

The background is a dark purple gradient. On the left, there are two vertical neon lines, one blue and one magenta, with a horizontal magenta line intersecting the blue one. On the right, a large magenta arc curves from the top towards the bottom. The text 'AVEVA WORLD' is centered in a white, bold, sans-serif font.

AVEVA WORLD

An aerial photograph of an industrial facility, likely a factory or refinery. The image shows several large, white, rectangular industrial buildings with flat roofs. In the foreground, there are large, cylindrical storage tanks. The facility is surrounded by a dark blue fence. In the background, there are green fields and a line of trees under a cloudy sky. A semi-transparent blue box with rounded corners is overlaid on the right side of the image, containing the title and subtitle text.

The Road to a Smart Factory: Bakoma Transformation Story

Utilizing the AVEVA Platform in Bakoma dynamic growth

Adrian Stelmach, Jakub Świerczyński

Agenda

- Introduction
- The Digital Transformation Journey of Bakoma
 - How it started, key milestones, and what changed.
- Strategy in a Nutshell
 - The guiding vision behind the transformation.
- What Does the AVEVA System Actually Do?
 - Practical explanation of the system's core functionalities.
- Why People Need the Right Tools?
 - How AVEVA empowers operators, managers, and decision-makers.
- Summary

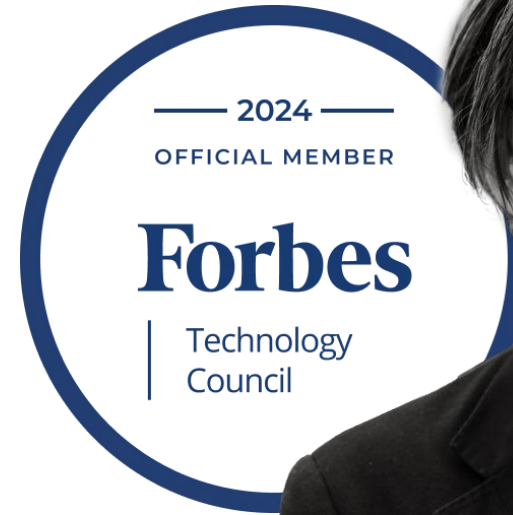


Introduction

Adrian Stelmach

- CEO explitia
- Author of book "15 steps to purchase an IT system"
- Host of the Digitalizuj.pl podcast
- One of Poland's leading IT Tech influencers
- Forbes Technology Council Member
- Mentor at the YBP Foundation

explitia



Introduction

Bakoma

Bakoma is one of the **largest dairy producers** in Poland, consistently investing in automation and **digitalization** to enhance production efficiency, traceability, and operational control.

AVEVA

AVEVA provides **scalable industrial software** solutions that serve as the backbone of Bakoma's automation, enabling **centralized production** oversight, data integration, and advanced process management.

explitia

explitia is Bakoma's key **technology partner**, responsible for implementing and continuously developing AVEVA-based SCADA/MES solutions, ensuring seamless automation, **standardization, and system scalability.**

Brief overview

- The AVEVA platform as the cornerstone of Bakoma's **digital transformation**.
- One of the **largest AVEVA licenses** in Poland based on the number of variables.
- Key **AVEVA modules**: Platform, Historian, InTouch, Reports

AVEVA

Bakoma

explitia

Brief overview of Bakoma in numbers

Leader in yogurt
production in CEE
region.

36 years in the
market

15+ product
packaging lines

200+ products

Certifications
including ISO, Global
Quality (IFS), V-
Label

Bakoma

Bakoma – Key Financial & Market Highlights in 2023

- **Revenue:** 766,894,000 PLN
- **Net Sales Revenue:** +7.05%
- **Profit:** 11,080,000 PLN
- **Total Equity:** +26.22%

A leader in dairy innovation and a trusted name in the industry.

Award-winning brand, recognized in major industry competitions:

- **“Złoty Paragon – Polish Retailers’ Award 2024”** – Bakoma Skyr Raspberry-Strawberry Drinking Yogurt
- **“Golden Innovations FMCG & Retail 2023”** – Bakoma Bubble Twist
- **“Lider Forum 2024”** – Bakoma MEN Skyr 300g (Innovation Category)

Bakoma

Bakoma products



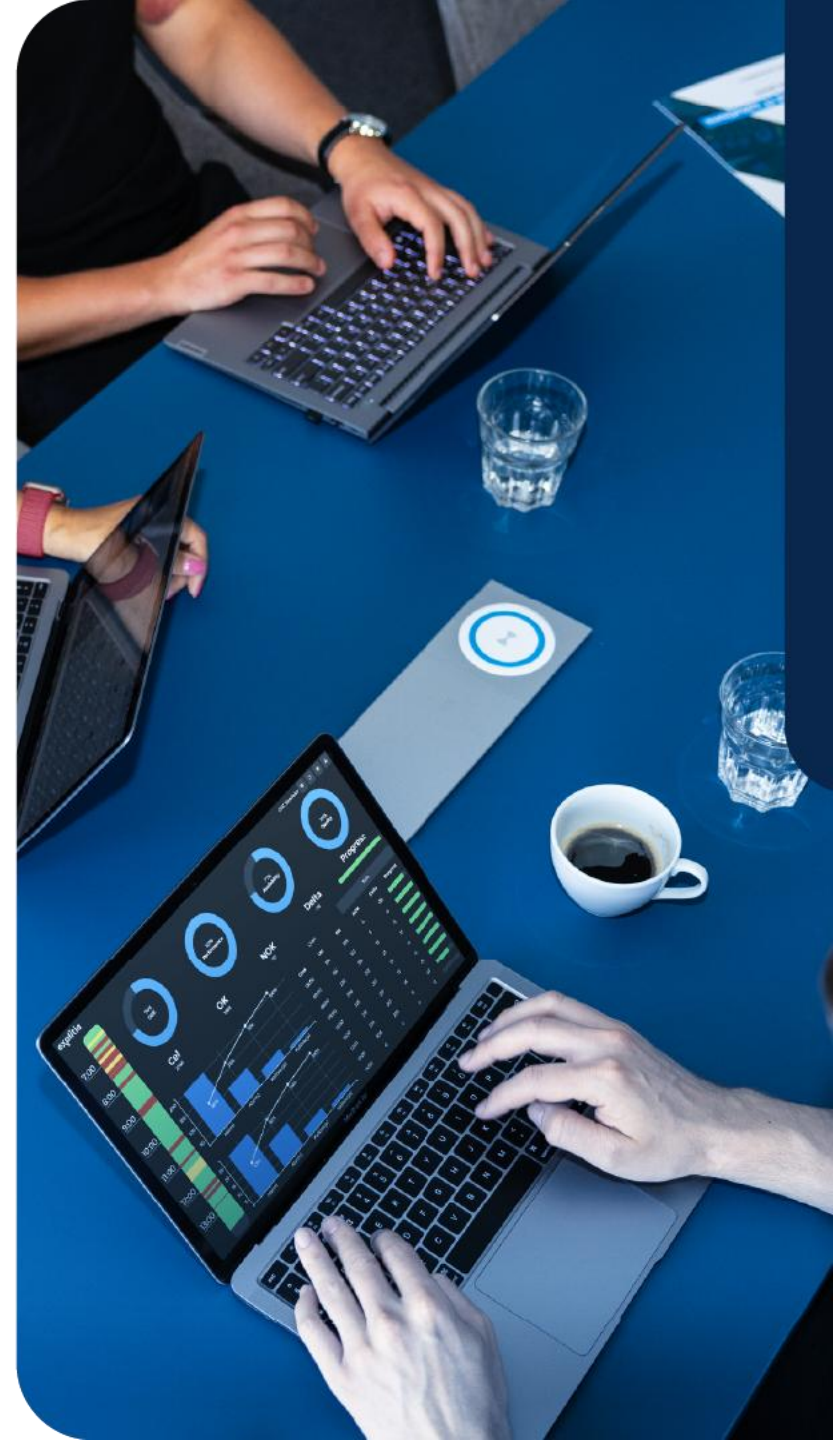
Bakoma

explitia – introduction

At **explitia**, we specialize in the **digital transformation of manufacturing enterprises**, providing end-to-end solutions that include:

- **Consulting** and needs analysis
- Technology selection and **full implementation**, covering software licensing, deployment, data collection, infrastructure, and hardware selection
- 24/7 top-tier **Maintenance**

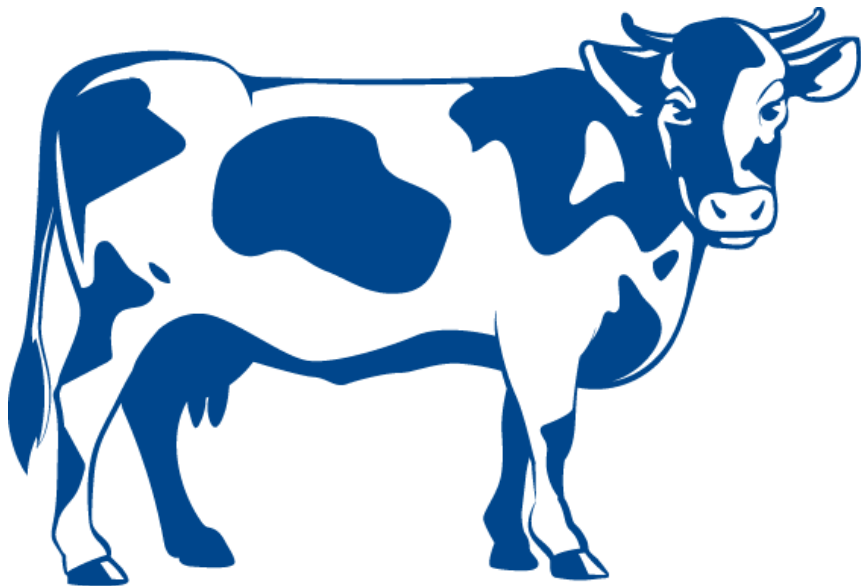
What sets us apart is our **deep process and technological expertise**, backed by a team of IT developers and automation specialists who ensure comprehensive customer support and a strong understanding of **client needs**.

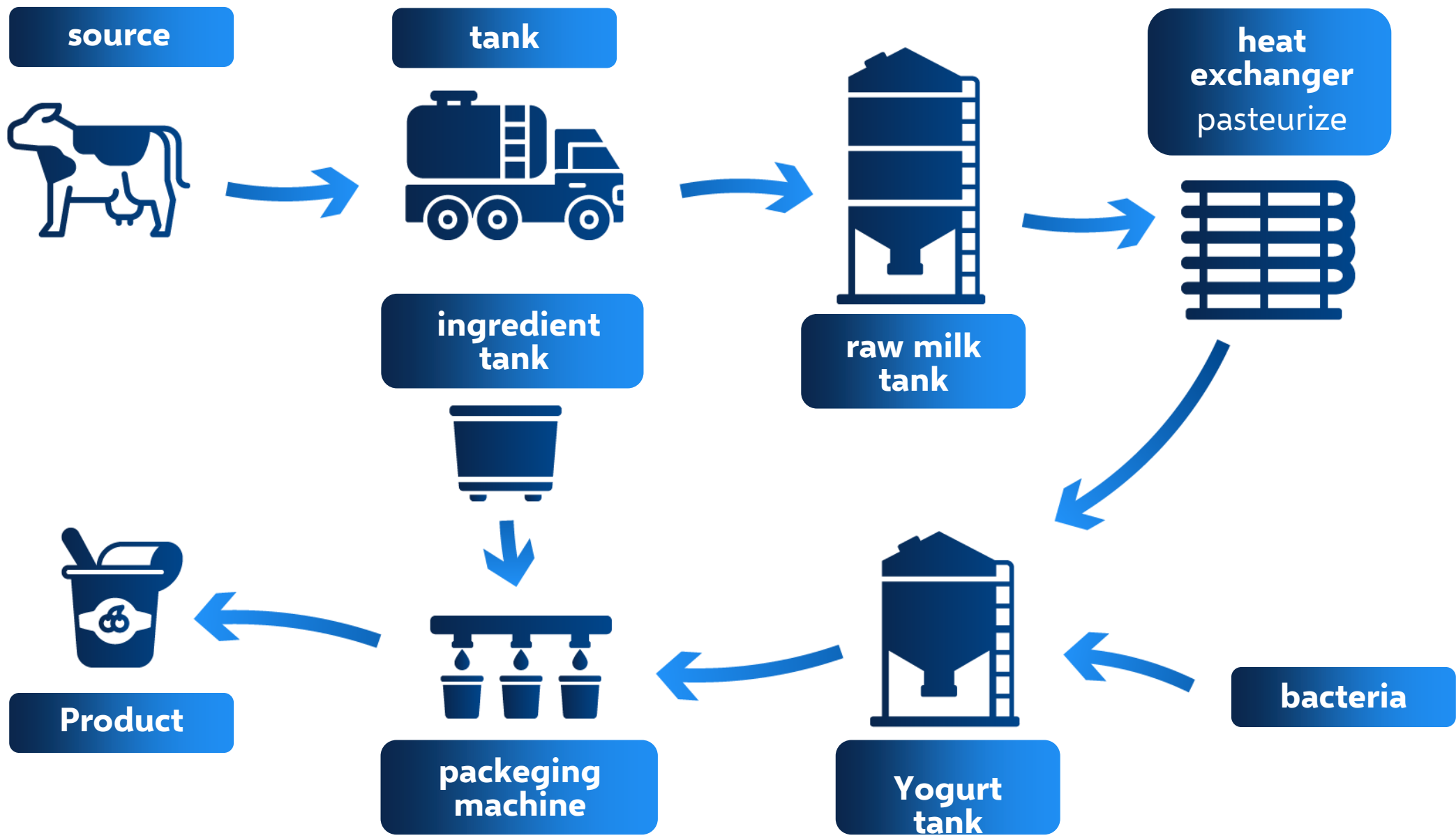


The Digital Transformation Journey of Bakoma

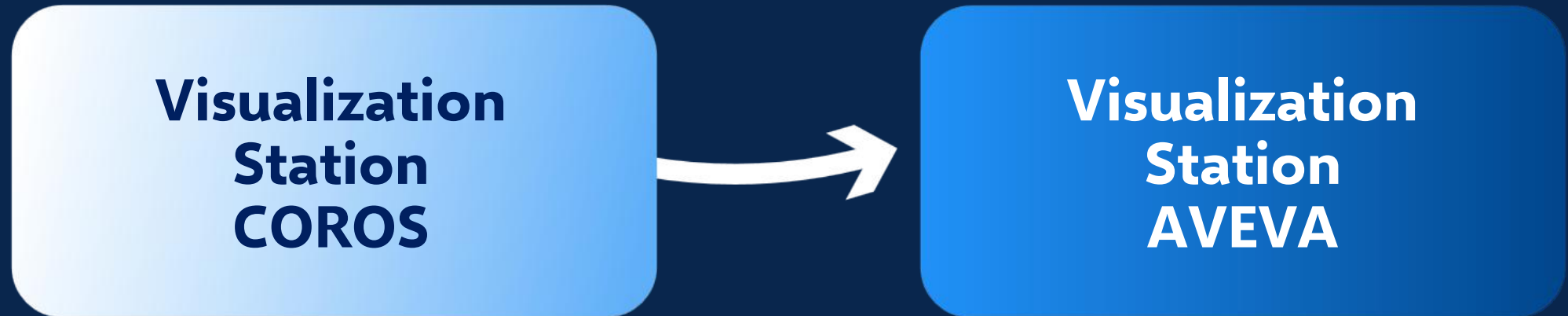
Description of the yogurt production process

From milk to finished product
(yogurt or dessert).





How it all started?



Digital transformation journey

**Visualization
Station
COROS**



2003

Control system based on Siemens SIMATIC S5 + SCADA COROS LSB



2005

Start of discussions on system modernization.



2006

Release of Wonderware System Platform 2.1.



2007

Migration to SIMATIC S7 and Wonderware System Platform 2.1.
License for 50,000 variables – one of the largest Wonderware deployments in Poland.



2013

Adrian Stelmach joins the system integrator team.



2014

Jakub Świerczyński promoted to Deputy Chief Technologist at Bakoma.



2015–2022

System development:
Standardization,
Elimination of paper documentation,
Centralized monitoring.



2023

AVEVA becomes the central technology management platform at Bakoma



**AVEVA
Current state**

How did we address customer needs? What made the impact?

- **Scalability** and development potential.
- **Standardization** of processes and systems
- **Centralization** of data and easier diagnostics
- Improved **quality control** and traceability
- Open source **code**.
- Multiplicity of **communication** channels.
- Powerful **historian** capabilities.
- Many verified instances of **working AVEVA platforms** in similar branches.
- Recommendation from the integrator company - **explitia**.



Introduction of Jakub Świerczyński



Shift Production Manager

Used **SCADA** (AVEVA) as a daily operational tool to monitor and control production. Relied on AVEVA for **real-time process visualization and supervision**.



Deputy Production Manager

Expanded his role to **production planning and process optimization**. Required deeper data insights and automation, leading to further AVEVA system enhancements. Contributed to **MES functionalities**, integrating SCADA with **production orders**.



Chief Technologist (Current Role)

Oversees technological investments and process automation. Utilizes AVEVA Historian for **detailed production analysis and traceability**. Works on further AVEVA-driven **digitalization**.

“Thanks to AVEVA, onboarding was faster, and the clear visualization made it easier for me to understand new workplace and technological processes”.

Jakub Świerczyński

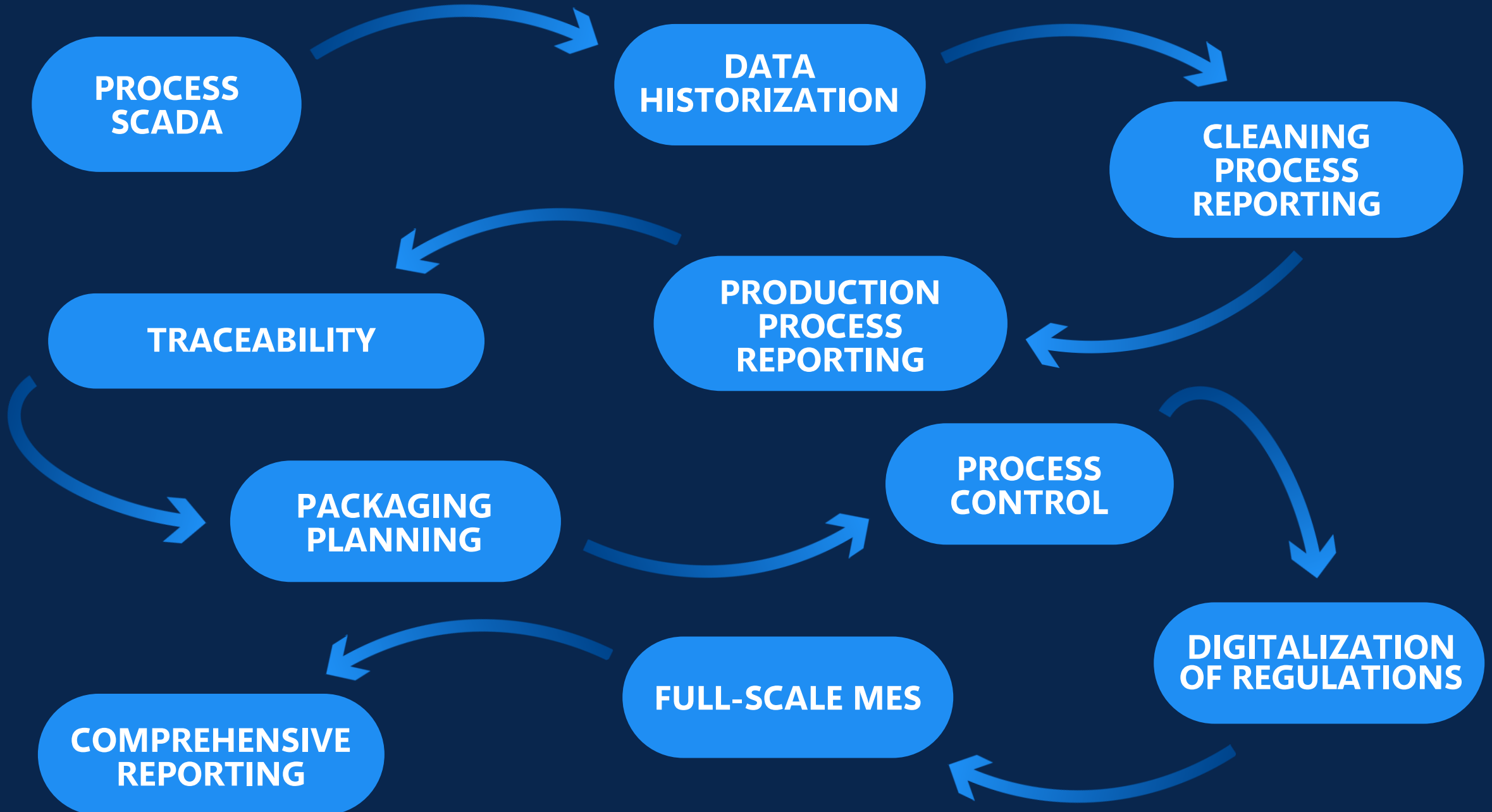
Strategy in a Nutshell

The importance of Digital Transformation Roadmap

- Success of an IT system is achieved **over time**.
- The key is to plan a **digital transformation roadmap**.



Bakoma's Digital Transformation Roadmap



Key Milestones in the Digitalization Journey

SCADA – CIP Process History

- Real-time monitoring and historical tracking of the **Cleaning in Place** (CIP) process.

MES in Production

- Extended capabilities enabling production tracking and **ERP integration**.
- Automated reporting, **eliminating manual documentation**.

Structuring & Expansion

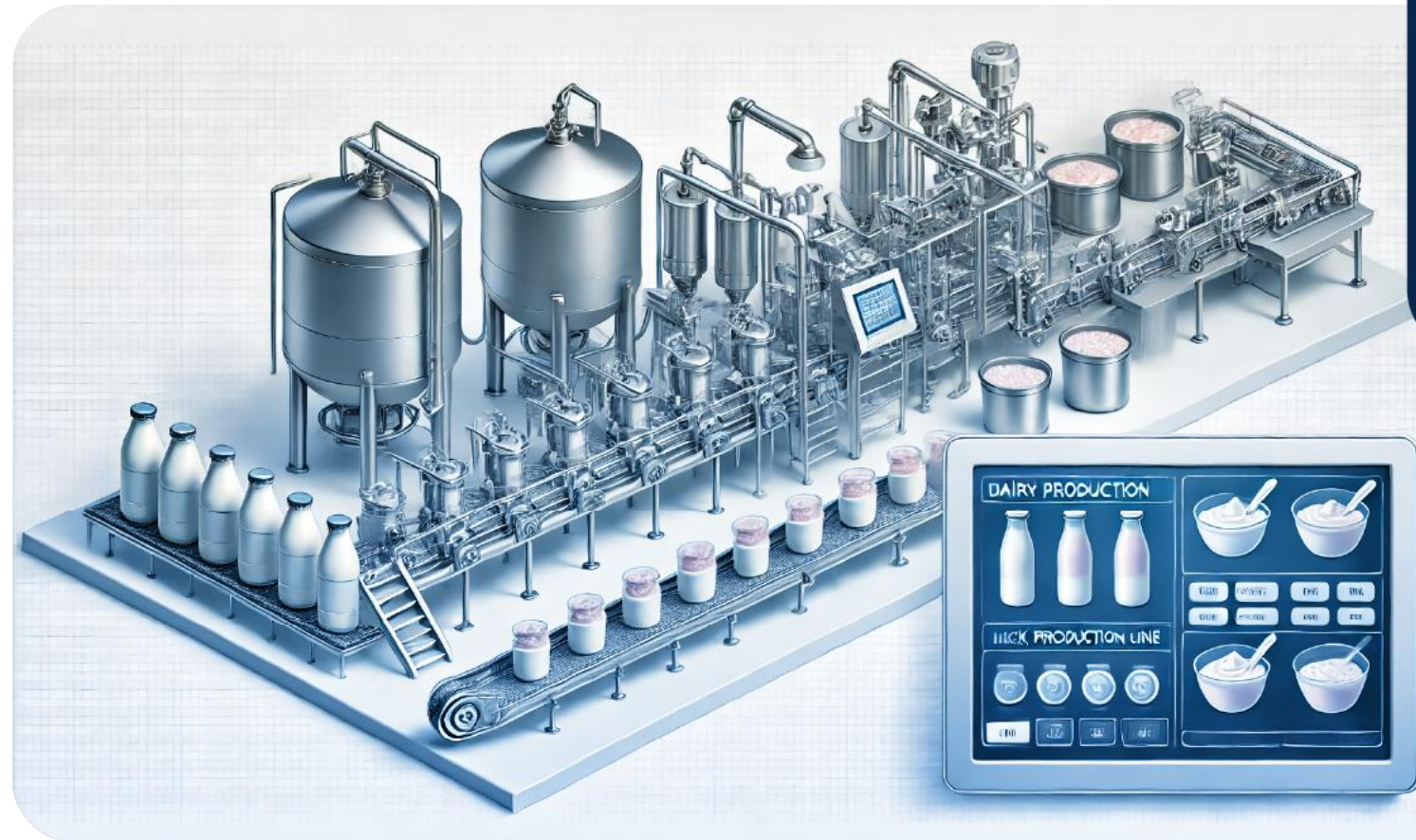
- Gradual digitalization of additional processes, implementation of **process analytics**.
- **Full traceability** and complete data visibility.

Centralization & Future Scalability

- **Unified system architecture** with the **flexibility** to expand and integrate new modules.

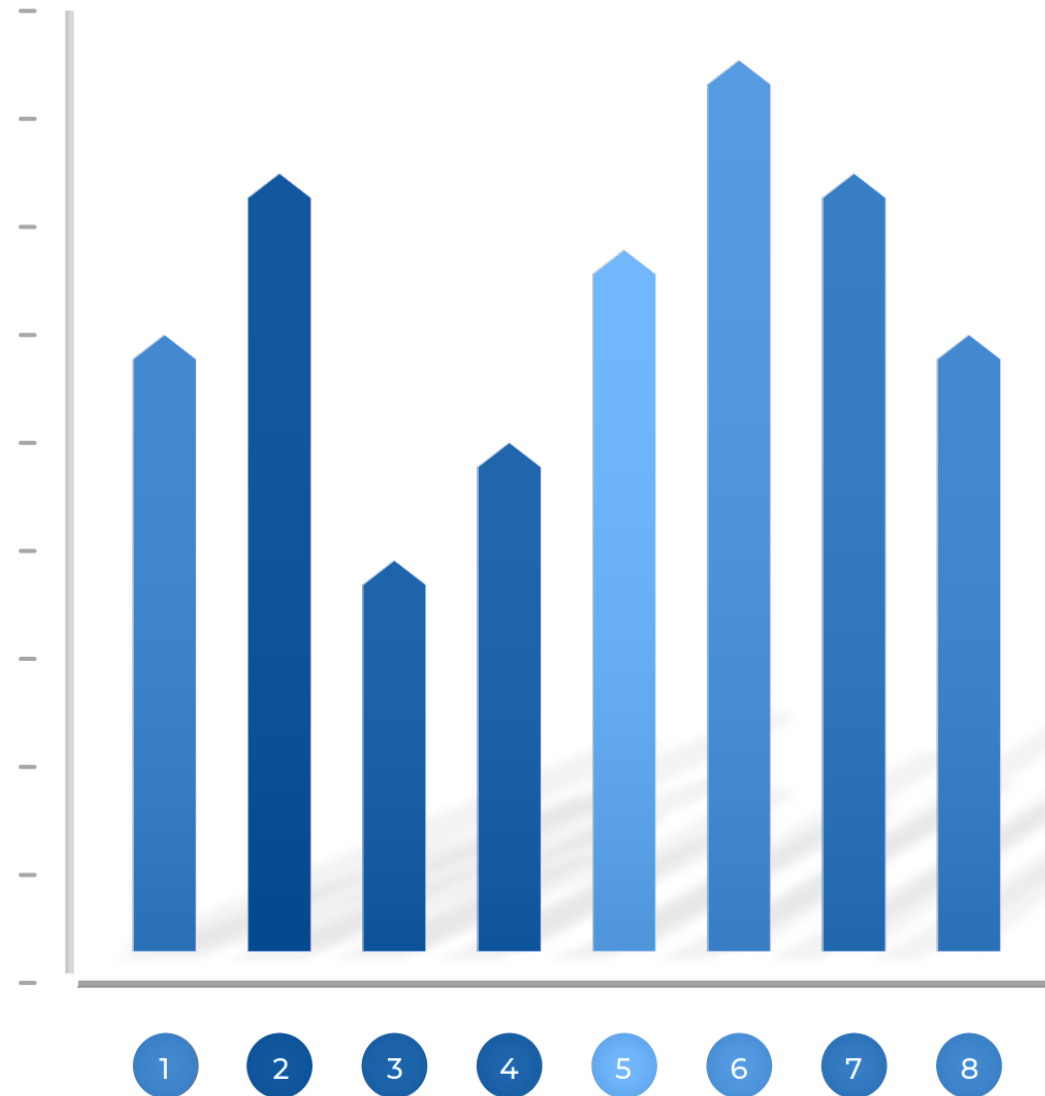
Digital Strategy Enables AVEVA Growth

- Documentation
- Identification
- Remote maintenance
- Safety improvement
- Production supervision
- Other systems migrations



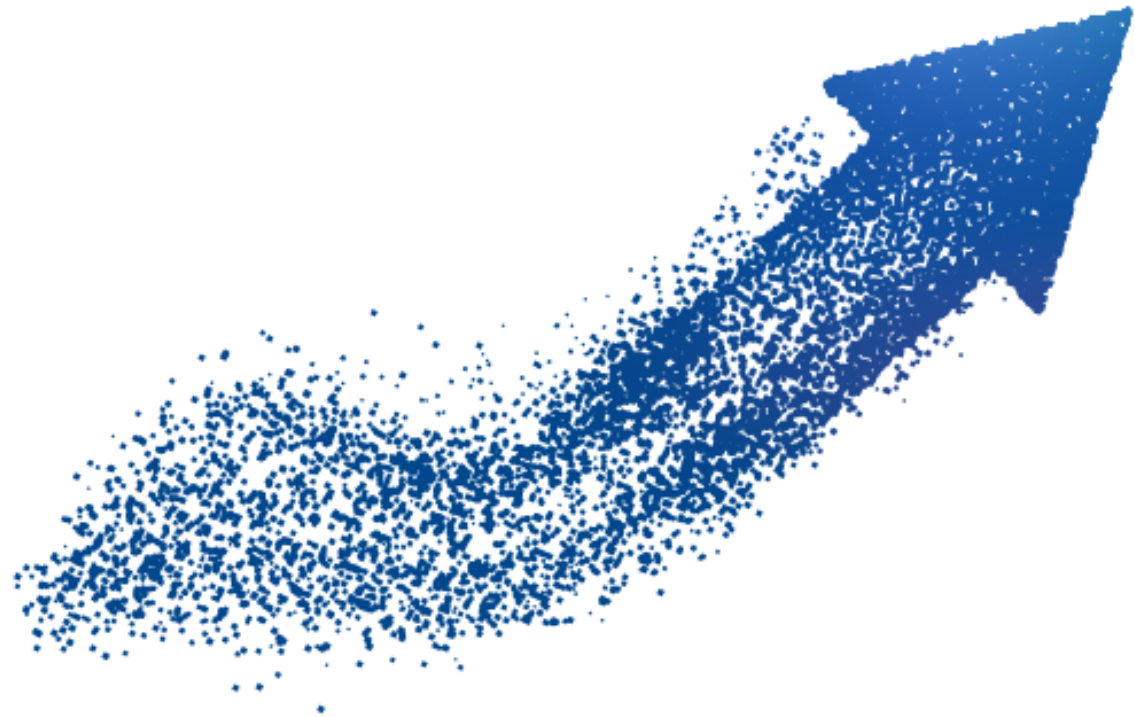
Investments in new equipment and technologies

Investments in New Equipment and Processes Enabled the AVEVA Platform to Support Production Growth and Product Diversification

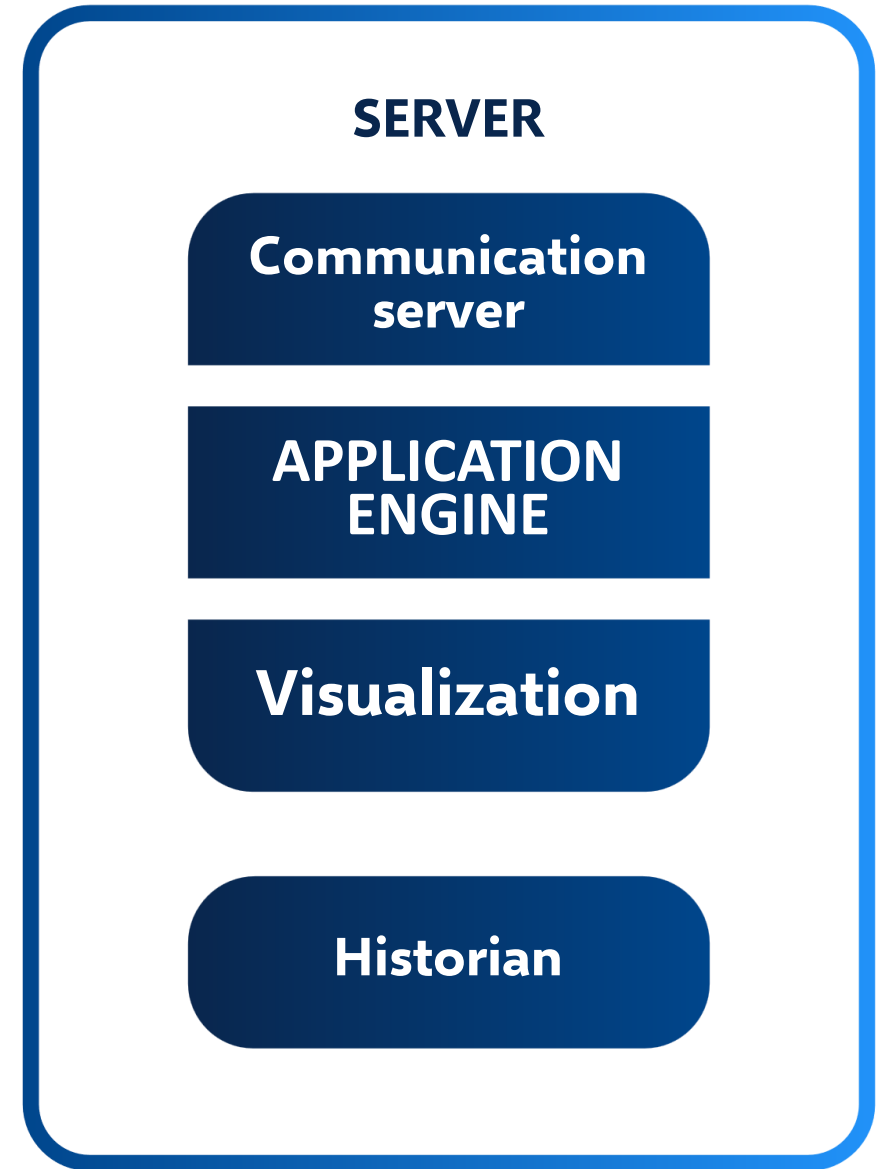


Development of the Bakoma plant

Increase in capacity and
infrastructure expansion.

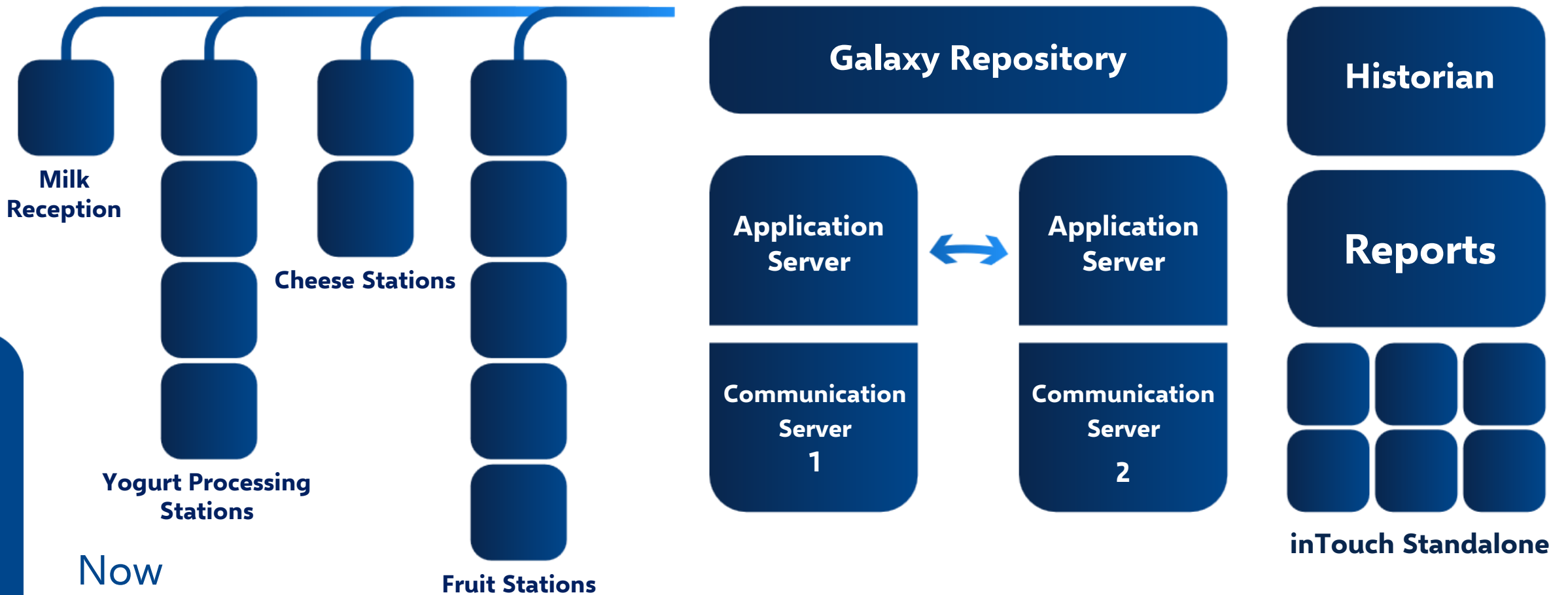


Visualization of the system's server and communication structure



Before

Visualization of the system's server and communication structure



What Does the AVEVA System Actually Do?

Process monitoring



CIP Monitoring



**Sterilization
Monitoring**

The role of the MES system in order distribution for the semi-finished and finished products creation.

From raw material to packed product...

Data Management



Integration of different SCADA systems

Standardization of systems.



Standardization in the AVEVA system

Simplification of operator work.

Automatization of data flow.



Identification of the production process

From raw milk to finished product.



Automated documentation of production processes

Quick problem identification.



Impact on the development of AVEVA

Optimization of technological processes.



Reporting and production accounting

Automation of reports and documentation.



Why People Need the Right Tools?

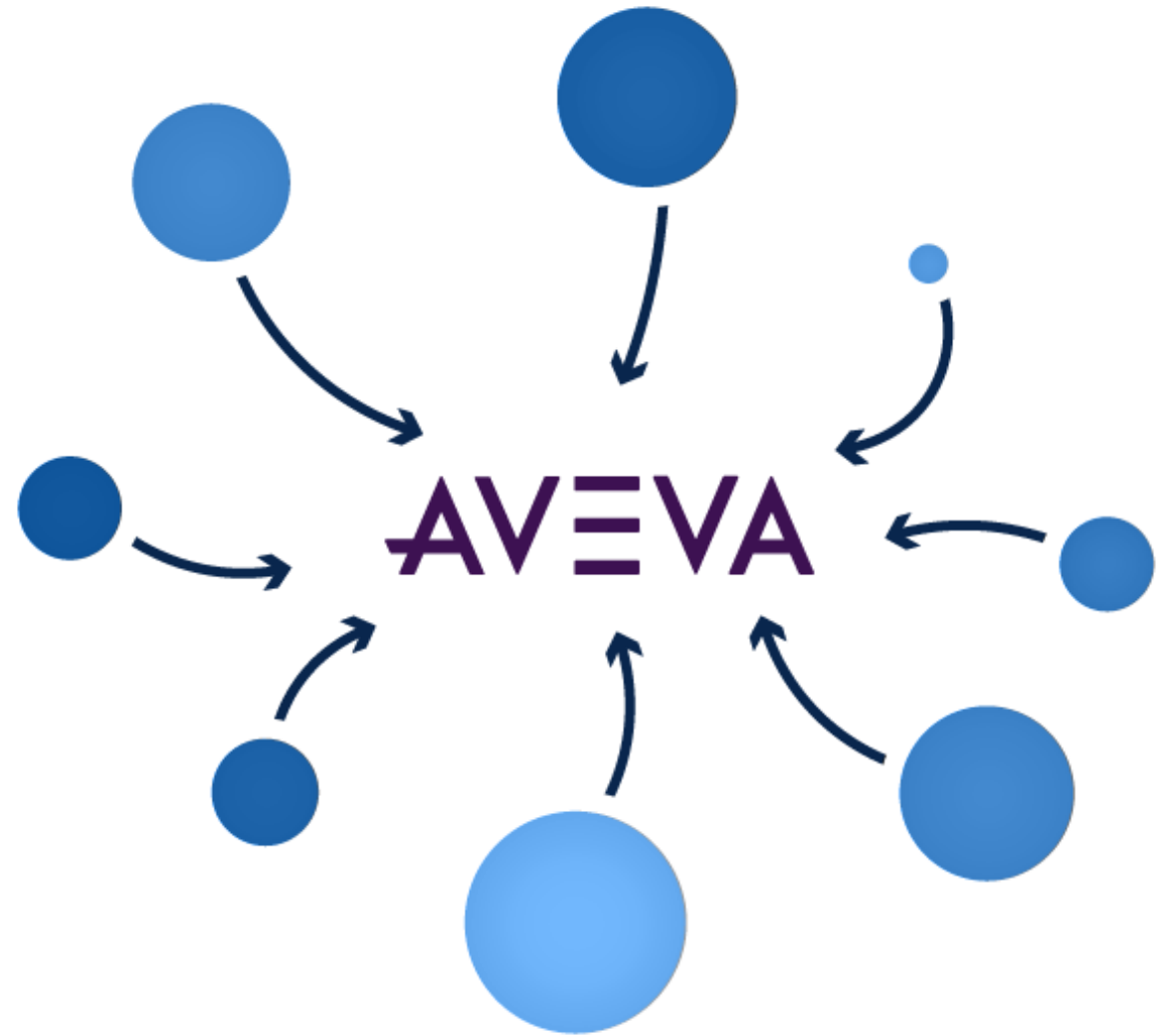
Centralization of production monitoring systems

One screen = full visibility – no more switching between stations

Faster diagnostics – spot problems immediately across the whole line

Less walking, more reacting – access data from one centralized terminal

Simplified UI – standardized interface means no retraining on each machine



Data-driven organizational culture

Centralized alarms – see where issues are before someone calls

Remote monitoring – intervene without being physically present

Prevent downtime – access to historical and live data in one place



Real-Time Insights for Better Decision-Making

Better coordination – view all production statuses in real-time

Data-driven decisions – no need to wait for reports or manual logs

Track delays and stoppages instantly, not hours later

Easier reporting – auto-generated summaries from a single source



The Role of Change Management

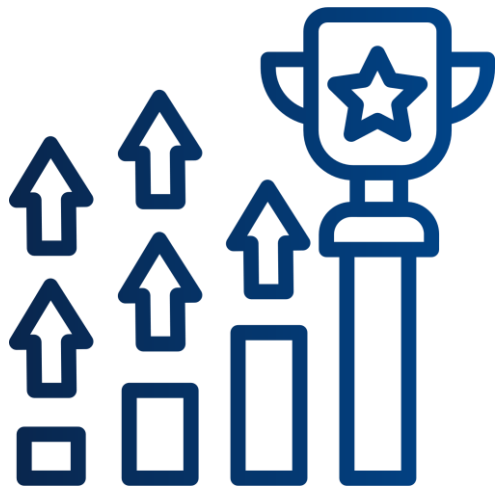
- Successful transformation is **20% technology, 80% people**
- **Clear communication** between IT, production, and management
- **Training & onboarding** are key for adoption of new tools like AVEVA
- Involve operators and team leaders **early in the process** to build ownership
- **Step-by-step implementation** reduces resistance and supports learning
- Documented workflows help **bridge old habits** with new systems
- Continuous **feedback loop**: listen to users and adjust



Summary

Summary

What It Takes to Scale IT Systems with Strategy and Success?



- Deep understanding of **manufacturing technologies**.
- Knowledge of **communication** protocols between machines and IT systems.
- Experience with facility project **planning** and coordination.
- Mastery in **programming** and automation logic.
- Expertise in **industrial network** infrastructure.
- Ability to develop and execute **test scenarios**.
- Familiarity with **software testing** methodologies.
- Skills in preparing **technical documentation** and client agreements.
- Competence in **post-project analysis** and reporting.
- Strong **communication skills** and alignment with client expectations.

What We've Learned?

DO:

- **Involve production teams early** — they know the process best.
- Build a clear **digitalization roadmap** before touching any technology.
- Choose **scalable solutions** that grow with the business.
- **Standardize your systems** across lines and sites to simplify operations.
- Start with **critical processes**, then expand in stages (SCADA → MES → analytics).

DON'T:

- Don't treat IT as a one-time project — it's an **ongoing process**.
- Don't underestimate the effort needed for **change management**.
- Don't rely on paper-based or manual systems when **digital options** exist.
- Don't isolate IT decisions from **business strategy**.
- Don't assume software alone will solve problems — **process understanding is key**.

Future plans with the AVEVA Platform

Bakoma will continue its development and collaboration with Explitia and AVEVA.



The Success of an IT Project Depends on the Synergy of Three Key Partners

1

The client – an expert in manufacturing processes and their work

Bakoma

2

Solution provider

AVEVA

3

An experienced integrator
who bridges these worlds

explitia

Bakoma increases traceability and production control through AVEVA system standardization

Challenge

- Manual documentation and siloed production data limited visibility
- Lack of standardization across production lines hindered growth
- Need for better traceability, process control, and reporting

Solution

- Implemented AVEVA™ System Platform and AVEVA™ Historian to centralize SCADA/MES operations
- Integrated various production stages with a unified AVEVA-based architecture
- Enabled live data monitoring, digital reporting, and seamless order tracking

Results

- Standardized system across 15+ packaging lines
- Reduced onboarding time for new employees with clear visualizations
- Achieved full traceability from raw milk to finished product
- Enabled production process scalability and support for new product lines



Thank you for your attention!

Adrian Stelmach

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