BC Automation Progressive Modernization for Legacy Industrial Systems Tech Primer - 07/04/25

You don't have to rip and replace to modernize. BC Automation delivers a secure, phased path to upgrade legacy SCADA, PLC, DCS, and MES systems — without disrupting operations. By analyzing data pathways, structuring telemetry with SPA™, and deploying edge-native AI with MetaLoop and SDA™, we help manufacturers transition confidently to Industry 5.0 while minimizing cybersecurity exposure during the transition.

PROBLEM: Legacy systems are vulnerable, opaque, and misaligned.

- · Uncontrolled telemetry creates security risks and blind spots
- Data leaks, vendor access, and missing metadata undermine trust and compliance
- IO mapping, resolution loss, and poor configuration limit operational insight
- Rip-and-replace proposals often stall due to cost, downtime, and risk

SOLUTION: Modernization through structured insight and modular intelligence.

- Conduct OT Penetration Testing to expose gaps in data flow and architecture
- Apply SPA[™] to secure, structure, and validate telemetry at the source
- Correct misaligned IO and buffer points with Fractional Historization
- Layer in MetaLoop to augment control logic with adaptive tuning and diagnostics
- Deploy SDA[™] to establish secure, decentralized edge autonomy — at your pace

OUR IMPACT: Preserve what works. Fortify what doesn't. Build toward the future.

- · Reduce risk without halting operations
- Restore trust in data and control reliability
- · Enable secure, edge-driven AI with full operator context
- Improve uptime, reduce manual intervention, and boost modernization ROI
- Establish a scalable path to Industry 5.0 on your terms





"A huge asset to any company looking to improve their cost and reliability." Chris Whitehair SVP Global Operations at SunOpta

"[BC Automation's] solutions are most thorough and comprehensive." Ned Miterius Founder & St Consultant at Periscope Consulting

Let's Transform Your Manufacturing Together.





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