

Achieve Industry 4.0 in Automotive

VERTICAL BRIEF



Belden solutions connect all parts of your plant—including the machines, people, processes, robots and more—to securely collect, synthesize and analyze your critical performance data and turn it into actionable insights.

The Building Blocks for a Solution



Network Resilience

Build a modern network foundation that delivers on current speed and quality expectations - and can scale for future growth ambitions.



Edge Computing

Empower people to access, analyze, and act on information near the source to solve issues faster and to reduce the amount of data transferred to the cloud.



Data Interoperability

Seamlessly convert and bring together data from various sources, formats, protocols and sites to power applications and analytics, so you can make better business decisions.

Explore How Belden Can Improve Customer Outcomes



Worker and Machine Productivity

Problem:

- Micro-stops
- Scrap/waste due to parameter issues
- Lower OEE (Overall Equipment Effectiveness)

Solution:

- Collect sensor and PLC data from critical machines
- Enable workflow visualization by connecting critical machines and sending machine data through a robust OT network
- Make data available to operators and managers on-demand



Problem:

- Downtime due to asset and equipment failure
- Aging equipment
- Limited maintenance resources

Asset Monitoring

Solution:

- Collect sensor and PLC data from critical machines
- Run advanced analytics to detect anomalies and predict and prevent equipment failure at the edge
- Standardize and streamline equipment maintenance

Belden Addresses Automotive Challenges

- Recovers lost productive equipment time due to cybersecurity attacks, network traffic surges and other interruptions
- Shortens data transfer times, minimizes data processing costs and enables real-time analytics
- Eliminates data silos due to legacy equipment and machines locked in proprietary protocols

The Pathway to Digitization

For maximum efficiency and value, Belden has mapped out four major steps that are crucial to your plant's digital transformation

Step 1: Digitize Assets

Add sensors to your plant assets to collect critical data such as pressure, temperature, flow, object count, etc.



Step 2: Build a Resilient Data Pipeline

Establish a secure and reliable IT/OT network to connect islands of automation and ingest real-time production data from all areas in the plant.



Step 3: Implement Data Operations

Translate previously incompatible machine data into one common language to enable plant wide visibility.



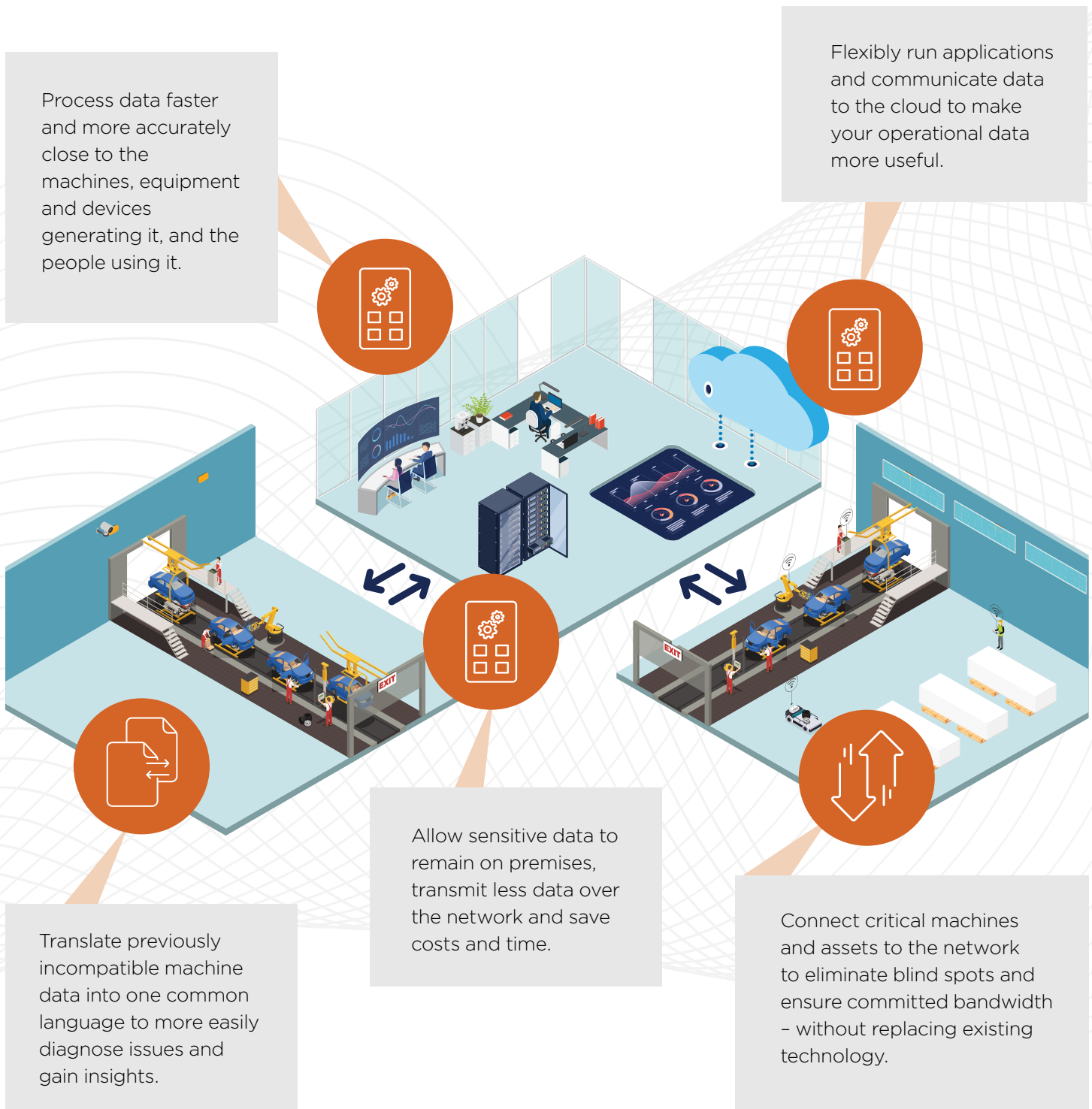
Step 4: Generate Insights

Run applications at the edge or in the cloud to visualize and showcase data to improve business operations

How Belden Can Help

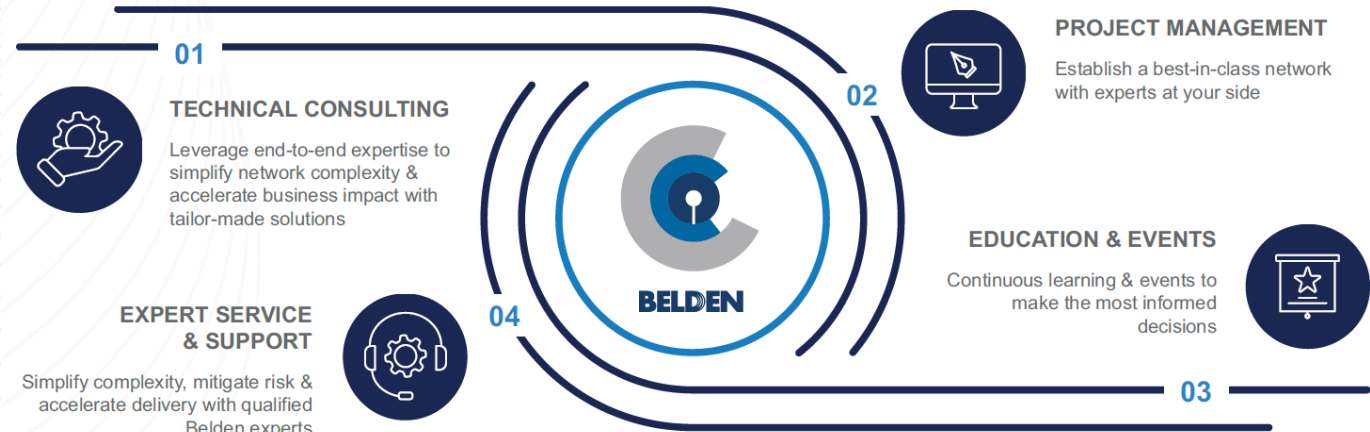
Today, the devices on your network are generating large amounts of data. Belden's capabilities provide a robust and scalable network solution that ensures your data is transmitted securely and seamlessly, regardless of the protocols or vendors you work with.

Get in touch with Belden's experts at belden.com/ias-capabilities to make Industry 4.0 a reality at your facility.



Global Customer Innovation Centers

Belden’s Customer Innovation Centers (CICs) serve your needs throughout the solution development lifecycle. These hubs — strategically located to serve regions throughout the world — offer access to best-in-class capabilities, including the opportunity to run proof of concepts (PoCs) in our validation lab.



Experts at Your Side

Designing the right solution for your business needs is not an easy task, so Belden provides direct access to our experts.

Solution Architect



- Deep technical knowledge of network architectures
- Develop, design, and validate best solutions tailored to the complexity of each customer’s unique business challenge

Digital Automation Consultant



- Industry expertise with deep networking know-how
- Lead process, workflows, and data assessments to identify digital transformation opportunities and calculate potential value of network solutions for the customer

Solution Consultant



- Deep technical knowledge of applications and industries
- Guide the customer in their digital transformation journey, conducting industrial network audits and positioning the ideal solutions

Service Engineer



- Deep technical knowledge of products and technologies
- Conduct trainings, test and commission networks
- Lead network assessments and deliver high quality pre-sales and post-sales technical support



About Belden

Belden Inc. delivers the infrastructure that makes the digital journey simpler, smarter and secure. We're moving beyond connectivity, from what we make to what we make possible through a performance-driven portfolio, forward-thinking expertise and purpose-built solutions. With a legacy of quality and reliability spanning 120-plus years, we have a strong foundation to continue building the future. We are headquartered in St. Louis and have manufacturing capabilities in North America, Europe, Asia, and Africa.. For more information, visit us at www.belden.com follow us on [Facebook](#), [LinkedIn](#) and [X/Twitter](#).

Learn More

Visit belden.com/ias-capabilities for additional information on Belden solutions and to contact our experts.