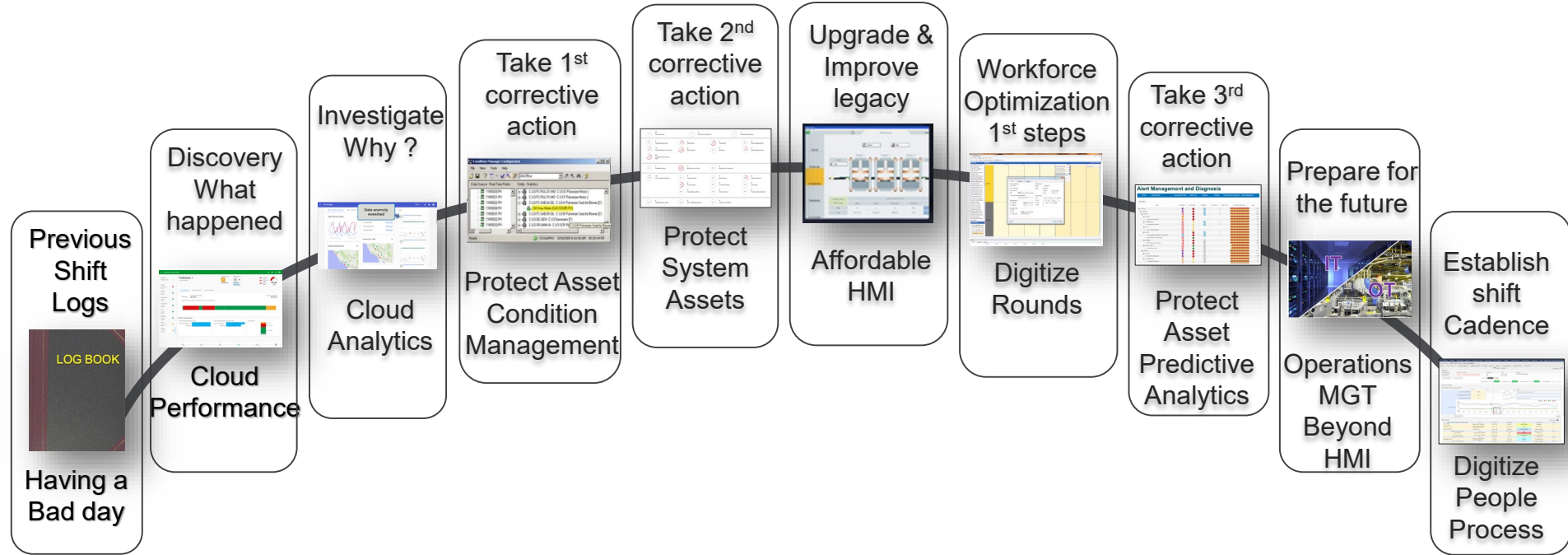


Our journey today – the cadence of the shift

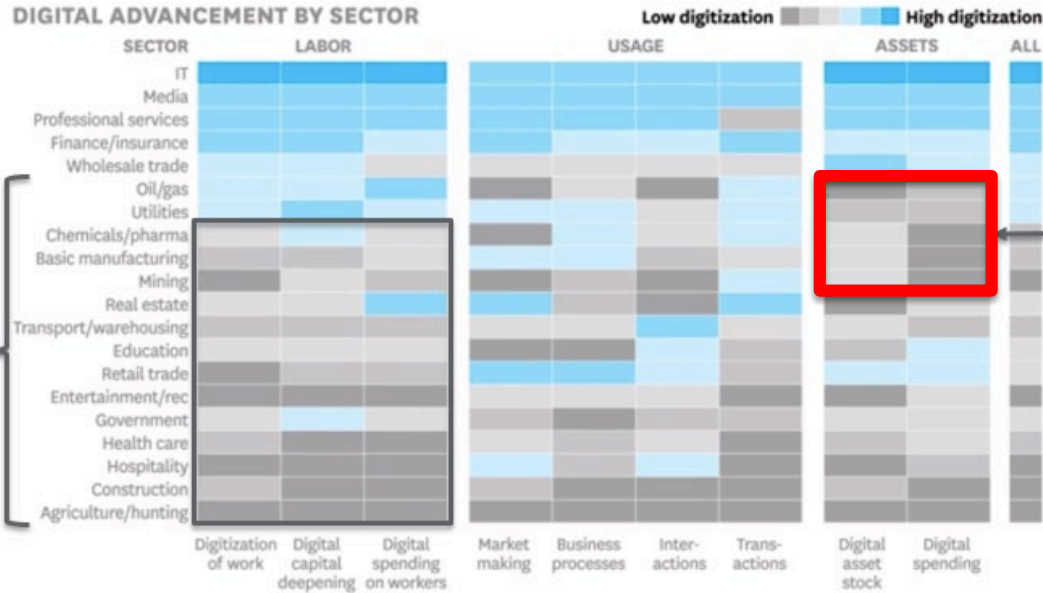
Steps toward being more Digitized



Areas we see a lot of movement in today

- Cloud ✓
 - IoT ✓
 - Artificial Intelligence (AI)
 - Augmented Reality (AR)
 - Machine learning ✓
 - Adaptive Manufacturing
 - Advanced Robotics
 - Big Data Analytics ✓
 - Smart Everything
 - Sensors, Cities, Equipment, Trucks
 - Condition monitoring ✓
 - Proactive and predictive maintenance ✓
 - Track and trace
 - IT and OT convergence ✓
 - Product design
 - Prototyping and development
 - 3D printing
 - Workforce Optimization ✓
 - eLogging, Rounds digitization, Paper on Glass
- We've covered most of these*

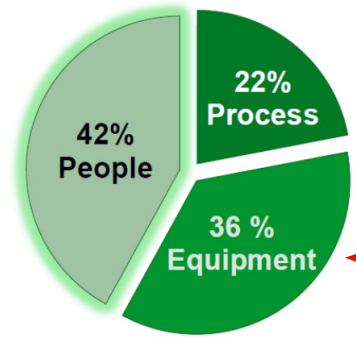
5 Ways to optimize Assets / Process (APM)



Lagging...
Digitization of Work

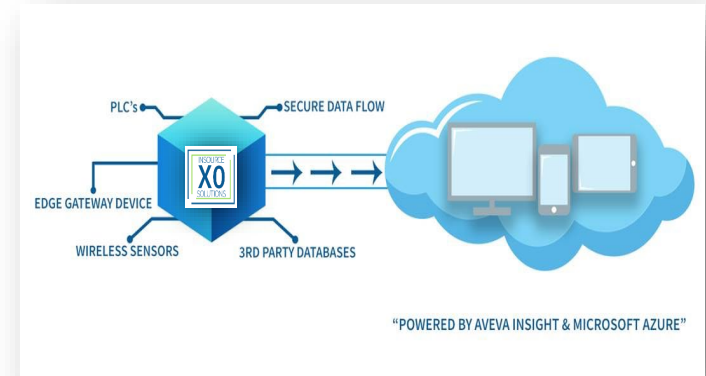
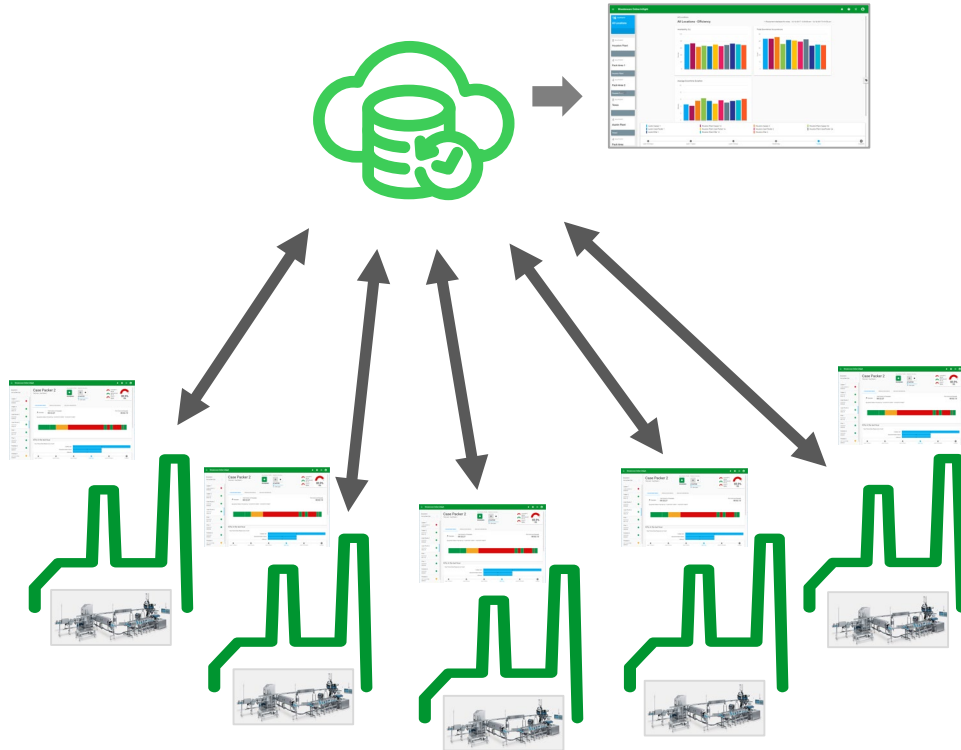
Asset intensive but low in digital maturity

Distribution of unscheduled Shutdowns and Slowdowns



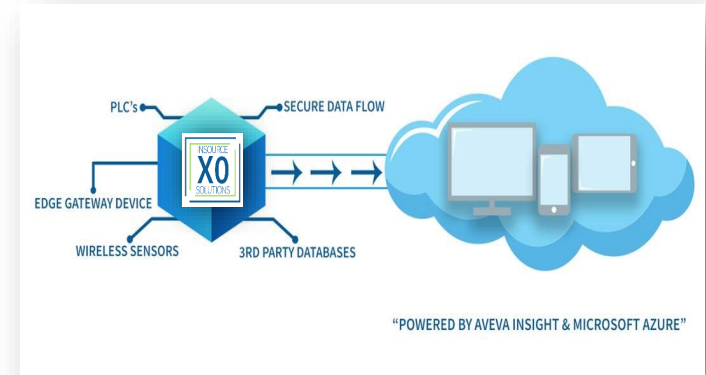
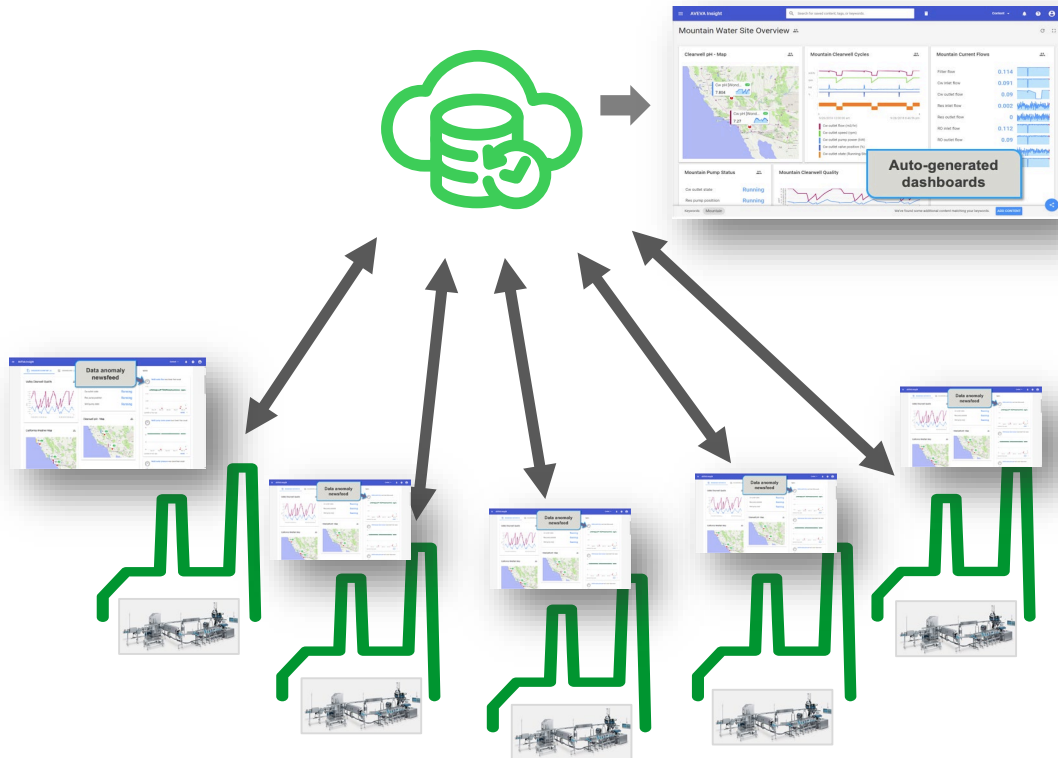
Source: ASM Consortium.
Cited by: ARC "Why we need a better approach to procedural automation" Larry O'Brien, September 2010

Optimize Assets performance – Insight Performance – X0



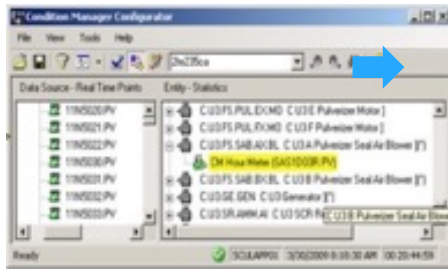
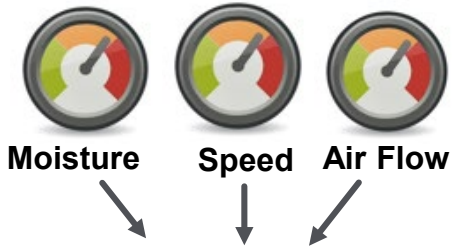
- Quick install, quick time to value
- Low / No capital required
- Remote monitoring
- Adoption services
- Connects to existing controls or add shadow sensors

Optimize Assets & Process performance – Insight History – X0



- Quick install, quick time to value
- Low / No capital required
- Remote monitoring
- Adoption services
- Connects to existing controls or add shadow sensors

...when you know the rules



Logic



Cloud



Corrective
Maintenance

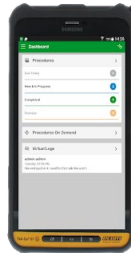


CMMS

Digitizing Work with Wonderware Mobile

Through Operator, Maintenance, and Safety Rounds

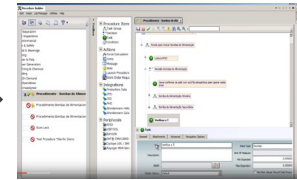
Disciplined Execution - Provides Enforcement, Accountability, Auditing



No Clipboard

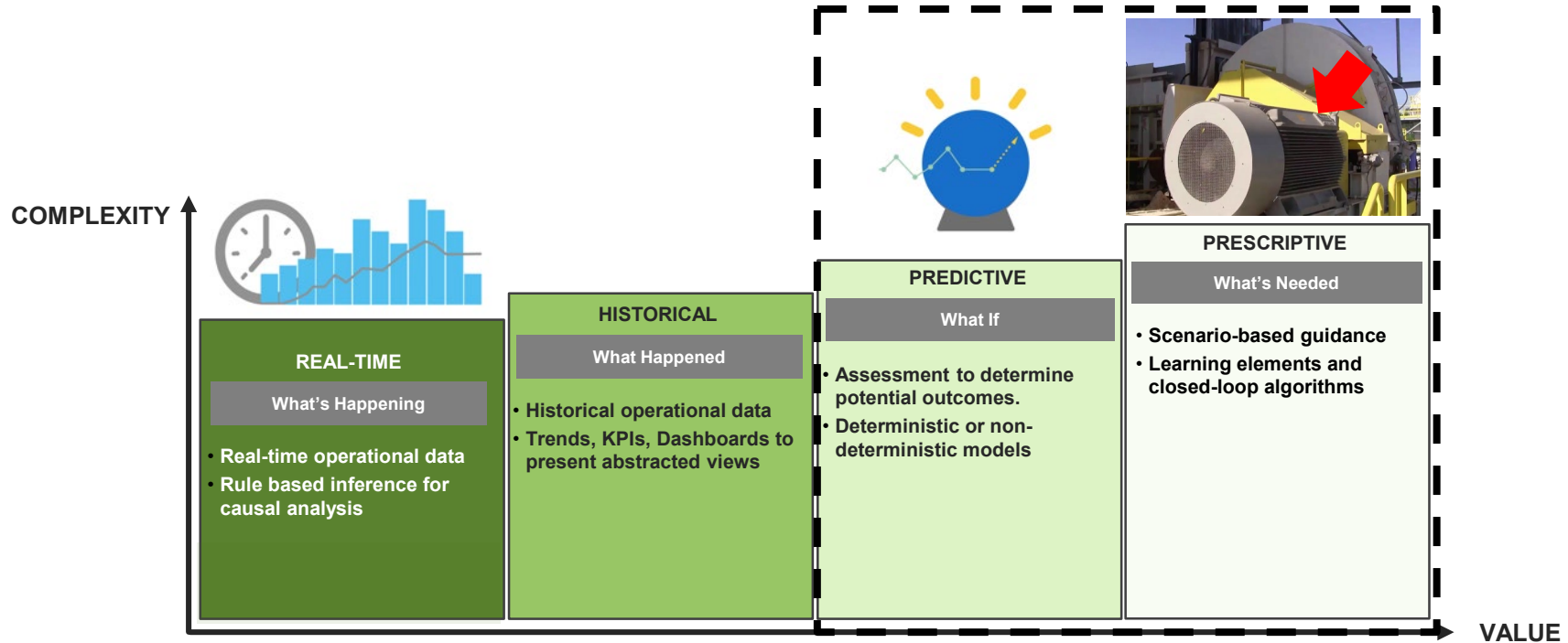


Digital storage

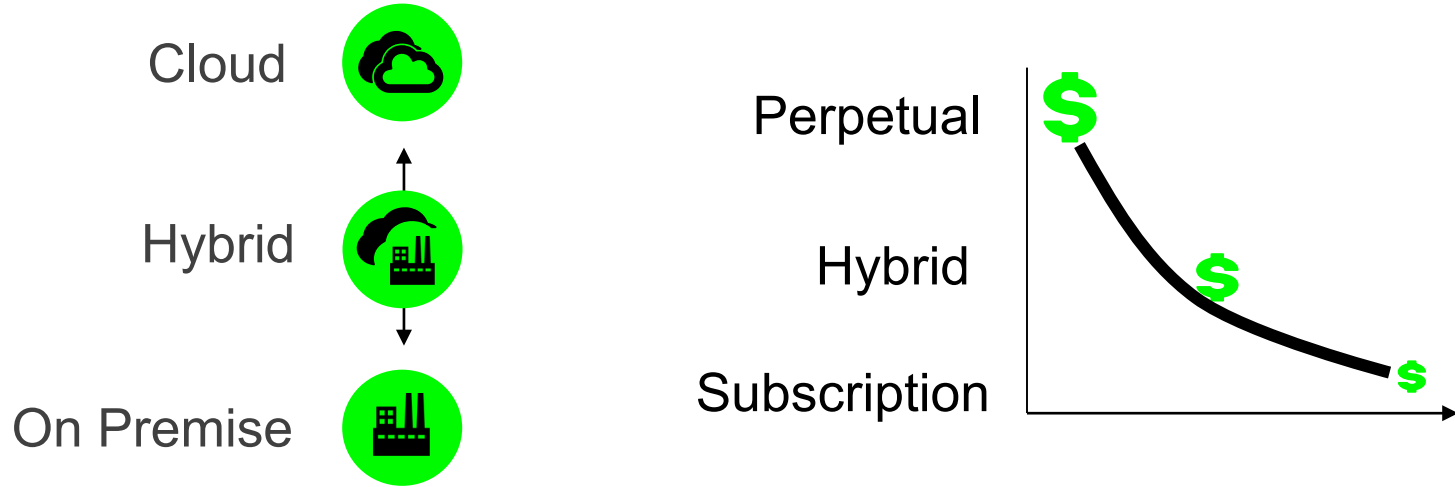


Analytics

Analytic capabilities that could change the game



Lower TCO....Technical & commercial flexibility



1) Full Cloud
IIoT devices are direct-connected to and operated from the Cloud (any modules).

- Industry Vision Cloud Platform
- Digital Engineering
- Digital Planning and Operations
- Digital Asset Performance
- Control and Information Management Platform

Full Cloud

3) On-Premise
All controls and software are fully on-premise. (traditional approach)

- Industry Vision Cloud Platform
- Digital Engineering
- Digital Planning and Operations
- Digital Asset Performance
- Control and Information Management Platform

On-premise

2) Hybrid
Some on-premise controls and sources and some Cloud connected (mixed mode).

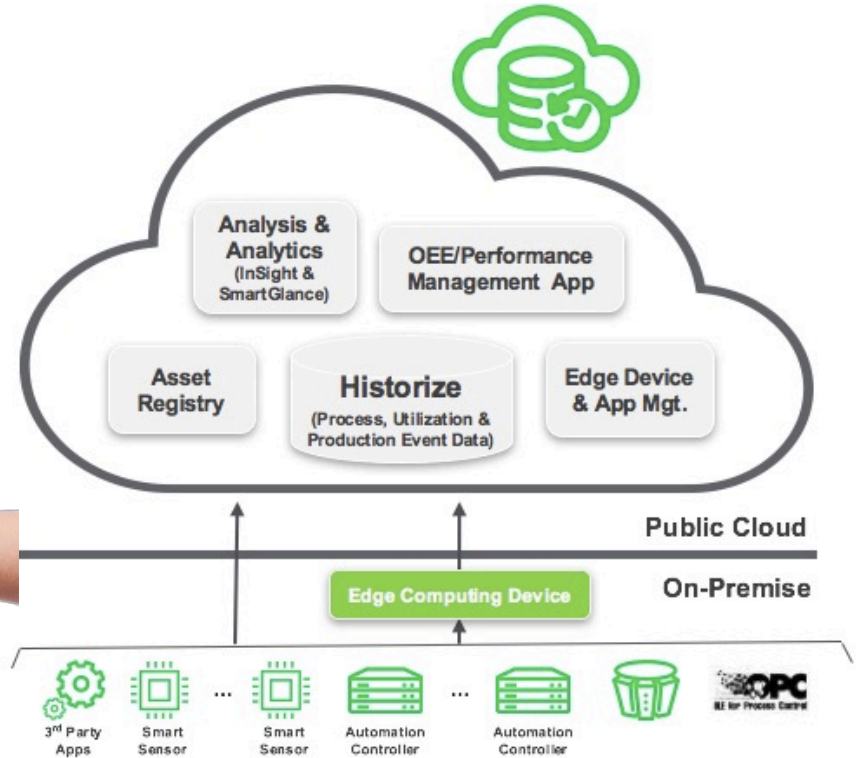
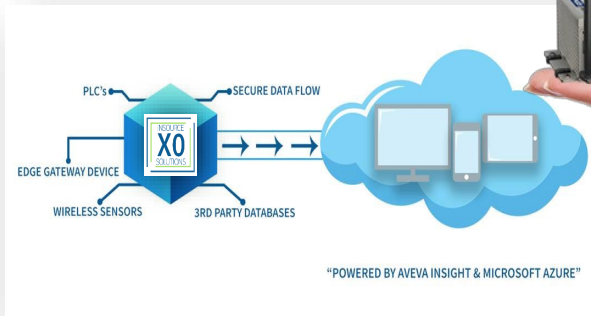
- Industry Vision Cloud Platform
- Digital Engineering
- Digital Planning and Operations
- Digital Asset Performance
- Control and Information Management Platform
- Information and Analytics
- Application Development Toolkit
- Workflows
- System Configuration and Maintenance Management
- Real-Time Control and Device Integration

Hybrid

Technology drivers - Internet of Things (IoT)

Empower more at less cost

- Stranded assets
- No infrastructure



Internet of Things (IoT)

Extend without compromising legacy systems

- ***Shadow sensing***



Internet of Things (IoT)

Scale virtually limitless on the cloud



InTouch Edge HMI – lower cost



Local machine visibility & control

- Rich, full featured capabilities
- Lower price point
- Import legacy PanelView & FactoryTalk™
- Connect to enterprise (no silo's)

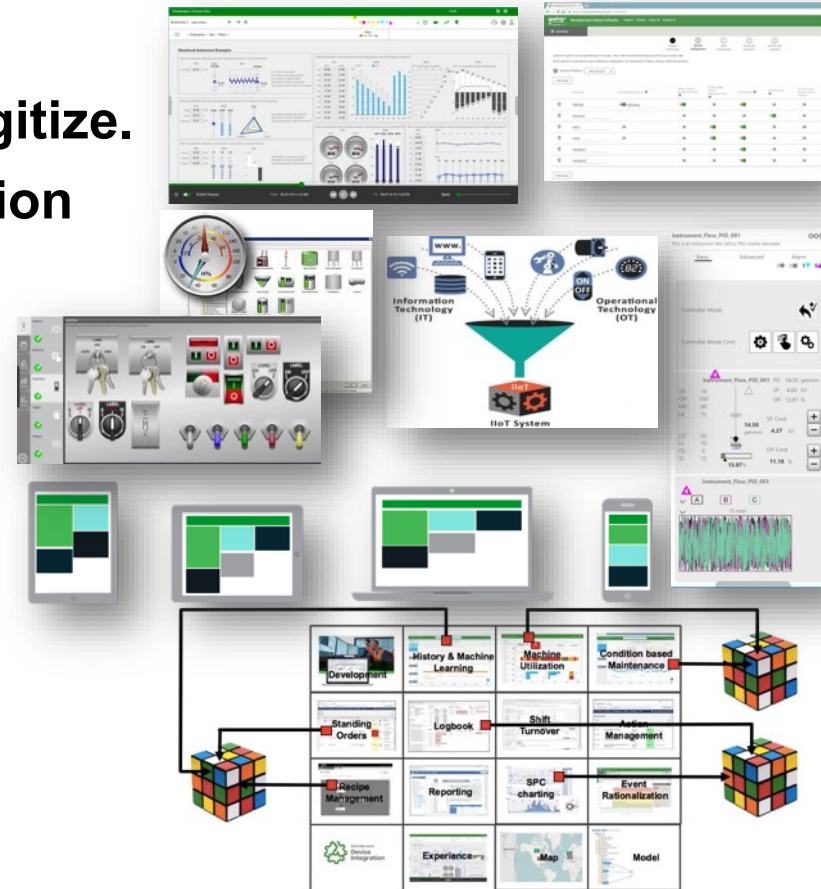


Native Mobile Apps for iOS (Apple Store) and Android (Google)

UNLIMITED Tags
UNLIMITED Thin Clients
DEV+RT
All features included
Simplex or Redundant

Operations Management (WW OMI)

- A Platform where OT & IT coexist is becoming an imperative in order to Digitize.
 - Responsive, Role-based visualization
 - Efficiency tools
 - IoT built in
 - Plug & Play Apps
 - Contextual data
 - Agile design
 - Standards framework
 - Collaborative Cloud development



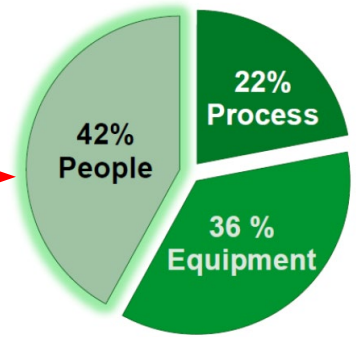
DIGITIZING WORK, Workforce Optimization



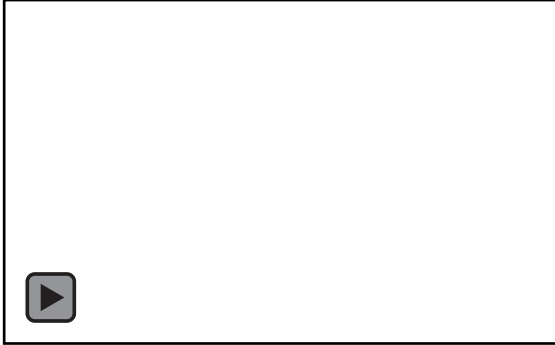
Lagging...
Digitization of Work

Asset intensive but low in digital maturity

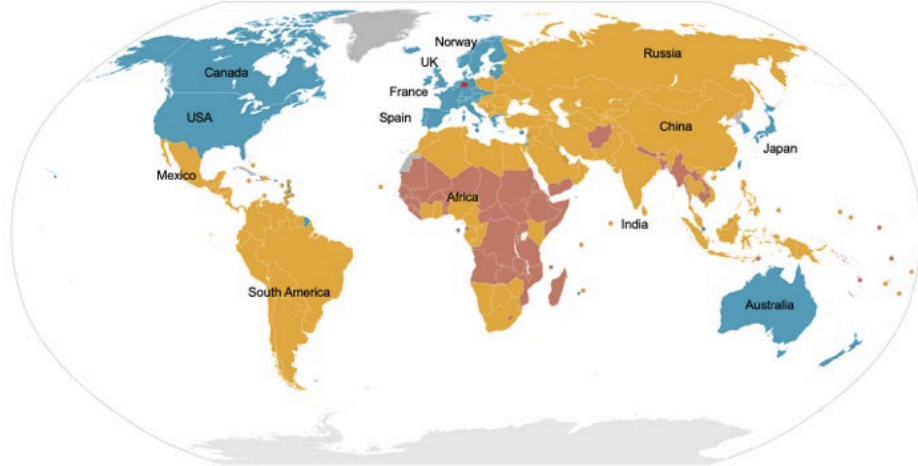
Distribution of unscheduled Shutdowns and Slowdowns






Procedure Automation – J5 International



The why – “be Relevant”



■ Developed countries ■ Developing countries ■ Least Developed Countries ■ Data unavailable Classifications by the IMF and the UN

Brown	vs	Green
 <ul style="list-style-type: none">• Legacy technology• Less efficient• Time to market is fixed• Customization is expensive• Supply chain less optimized• Longer development life cycle• Culture has to be transformed		  <ul style="list-style-type: none">• Latest technology advancements• Greater operational efficiency• Faster time to market• Easier customization• Optimized supply chain• Shorter development life cycle• Culturally prepared

Staying Relevant is....

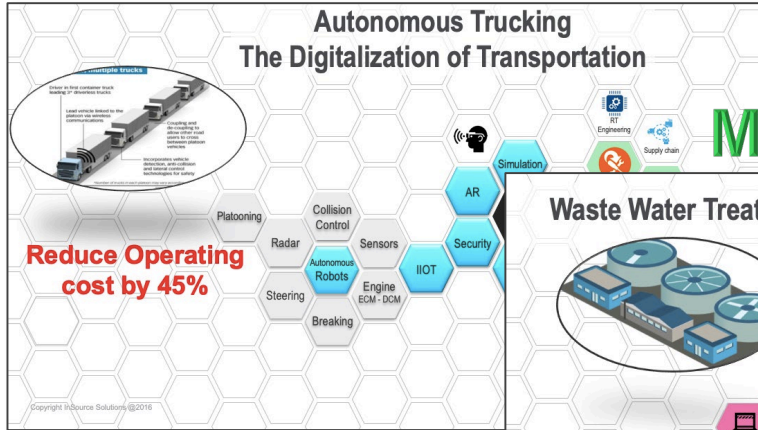
Never a conditional statement of **IF**
And never a question of **WHEN**
It is always the imperative of **NOW**



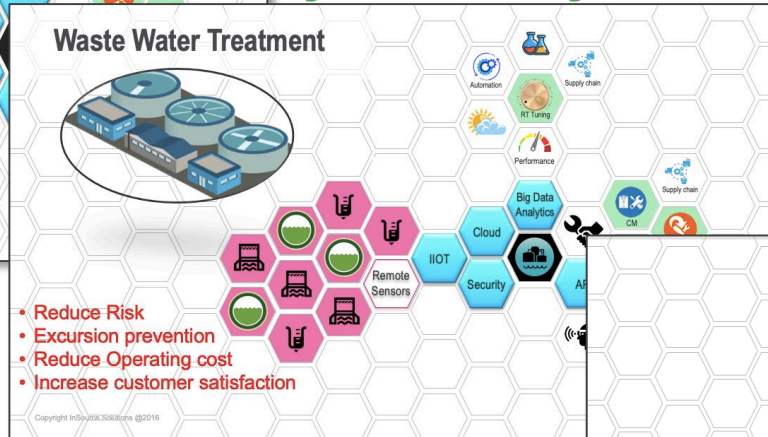
How InSource helps

Discover what makes sense for your site

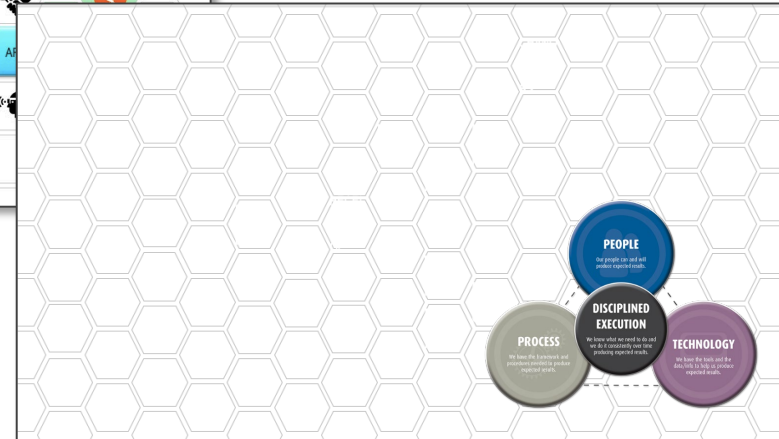
Not you



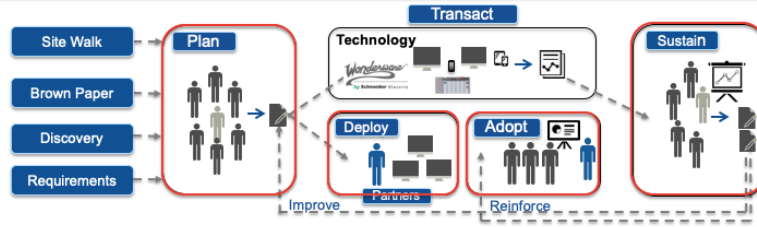
May not be you?



Could be you?



How we help



Requirements definition



Process mapping



Lean practices



Adoption coaching



Owners Agent services



Upgrade assistance



Technical assessment



Systems Health Check



Classroom & virtual Training

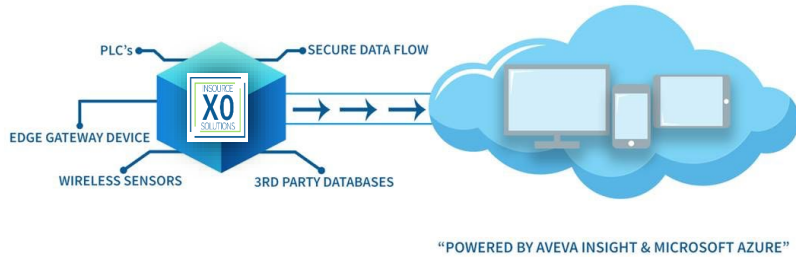


Technology strategy mapping



How we help

InSource X0 solutions



- Downtime
- System Health
- History
- Energy
- Others...

Could be you?



Digital Transformation — The Complex Made Easy

What makes InSource X0 Solutions™ So Unique?

Rapid Deployment

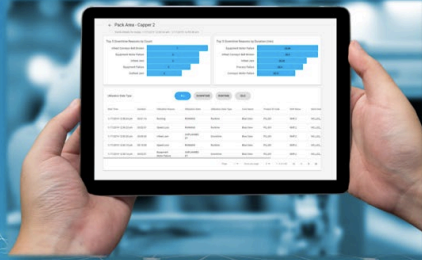
Less Expensive

Quick ROI

Scalable

Cloud Based

System Health checks



A Leapfrog in Value

	Downtime Solution	1 Line Pilot	5 Lines	15 Lines
Traditional Project Cost		\$ 65,000	\$ 125,000	\$200,000
Time to Deploy		4-6 weeks	6-10 weeks	12-16 weeks
X0 Solution Annual Cost (subscription based)		\$10,000	\$15,000	\$33,000
Time to Deploy		48 hours	48 hours	48 hours

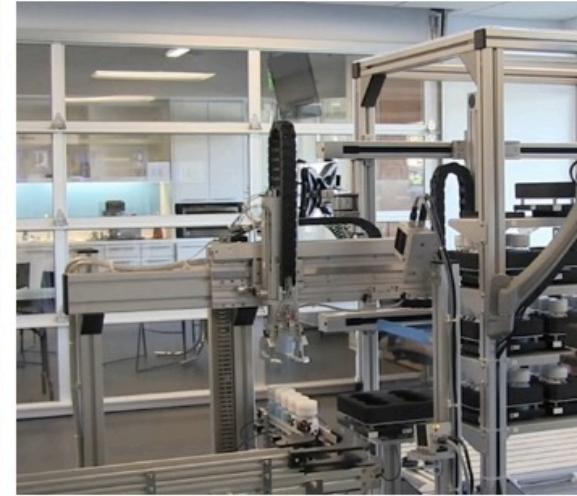
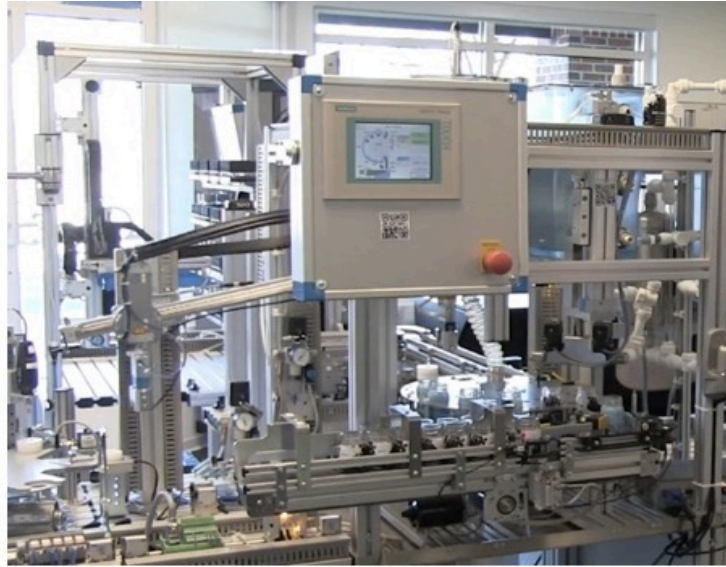
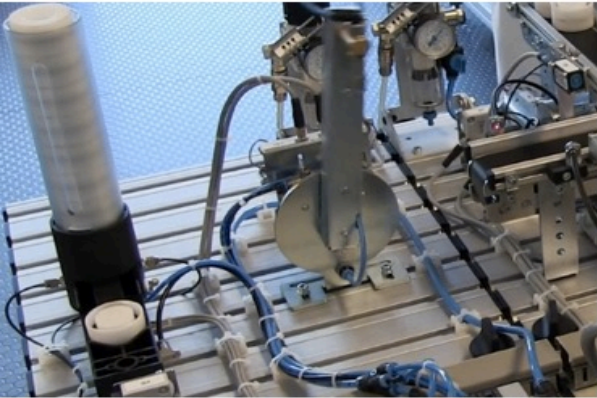
Minimal Infrastructure Cost

Subscription Based

Flexible



InSource Learning Lab

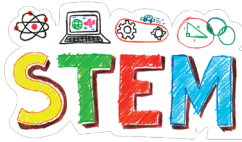


Working to influence the next generation.....



Tech School, Local College & Manufacturers

Local College



Manufacturers



InSource Outreach Program
Reinvigorates manufacturing in America through education, advocacy, outreach & assistance.

We seek to **reverse interest, remove misconceptions, provide assistance, and help others see the value of manufacturing** through various programs and events in order to have more youth seek manufacturing careers. We will focus our efforts the majority of our efforts on youth in Middle and High School.

InSource desires to be more visible.

InSource Solutions is focused on reinvigorating manufacturing in America. We are a 100% ESOP company, and our pride and ownership show in all we do. It is an honor to serve and build great value alongside our clients, employees, partners and communities.

We help make manufacturers more productive & profitable. We provide scalable solutions that integrate technology with management systems and continuous improvement tools to ensure our clients achieve and sustain success.

We recognize that today's youth are tomorrow's manufacturers and leaders. By educating and inspiring young people about manufacturing and technology, we can help open their minds to greater opportunities for them and our country.

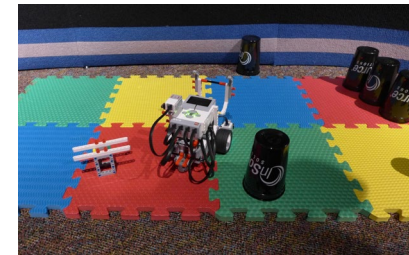
To achieve this, our Outreach program is focused on helping our youth community by partnering with schools and other like-minded organizations that promote programs such as STEM education, robotic competitions, and challenge events that foster personal growth, team building, and professional development for our youth.

THINGS WE WOULD LIKE TO ACCOMPLISH

1. Work more with local public schools to inspire students to pursue a career in manufacturing
2. Work more with local community colleges to assist in getting students trained in manufacturing careers to help make them more marketable in the job market



MFG DAY
Opening Doors
and Minds
#MFGDAY17



Contact:
Aaron Evans – 804-378-7500

Thank you

Industry 4.0

**Driving Operational Results
Through Digitization**

