

Bridging the Gap: Modernizing Legacy Systems Without Disrupting Production



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For manufacturing leaders, legacy systems are both an asset and a challenge. These systems have kept operations running for decades, yet staying competitive means embracing cloud computing and IoT. The problem? Full system replacements come with high costs, production risks, and downtime. All unacceptable terms in a fast-moving industry.

Fortunately, manufacturers don't need a total overhaul to gain modern capabilities. A strategic integration approach allows legacy infrastructure to work with cloud-based analytics, IoT-driven insights, and predictive maintenance, optimizing operations while maintaining reliability.

Where Legacy Systems Hold You Back

Outdated technology creates bottlenecks in areas like:

- Operational efficiency: Limited ability to scale and adjust workflows dynamically. IT downtime costs \$5,600/minute on average [Gartner].
- Real-time decision making: Minimal data insights, leading to reactive instead of proactive strategies.
- Cybersecurity: Aging systems increase vulnerabilities, especially as digital threats evolve. System intrusion accounts for 48% of all manufacturing breaches, followed by social engineering with 20% and miscellaneous errors with 18% [2024 Data Breach Investigations Report | Verizon].
- Enhancing ESG Initiatives: Cybersecurity integrates seamlessly into corporate responsibility goals. Organizations can gain a market edge by meeting and exceeding regulatory standards. A proactive cybersecurity approach not only shows ethical and sustainable responsibility but is essential to its clients' governance strategies, aligning with stakeholder expectations.
- Interoperability: Difficulty connecting machinery with modern software and smart factory applications.

Strategic Integration: The Smart Approach

Manufacturers need cost-effective, low-risk solutions that drive progress without disrupting production. Decision makers can modernize operations while preserving legacy systems through these practical steps:

- **1. Adopt Edge Computing:** Edge processing ensures real-time data analysis without overwhelming aging infrastructure. It allows IoT devices to process information locally before syncing with cloud-based applications.
- **2. Leverage Cloud Gateways:** Cloud gateways act as bridges between legacy machines and modern platforms, ensuring compatibility without costly replacements.
- **3. Enhance Predictive Maintenance:** IoT sensors and cloud-based analytics can reduce downtime by identifying potential failures before they happen.
- **4. Improve Cybersecurity Measures:** As systems become more connected, cybersecurity needs to evolve. Upgrading network protection, access controls, and compliance standards ensures legacy infrastructure remains secure.
- **5. Implement Gradual Digital Transformation:** Instead of full replacements, manufacturers should implement incremental upgrades—starting with high-impact changes like real-time monitoring and Al-driven analytics.

How Leapfrog Services Supports Manufacturing Leaders

At Leapfrog Services, we help manufacturers balance innovation with operational stability, ensuring legacy systems evolve without costly overhauls by providing full IT support. Whether it's deploying IT systems in expansive warehouses, connecting networks across streets, or ensuring seamless infrastructure spanning multiple facilities, we go wherever technology is needed to keep operations running smoothly.

With deep expertise in Industry 5.0 IT specific needs, Leapfrog helps businesses minimize downtime, improve operational efficiency, and stay ahead of industry regulations by providing:

- Tailored Modernization Strategies: We design custom integration roadmaps, aligning cloud and IoT solutions with existing infrastructure and long-term goals.
- Cloud and IoT Optimization: Our expertise ensures smooth connectivity between machines, software, and data analytics.
- Cybersecurity for Legacy Systems: We implement robust security measures and offer access to a vCSO, ensuring safeguarded operations designed for manufacturing environments.
- Continuous Support and Future-Proofing: Manufacturing never stops, and neither do we. Our long-term strategy and extraordinary support ensure ongoing optimization.
- Transparent Pricing: We provide clear, straightforward cost structures to help you budget.
- **Human-Centric Technology Approach:** We equip workers with the training and tools to seamlessly integrate new technologies into their roles.

When partnering with Leapfrog, we can strategically integrate cloud and IoT, helping your operation to improve efficiency, security, and adaptability, with minimal disruption to production.

Partner with an IT provider that knows manufacturing inside and out, so you can focus on what matters – building, creating, and delivering excellence. Leapfrog proudly supports:





Leapfrog offers outsourced managed IT and cybersecurity services that fit easily into your business model. With over 25 years of MSP, MSSP, and CyberRisk Management experience, we help a broad array of companies simplify their IT operations while improving their security and resiliency. Our services are scalable, aligned, and built on a proven methodology, and our culture (we call it "Frogma") is built on Integrity, Service, and People so you get personalized, best-in-class support.

say they will continue to partner with Leapfrog for the next 12 months

are happy with our after-hours support

say Leapfrog is more effective than their

have confidence in Leapfrog security

Let's discuss how Leapfrog Services can help your operation modernize for the future. Please call 866-260-9478 or contact us at sales@leapfrogservices.com.



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