Maersk, and GE in various CTO. CIO, and Chief Al and Digital Officer roles



Dr. Bruce Porter Chief Science Officer Two-time Chair of the University of Texas Computer Science Dept.



Art Sellers President & GM, Avathon Government Formerly U.S. Army Infantry Officer with 27 years exp. including special operations. command billets, and combat.

### ADVISORS (SELECT)



John Chambers CEO & Founder of JC2 Ventures Chairman Emeritus. Cisco Corp.



Paul Achleitner Former Chairman Deutsche Bank



Bill Shea Former CEO and Chairman of DCII



Gen. John R. Allen Retired United States Marine Corps four-star general