INNOVATE

Business transformation leverages IIoT technologies to completely change the way industrial companies do business.

se.com/industrial-automation-solutions

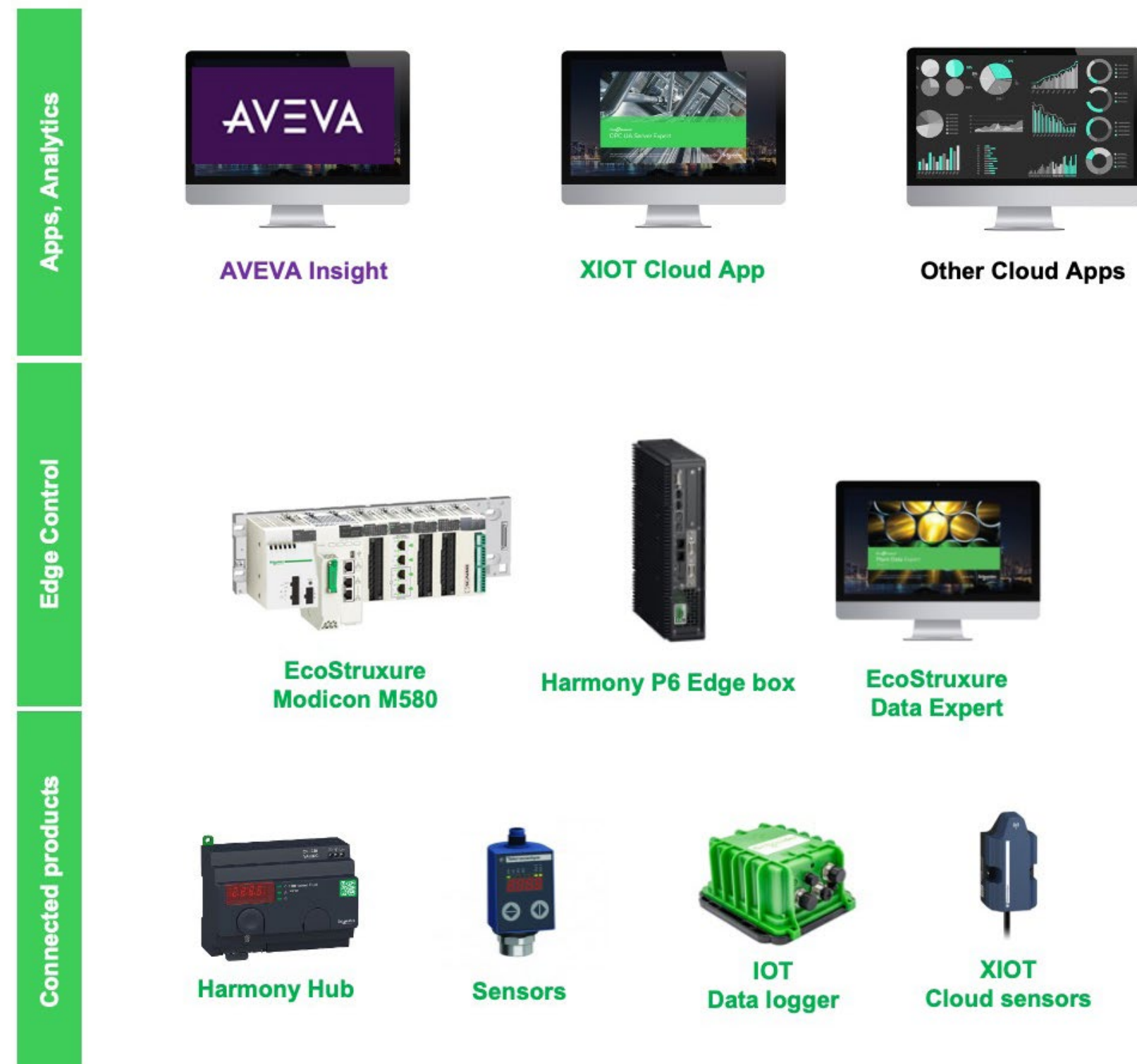Life Is On | Schneider Electric

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- Do you need to collect data from remote or local assets and systems for use by cloud and edge applications?

- Do you need to enable remote monitoring and alerts for critical assets?

- Do you need to enhance workforce mobility?

- Do you want to leverage new wireless communications protocols to make the most of connected devices such as power meters, instrumentation, digital & analog switches and pushbuttons?

- Do you need end-to end cybersecure connection of assets?

Smart data collection to cloud

Solution architecture

Apps, Analytics

AVEVA Insight | XIOT Cloud App | Other Cloud Apps

Edge Control

EcoStruxure Modicon M580 | Harmony P6 Edge box | EcoStruxure Data Expert

Connected products

Harmony Hub | Sensors | IOT Data logger | XIOT Cloud sensors

Easily connect equipment secondary sensors or systems so you can collect & contextualize data for use by edge & cloud apps or IOT platforms to reliably manage assets, operational productivity or energy efficiency.

Why it matters

- Enable field connectivity & share data collection with IT applications to reliably manage assets , operational productivity or energy efficiency

- Make it easy to access remote support information.

- Smart data integration in analytics applications with intelligent services: Data contextualization, data analysis and computing, dashboarding, real time alarming, geo-localization ….

- Quickly start monitoring your assets with customizable dashboard, cloud apps.

Schneider Electric Smart Factory Le Vaudreuil

Established 50 years ago,
Le Vaudreuil plant produces
12 million contractors a year.

The results: Life is On with… 10% reduction in energy consumption and costs and increased OEE from 42% to 71%.

Challenges

Improve competitiveness and future-proof 50-year old plant by increasing production capability to meet escalating demand:

- Energy accounting and sustainabilty
- Integrated industrial software solutions
- Centralized control and data management

The solution

Deployment of Schneider Electric's latest smart, IIoT enabled technologies for:

- Energy management
- Smart supply chain
- Predictive maintenance
- Lean digitization
- Augmented operator

Benefits

Digitization across the plant has led to:

- 10% reduction in energy consumption
- 25% improvement in operator efficiency
- 20% reduction in maintenance costs
- 20% reduction in diagnosis and repair time
- Increase in plant uptime

- Do you need a powerful cloud tool solution to provide real time contextual information?

- Do you need an need easy scalable deployment from one plant to all plants?

- Do you want to increase operator efficiency?

- Do you want to enable visibility and interoperability across enterprise systems?

- Do you need to deploy dashboarding combined with Analytics Business Intelligence in your plant and make your operations more efficient and profitable?

Flexible Dashboard

Solution architecture

Apps, Analytics

AVEVA Insights

Edge Control

Harmony P6

AVEVA System Platform

EcoStruxure Machine SCADA Expert

EcoStruxure Data Expert

Modicon M580

Digitize production management and leverage multi-site plant production for efficiency and profitability. Flexible and scalable IOT platform which aggregates all operation data and business process flow to support business intelligence for a manufacturing line or plant.

Why it matters?

- Provide an opportunity to drive business transformation becoming a source of new competitive advantage.
- Clear real-time insights on operating conditionsto drive data driven action plants to improve enterprise wide efficiency.
- Faster deployment, software costs reduction, company scalability.
- Break silos and facilitate people collaboration.
- Insight into industry best practices.
- Improve consistency across different teams.
- Simple and intuitive to use.

Schneider Electric worldwide factories
Standardized Control Tower for Manufacturing for Schneider Electric Plants

Deployed EcoStruxure solutions for manufacturing across **200** of our sites

Reduced energy costs **10-30%**

Reduced maintenance costs by **30-50%**

As a manufacturing solutions provider, Schneider Electric uses, tests, and implements the same solutions we recommend to customers. To improve our competitiveness at all our plants around the world and meet escalating demand, we strive to increase production capacity.

To do so, it's critical that we increase plant uptime, optimize plant efficiency, and empower our workforce of over 128,000.

We have a wide range of different manufacturing processes where complexity must be translated to simplicity. Processes need to be simple enough for anyone to manage.

The solution must support processes with different levels of automation from all-manual assembly lines to a fully automated process.

A manufacturing control tower has been developed as the scalable IOT-based manufacturing efficiency system for Schneider Electric plants.

This has led to multi-site operating insights, issue and root cause analysis based on multiple inputs and KPIs, and a better understanding of process situations for better decision making and customer satisfaction.

Learn more

Do you need real time insights to help you improve operational performance and sustainability?

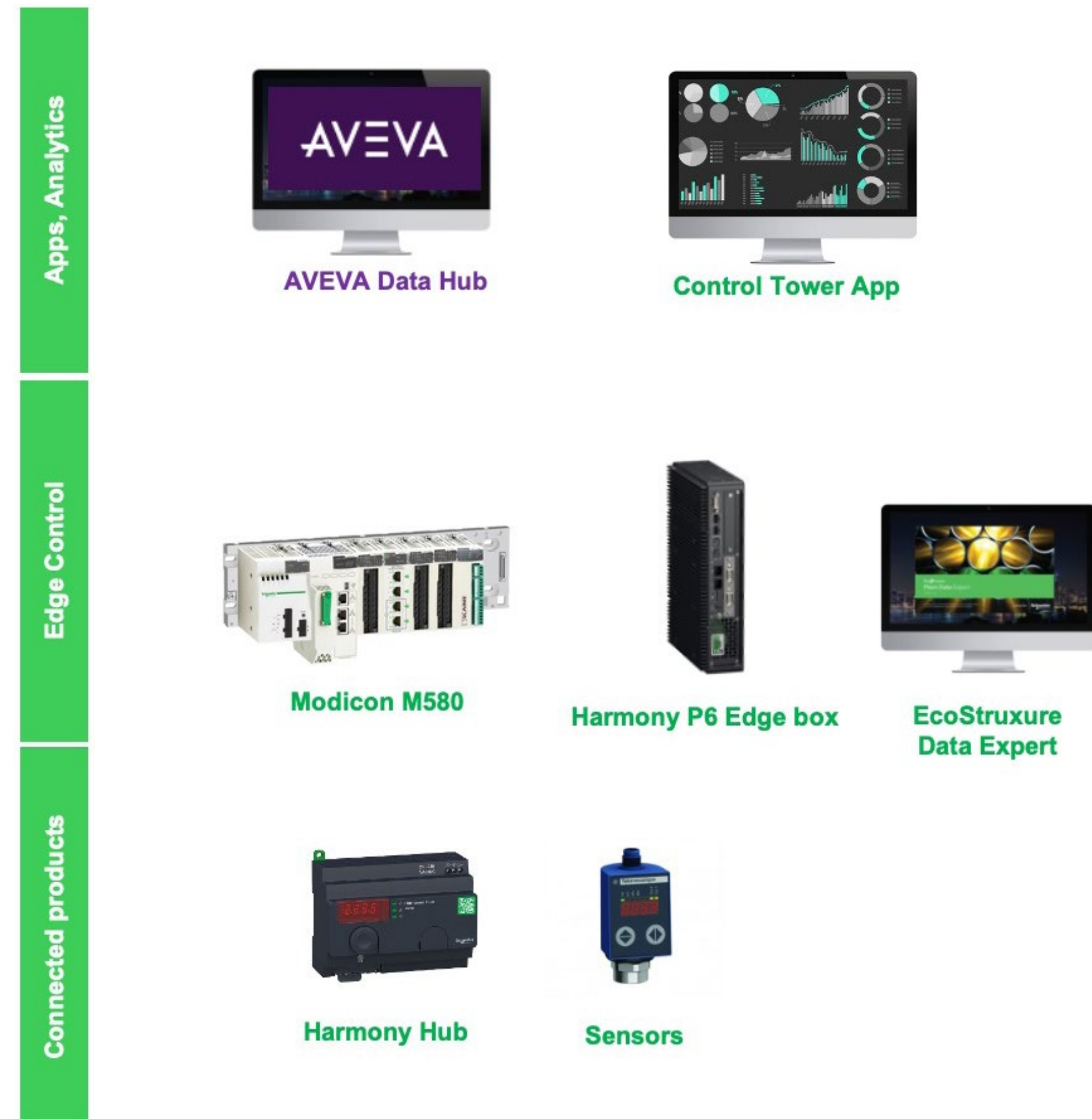Do you need the right business analytics and intelligence to drive improvements in:

• Safety?

• OEE and line/machine performance?

• Production flow and throughput?

• Quality?

• Asset uptime including root cause analysis of downtime events?

Do you want a solution which is scalable and can easily be deployed plant or enterprise wide?

Control Tower

Solution architecture

Apps, Analytics

AVEVA Data Hub

Control Tower App

Edge Control

Modicon M580

Harmony P6 Edge box

EcoStruxure Data Expert

Connected products

Harmony Hub

Sensors

A flexible, scalable IOT platform which supports manufacturing or process business intelligence by aggregating all operational and business processes flow data.

Why it matters?

• Leverage business analytics as a new source of increased competitive advantage

• Clear insights from industrial big data to decide which improvements to prioritize first to make the greatest difference

• Faster deployment, lower software costs, enterprise wide scalability

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Learn more

- Do you need multi-site performance visibility at the operations level?

- Do you need data access and data management?

- Do you need reporting and real-time decision support for business integration?

- Do you need faster development, deployment and scalability through templates, reports, dashboards and KPIs?

- Do you want preventive and predictive asset maintenance?
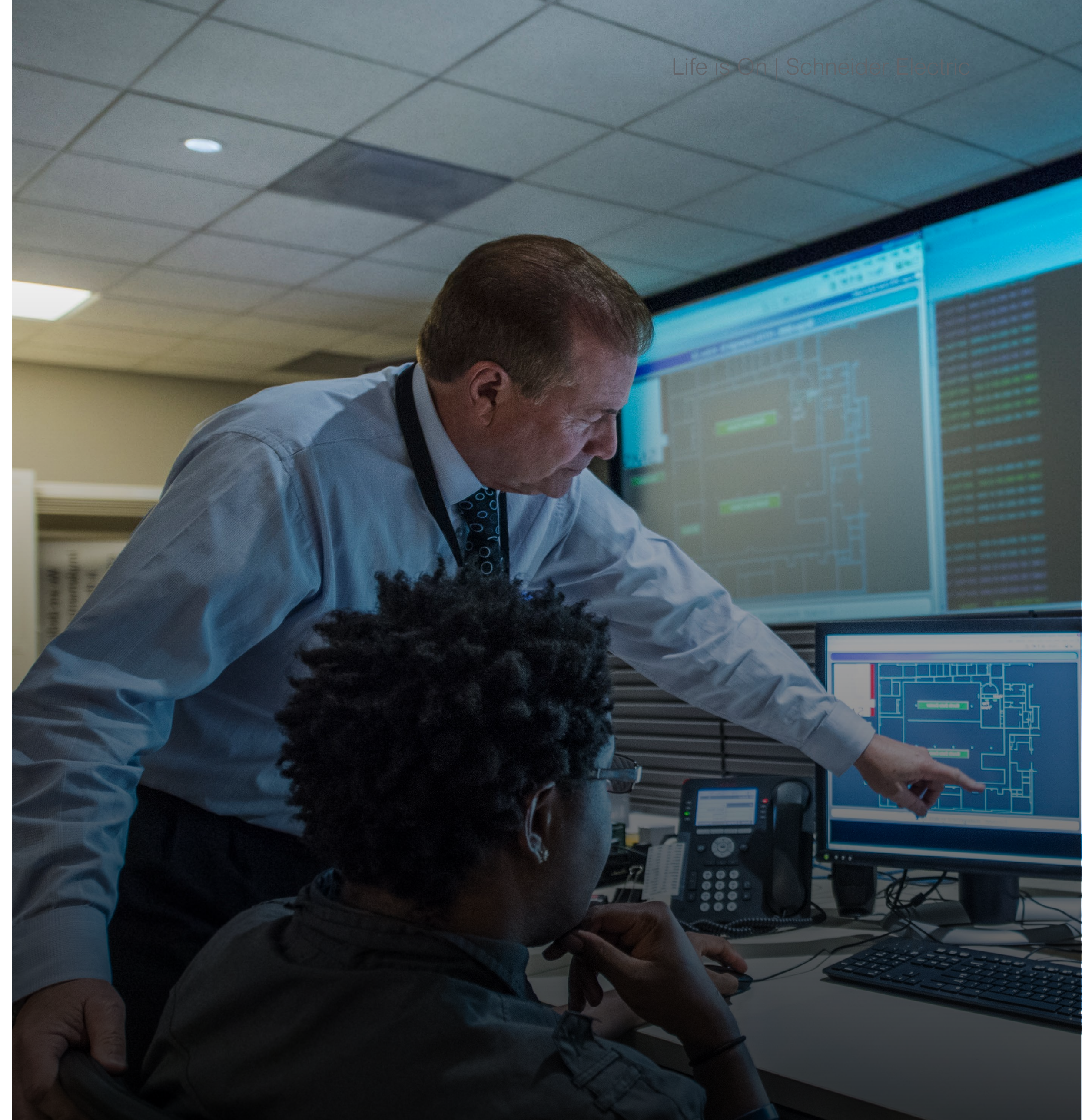
Smart Water Control Center

Solution architecture
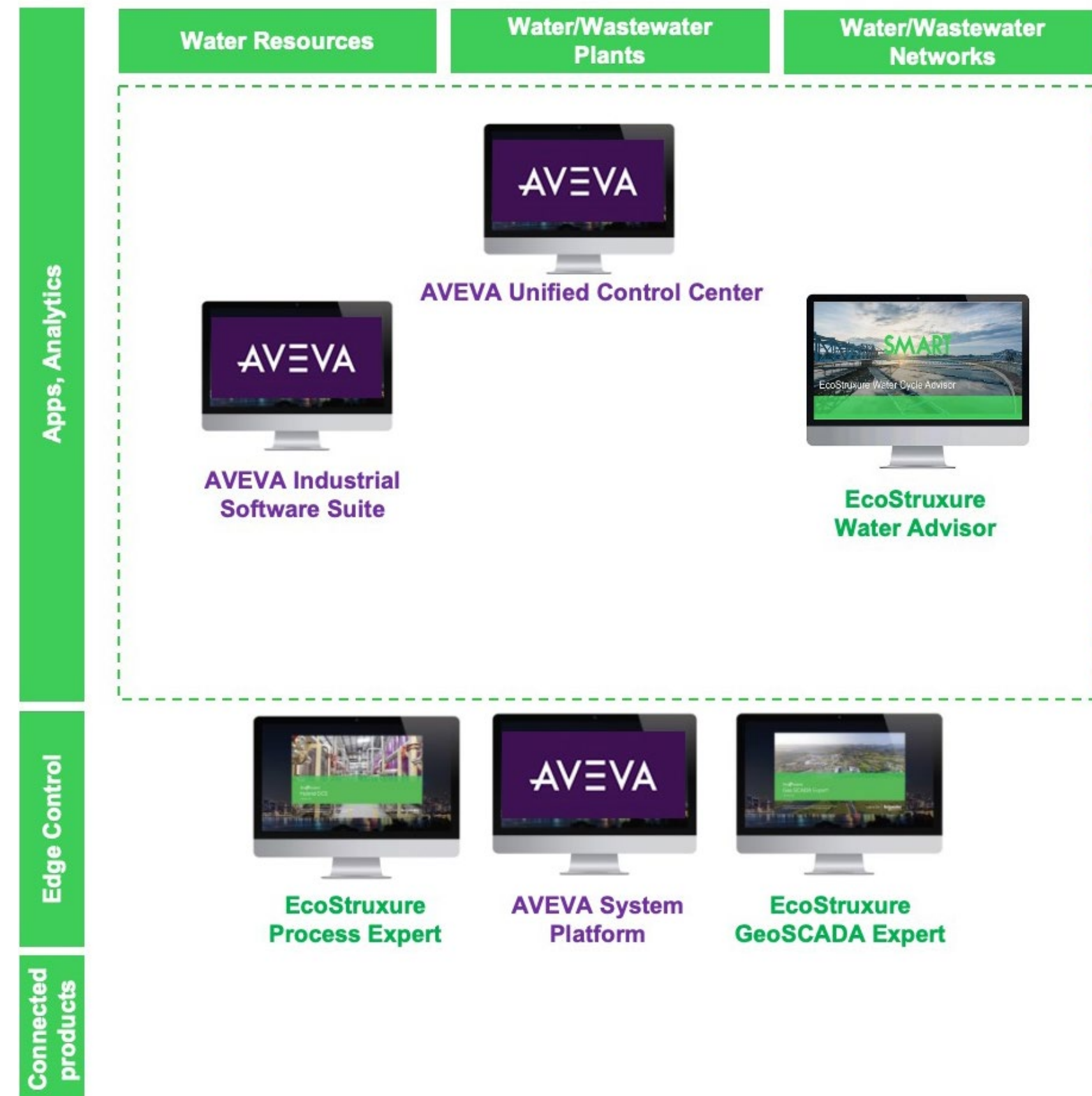
A comprehensive solution providing up of system of systems to manage the entire WWW infrastructure made of treatment plants and networks. Monitor and control multiple sites remotely, from one central location.

Why it matters?

- Increase operational efficiency
- Reduce in maintenance costs
- Energy savings
- Reduce response times
- Reduce downtime
- Improve collaboration
- Increase availability and profitability with financial performance

> "Having this solution in place gives benefits to our business. It gives tangible return on investment. We are confident that in the long run, Schneider Electric's solution will help up reduce energy costs truly"
>
> Mr. Cherdchai Pitiwacharakul
> Senior Vice President
> Operation and Customer Service East Water

East Water

Sustainable water management for a secure & stable supply

Customer challenge

- Manage pumping water from multiple sources while ensuring constant water pressure and volume.
- Optimize energy costs (approx. 40% of OpEx) and effectively manage water reserve during droughts.
- Visibility of pipeline network, with data on ageing assets to monitor for leaks and improve decision making.
- Ability to coordinate efforts & workflow between operation, maintenance, management and other departments.

The solution

From its pumping system to its upgraded centralized unified operations center, East Water has chosen Schneider Electric as their main technology partner and trusted advisor for their Smart Water initiative. They use a full EcoStruxure for Water Network solution, integrating leading-edge industrial software from AVEVA.

Results

20-30% increase in overall operational efficiency, 10% reduction in water losses and 15% cut in energy costs (pumps).

Learn more   Watch now

- Do you need process-energy correlation?

- Do you need real time insights to help you improve operational performance and sustainability?

- Do you want a solution which is scalable and can easily be deployed plant or enterprise wide?

- Do you need virtual sensor technology to increase accuracy of key variables?

Process intelligence

Solution architecture
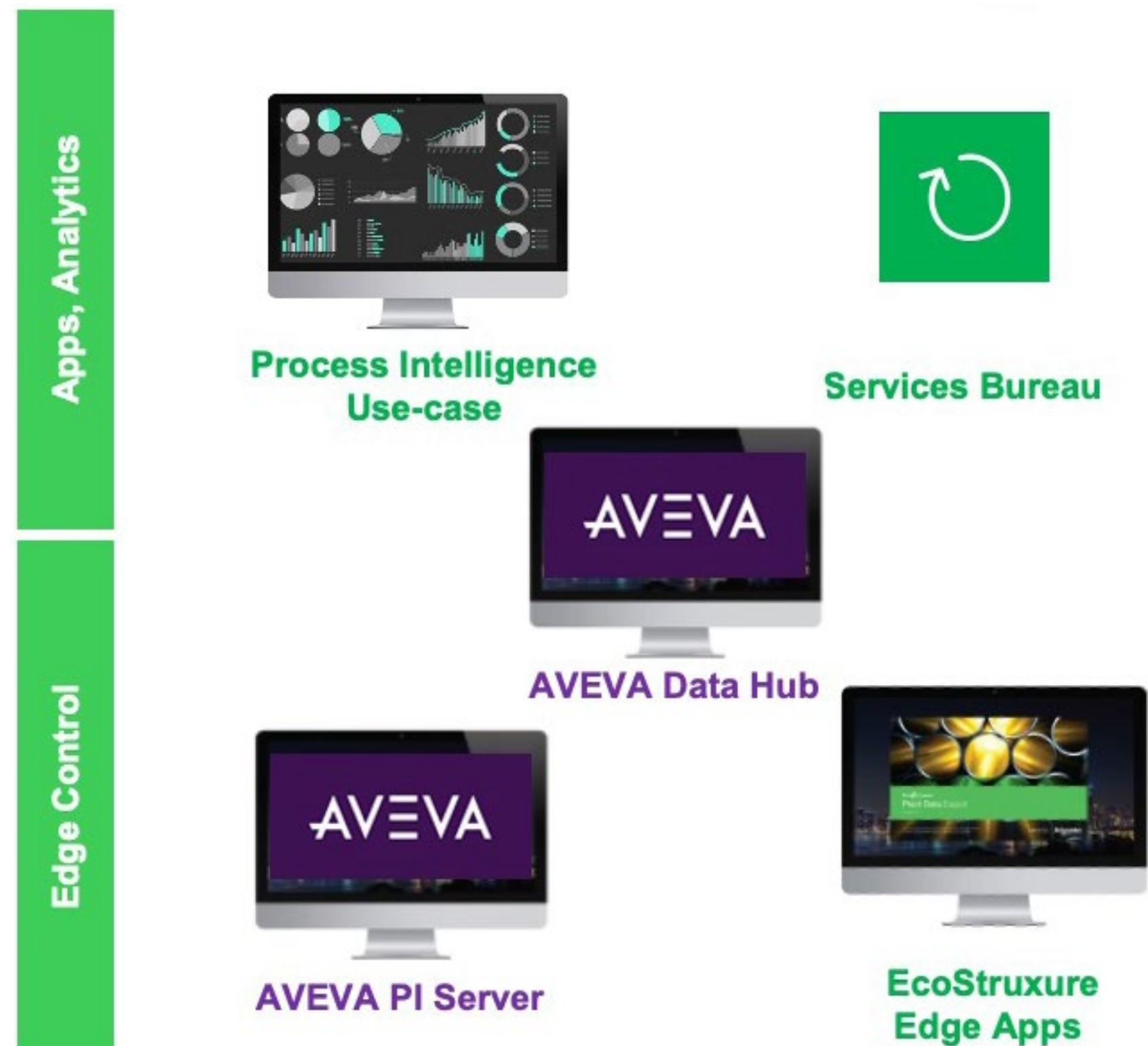
An open IIOT platform which helps industrial enterprises optimize operational KPIs (OEE, energy consumption, throughput, mass balance, recovery) through actionable insights, visualization and identification of root causes of anomalies.

Why it matters?

- Optimize energy consumption per ton of final product.
- Increase the throughput of existing assets.
- Access accurate information to drive operational efficiency
- Access to remote support

The solution offers operational intelligence and process "self-learning" to boost efficiency and create cleaner raw material operations along the value chain.

Learn more about how this business transformation solution works for mining and cement industries:
Watch the Video   Read the Article

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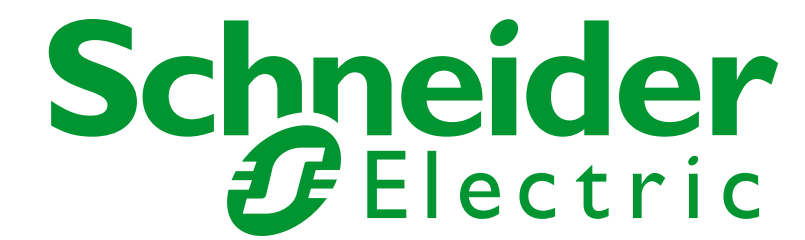
To learn more information about how business transformation leverages IIoT
technologies to completely change the way industrial companies do business visit

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