

# AVEVA

---

A value-driven,  
integrated approach to  
achieving operational  
efficiency

Start your journey to operational  
excellence and overcome market  
volatility

[aveva.com](https://www.aveva.com)



---

# Table of contents

Executive summary .....	3
The digital nervous system .....	4
Reduce waste, increase value .....	5
Digitalization starts with people .....	6
Case studies .....	7
AVEVA™ Operations Control .....	12
Day in the life of operations .....	13



# Executive summary

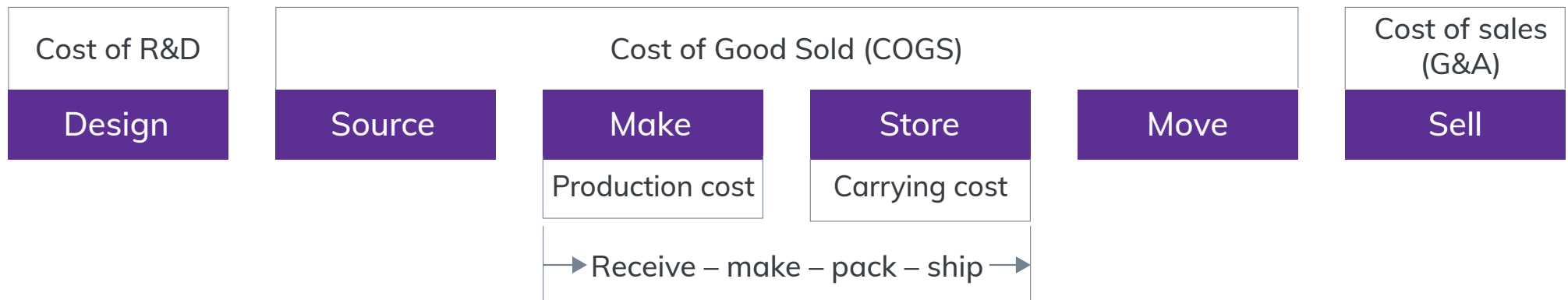
Accelerating return on investment (ROI) on digital manufacturing investments

In today's volatile market, building efficient operations is the only way consumer products manufacturers can keep their doors open. To achieve operational efficiency, manufacturers must increase visibility across the entire production line so teams can quickly take action to reduce value leaks and optimize assets and processes – and that requires an integrated approach to digital tools and solutions.

In this e-book, you will learn how to take an integrated approach to operations management to engage the plant floor, the control room, and the entire enterprise – without a massive capital outlay. We'll also show you how some of the top brands in the world are deploying successful digitalization initiatives. Lastly, we'll help you learn how you can accelerate return on investment in a way that reduces the cost of goods sold and enables return on investment every step of the way.

Reduce COGS by:

- Minimizing production cost
- Minimizing carrying cost
- Maximizing speed and real-time visibility



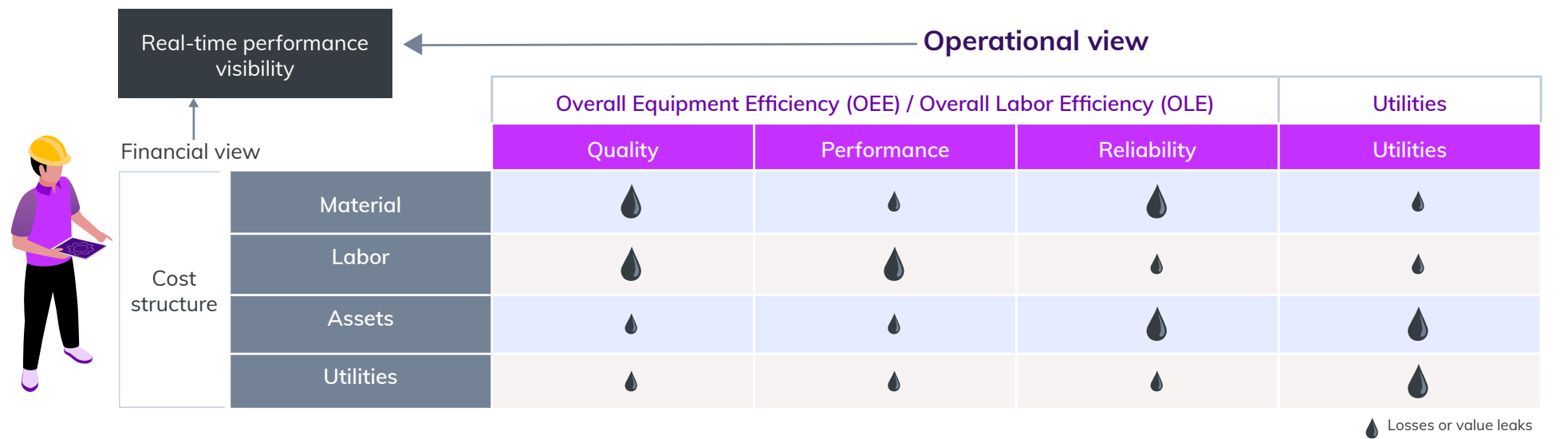


# A digital nervous system for manufacturing

Many consumer products manufacturers lack visibility into every part of the manufacturing process. The lack of available operational details makes it difficult for manufacturers to maximize throughput, allocate production factors to the most valuable uses, and eliminate or minimize waste, or value leaks. Teams can't identify where value leaks are coming from and the cost to the business because, put simply, they can't manage what they can't see.

Manufacturers of all sizes must focus on building a connected digital nervous system that enables a comprehensive view of operational and financial benchmarks and performance. Only then can teams respond in real time.

Unfortunately, digitalization efforts are often deployed in silos, resulting in uneven data collection and process maturity as well as hidden or hard-to-track leaks that lead to productivity losses.

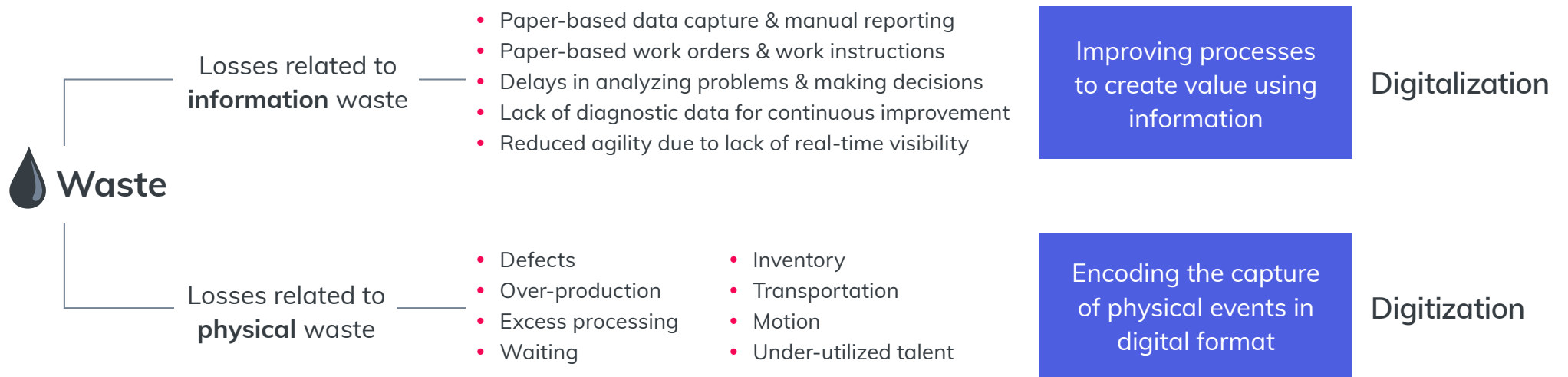


# Reduce waste, increase value

The quest to reduce manufacturing waste is not new. While companies have long embraced Lean Manufacturing, digitization and digitalization build upon these core principles to accelerate value.

**Digitization:** Encoding the paper-based aspects of work processes. Digitization encodes physical events into a digital format. For example, manufacturers can digitally codify each different type of waste identified by Lean. Technology can also encode more than a paper trail to include auditory, visual, and other sensory inputs.

**Digitalization:** Creating the sense-and-response network of the digital nervous system. Digitalization uses the data that digitization creates for higher-level processes and problem-solving activities. This full sense-and-response process creates a closed-loop to enable continuous improvement.



# Digitalization starts with people

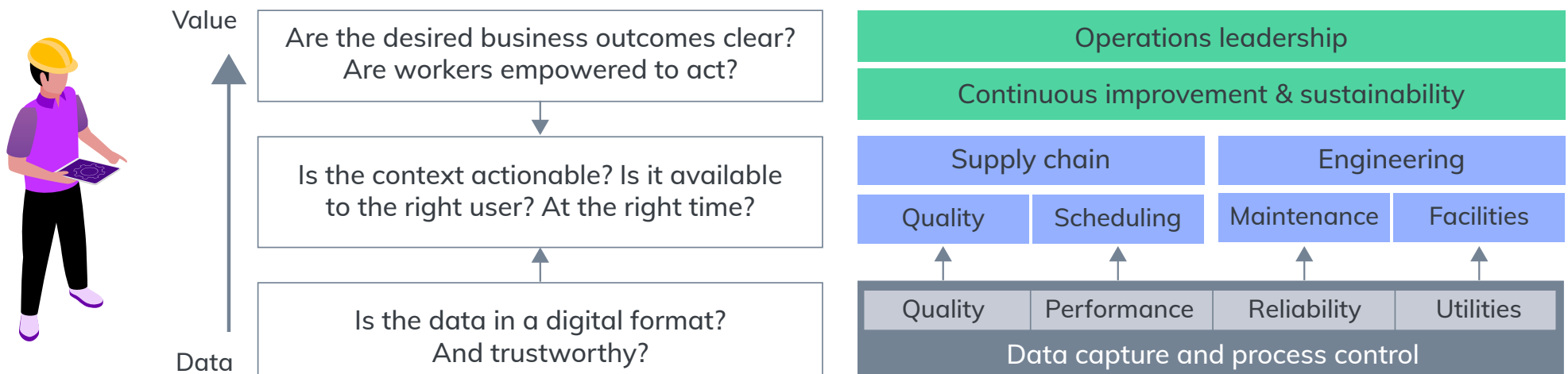
Technology is a critical part of building a digital nervous system, but technology is only effective when backed by an empowered workforce. To accelerate ROI, manufacturers must create a sustainable, living-and-learning system – and that starts with a data capture foundation. From there, data must be accessible to functional users, presented promptly, and contextualized in a way that is meaningful for both the end-user and the business.

Beyond technology, functional teams must work together to ensure the right production order and time with the right quality and quantity of assets.

To collaborate effectively, teams across the enterprise must have consistent access to the same source of real-time information.

Finally, a people-centric approach to digitalization depends on leadership and company culture. Companies must foster a culture that prioritizes agility, continuous improvement, and sustainability. Leadership must communicate the organization’s desired business and operational outcomes to workers on the front lines of execution.

This combined approach will enable organizations to uncover new efficiencies, simplify workflows, and maximize return on investment.



# Case study: Henkel

Henkel is a global leader in consumer goods and industrial chemicals with a diverse portfolio of well-known brands. As a pioneer in sustainability, the company is committed to solutions that meet its economic and climate-positive goals in all of its activities across the entire value chain.

Working with AVEVA, the Laundry & Home Care division deployed a digital backbone to establish a single source of truth to help manage its sustainability and OEE performance.

“ When we introduced AVEVA™ MES in 2013, we had a normal run-rate of 3% energy efficiency savings on every ton of product produced. After we installed the AVEVA system, we clearly saw the energy efficiency increase.

Taking half a percent out equates to almost €500,000, so we are saving €8M per year, six years into the program. We spent around €8 -10M on the system, so you can see the ROI over time is excellent, and we are using the system to generate many other efficiency gains throughout our operations on top. ”





---

# Case study: Starbucks

As the world's largest coffeehouse company, Starbucks operates more than 30,000 stores in over 80 countries worldwide. AVEVA is the foundation of the group's manufacturing automation platform offering superior edge-to-enterprise connectivity and visibility into operations around the world.

Starbucks is working to make coffee the world's first sustainable agricultural product and AVEVA is proud to support Starbucks as they seek to "inspire and nurture the human spirit – one person, one cup, and one neighborhood at a time."





---

# Case study: Proctor and Gamble

P&G drives system standards across 90 plants and 65 different product lines to unify data, achieve 360° reporting and KPIs, and reduce implementation costs.

Procter & Gamble has standardized on AVEVA software in its 90 plants across the globe to accelerate time to market for a wide range of personal health, consumer health, and personal care and hygiene products. AVEVA™ System Platform acts as a flexible foundation for giving cross-functional teams access to monitor, control and mitigate bottle necks with real-time and historical data across manufacturing processes and global sites. AVEVA is an enthusiastic partner in supporting Industry 4.0 initiatives across P&G.



# Case study: F&N Dairies

F&N Dairies Thailand, a member of F&N Limited based in Singapore, has a 133-year history in the businesses of food & beverage, real estate, and publishing. The Rojana plant in Thailand is one of the largest canning factories in the world, producing over 3M cans of sterilized milk every day (or 2500 cans per minute).

F&N Dairy has very high standards for its food safety, production efficiency, and energy usage goals, which require the plant to adhere to very strict quality control measures at every step of the manufacturing process.

“Traceability is a very big concern at F&N dairies because Thai law dictates that the plant must be able to store and retrieve product information quickly and correctly and that quality documentation must be kept until the end of the product’s shelf life, which is typically two years.

The system helped us solve the problem by reducing the time from four hours to one minute for a single traceability exercise.”

-  
Watcharapong Boonnam





# Case study: Kellogg's

Kellogg's is a US-based multinational manufacturer of cereal and convenience foods with over \$14B in annual sales. The company manufactures and distributes breakfast and snack foods in more than 180 countries. Like other name-brand food and beverage producers, it's adjusting to a market with tighter regulations and safety standards and increased public scrutiny of its products.

To that end, the company wanted to upgrade the infrastructures of its international assets to reduce recalls, meet more stringent regulations, and sustain consumer trust. Kellogg's deployed AVEVA™ PI System™ at its manufacturing plant in Valls, Spain, which produces 12 of Kellogg's cereal brands.

“Now we spend less time looking for data and more time analyzing it.”

-  
Emilio Angles  
Power Controls and Information Systems  
Manager, Kellogg's (Valls Plant, Spain)





# AVEVA Operations Control: A holistic solution without unnecessary spending

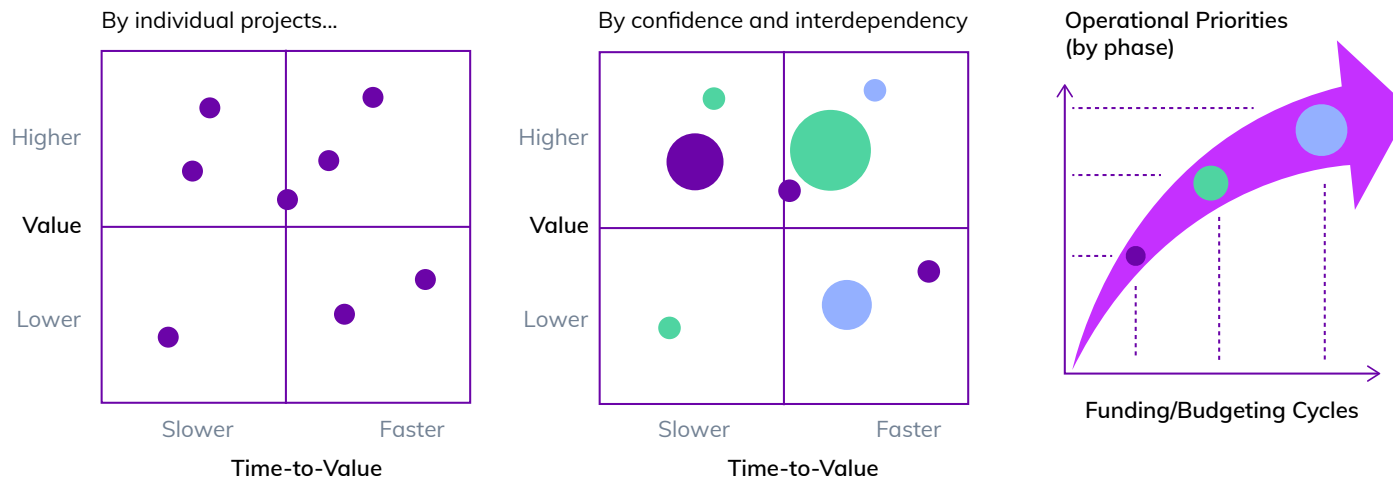
Traditionally, industrial automation has been a fragmented ecosystem of solutions, with high integration and maintenance costs – until now.

AVEVA Operations Control unifies the plant automation control layer with operator productivity tools to provide a better experience and empower users to make better, faster decisions.

AVEVA Operations Control’s seamless approach enables teams to rapidly identify value leaks and uncover new efficiencies.

Now, manufacturers of all sizes have access to the latest technology, artificial intelligence (AI), and machine learning (ML) tools – without the heavy up-front financial lift.

Available as a SaaS-based subscription, AVEVA Operations Control is easy to deploy, while allowing manufacturers to amortize costs and reach a faster return on investment (ROI).



# Day in the life of operations: Enabling a new way to work with AVEVA Operations Control

Operations is made up of many teams with different job functions, each requiring cross-functional capabilities that cover an array of operating time scales. From the millisecond requirements of the plant floor automation layer to the minute-, hour-, or even day-long enterprise business systems requirements, teams must have access to the right tools based on the right time scale to meet performance goals.

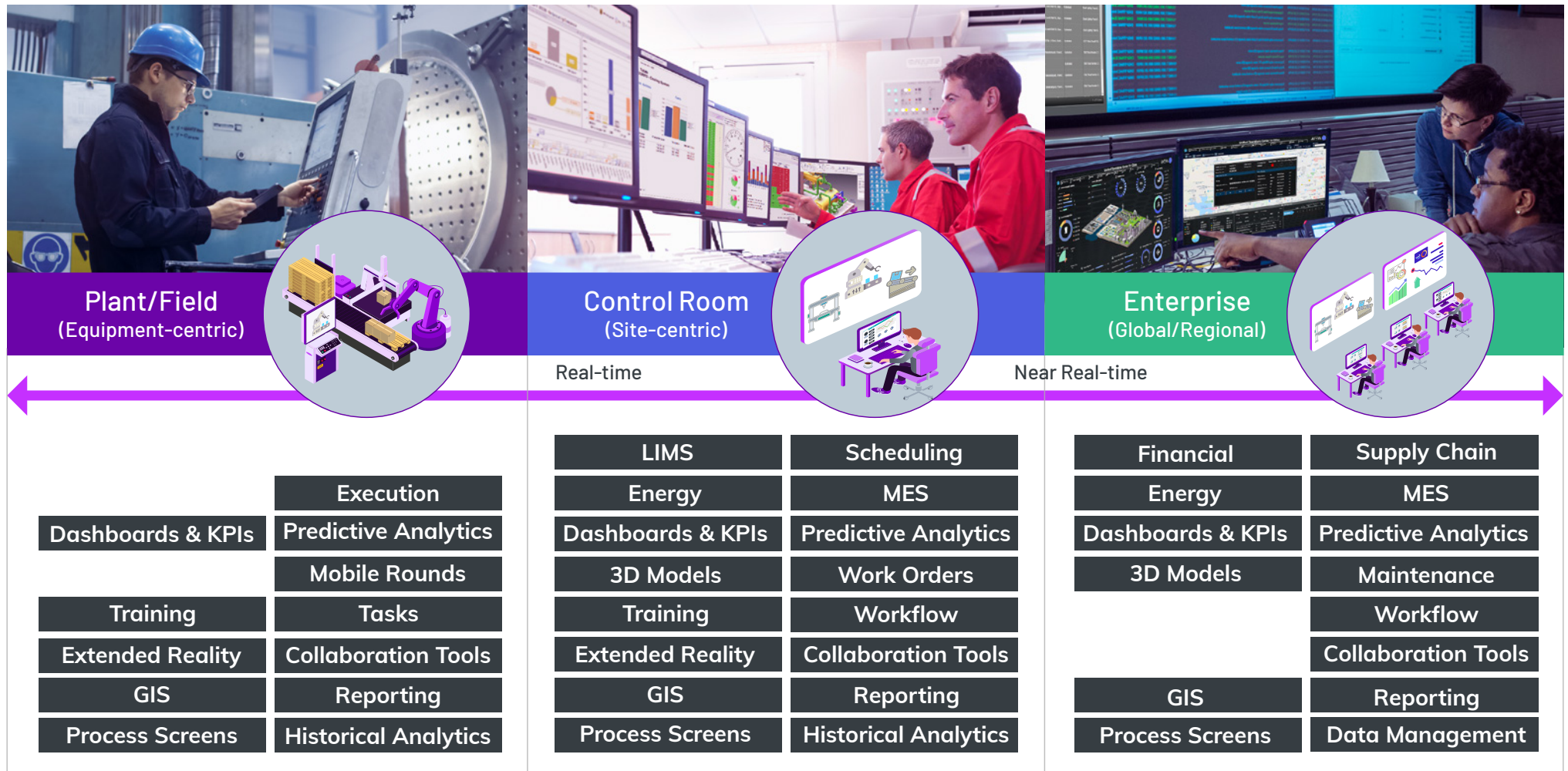
Enabling a new way to work requires companies to seamlessly connect operations, workers, and the enterprise.

A flexible solution – available on-premise, as a hybrid, or in the cloud – enables development, visualization, and analytics, so users can effectively execute disparate tasks, timescales, and work cells.

AVEVA Operations Control provides a common, data-centric foundation, enabling knowledge transfer, improving collaboration and sharing of best practices, and promoting actionable intelligence. When users understand the business, they can make timely, fully informed decisions.




# Enable a new way of work with AVEVA Operations Control







For more information, please visit:  
[aveva.com/operational-efficiency](https://aveva.com/operational-efficiency)

 [linkedin.com/company/aveva](https://www.linkedin.com/company/aveva)

 [@avevagroup](https://twitter.com/avevagroup)

## About AVEVA

AVEVA is a global leader in industrial software, driving digital transformation and sustainability. By connecting the power of information and artificial intelligence with human insight, AVEVA enables teams to use their data to unlock new value. We call this Performance Intelligence. AVEVA's comprehensive portfolio enables more than 20,000 industrial enterprises to engineer smarter, operate better and drive sustainable efficiency. AVEVA supports customers through a trusted ecosystem that includes 5,500 partners and 5,700 certified developers around the world. The company is headquartered in Cambridge, UK, with over 6,500 employees and 90 offices in over 40 countries.

Learn more at [www.aveva.com](https://www.aveva.com)

AVEVA and the AVEVA logo are a trademark or registered trademark of AVEVA Group plc in the U.S. and other countries. All product names mentioned are the trademarks of their respective holders.

© 2022 AVEVA Group plc and its subsidiaries. All rights reserved.

