## Industry Challenges

- Rising costs evolving/ managing automation
- Aging Asset / Legacy ‘Unconnected’ Systems
- Tightened Regulations
- Cyber Security
- Skills shortage due to aging workforce/ Generation Shift

## Business Imperatives

- Operational efficiency
- Enterprise-wide visibility for enhanced decision support
- Agility in meeting changing requirements
- Operator productivity

## Technology Trends

- Cloud
- IIoT
- Mobility/ BYOD
- Big Data Analytics
Enterprise Integration

ADAPTIVE

• Integrated business systems and automation
• Enterprise wide data exchange

CONSISTENT

Central Automated Processes
• Processes Standardized across the organization

REINFORCED

Collect and Analyze Metrics
• Processes are measured and analyzed

PREPARED

Silos of Automation
• Processes are managed
• No Standardization

VALUE

• WSP, Workflow, Operations, Performance, Predictive Analytics

MATURITY

No Automation
• Unpredictable, Uncontrolled
• Manual Operations

CONSISTENT

InTouch / Citect / InduSoft
• PanelViews

REINFORCED

System Platform, InSight, Intelligence, SmartGlance

ADAPTIVE

Enterprise Integration

VALUE
The Leading Digital IoT SOLUTION PROVIDER

2 Million Licenses Installed

100,000+ Sites Worldwide

12+ Petabytes of Data Stored/Year

10+ Trillion Industrial Transaction/Day

20+ Billion Operating Parameters

900K+ Miles Oil and Gas Pipelines
Customer Successes
EAU DE PARIS: EFFICIENT WATER DISTRIBUTION
MULTI-SITE OPERATION MANAGEMENT

Customer Solution Value:
▲ Improve visualization for operators to manage system processes
▲ Streamline process for viewing and supervising multiple water distribution facilities
▲ Effective management of 120 facilities that serve Paris’ over 10 million people
▲ Automatic conversion of AutoCAD drawings to HMI screens
▲ please add also the safety and security requirements:
▲ Integration of video surveillance for water distribution facilities
▲ Interaction between video system, Intrusion detection and HMI
▲ Requirement to support regulations for minimize the risks of malevolence or terrorist acts

Schneider Software Solution:
▲ HMI

“InTouch provides our staff with ‘Hypervisory’ capabilities by animating the large blocks of diagrams from the HMI, and projects them onto our innovative operator management video wall. The displayed information provides details to effectively manage the city’s extensive water system.”

Frank Montiel, Head of the Regulation - CTM project in the Information Systems Department, Eau de Paris
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TRANSPORTATION

AENA – Spain airports
Barcelona alone - 1M+ I/O
Transportation/Air

London Underground
System Platform, large Galaxy
Transportation/Rail

Edmonton International Airport
200,000 I/O
Transportation/Air

China Rail
1+ Million I/O
Transportation/Rail
Application Examples
BLACK ROCK MINE – AFTER OMI ADDITION
Roles: Operators & Plant Engineers

2.1M Installed Licenses
All industries: Process, Hybrid and Discrete

More than HMI
Cloud and native web Visualization
Edge to Enterprise SCADA
Engineering Productivity
What’s next
From Machine/Edge to Enterprise Control

Vendor agnostic HMI and control configuration
High operational ROI through standardization

Enterprise level visualization and monitoring
Faster operator actions through situational awareness
Enabling Digital Transformation

A broad value proposition:

- Cost Reduction
- Supply Chain Management
- Engineering Efficiency
- Asset Optimization
- Downtime Elimination
- Production Quality
- Information Across Systems
- Process Monitor & Control
HMI to System Platform: Operations Management Interface

Content/Context at the CORE

Transformational Platform for Operations

More than HMI
About AVEVA

AVEVA software and services enables our customers to solve the world’s most complex engineering and design challenges. Discover how we can help you redefine engineering possibilities to successfully create and manage world-class capital-intensive assets. Headquartered in Cambridge, England, AVEVA employs more than 1,600 staff in 50 offices around the world.

aveva.com
Engineering Information Management
ASSET LIFECYCLE SUPPORT

Projects
- Process Simulation
- Integrated Engineering
- Construction Management

Operations
- EAM
- HMI/Scada
- Operator Training

Information Management
We help customers digitalise, visualise and realise the full potential of their assets with a trusted digital representation, designed and built to be maintainable, in the same way as the physical asset is designed to constantly evolve over time.
What is Engineering Information?

**Formats**
3D, 2D, 1D

**Associations**
Context
Relationships

**Information**
Maturity
Status
AVEVA ENGAGE for Operations