



Optimising Manufacturing Operations

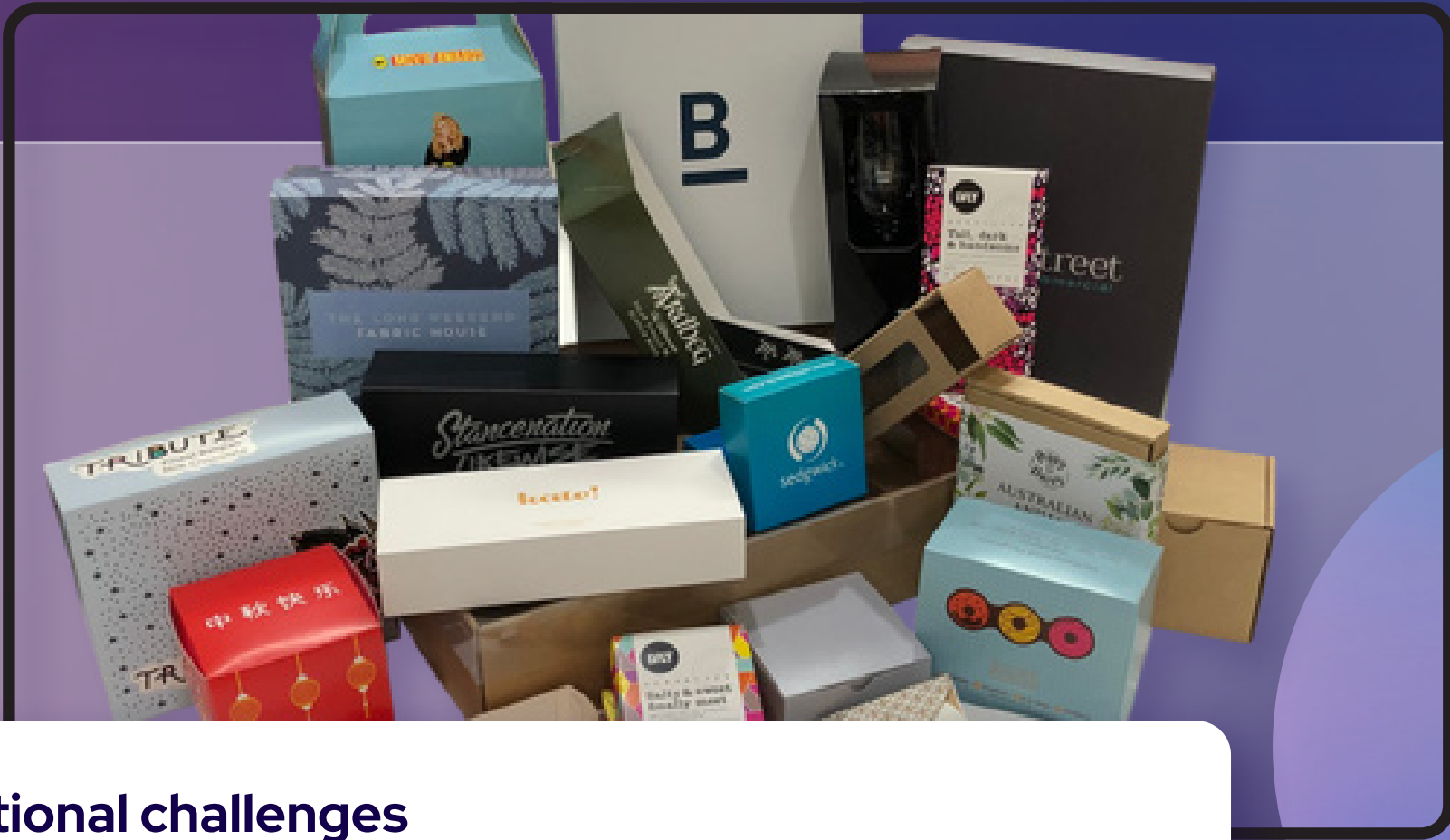
Customer Success Story:
The Packaging Place

Customer Problem

The Packaging Place, a leading provider of packaging solutions, faced a critical challenge in optimising their manufacturing operations. Like many companies in their industry, they were grappling with disparate legacy operational control systems that provided basic management and reporting functionality, making it impossible to gain a holistic view of their processes. To add to this some of the machines control systems were “locked down” while others had little to no control system at all. This fragmentation led to a loss of efficiency and suboptimal operating outcomes.

The Packaging Place needed a solution that could:

- Provide real-time visibility into machine performance, including throughput, uptime, and efficiency.
- Track energy usage patterns by machine across the facility and forecast expected costs.
- Consolidate data from multiple machines into a single, unified view for better decision-making.



Additional challenges

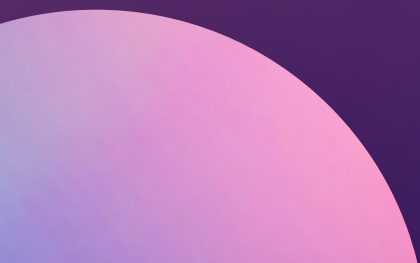
As The Packaging Place's custom packaging products are in high demand, the solution proposed needed to achieve these improvements without significant disruption to production activities.



CapitalAI Solution

The CapitalAI team consulted with the client to understand the important monitoring and control requirements and reportable metrics and implementation options:

- **Seamless Data Acquisition:** Additional micro-PLCs and sensors were installed to compliment the current PLC's on three critical machines at the facility. An Ewon industrial gateway was deployed to securely and reliably pass the data between the machines and the NexAI platform enabling real-time data collection.
- **Real-time Monitoring and Dashboards:** Data collected by the NexAI platform was transformed into insightful visualisations for Overall Equipment Effectiveness (OEE) and Energy Consumption, providing a real-time view of KPI's such as:
 - Manufactured Throughput
 - Uptime and Downtime
 - Effectiveness and Performance
 - Energy Consumption and Cost



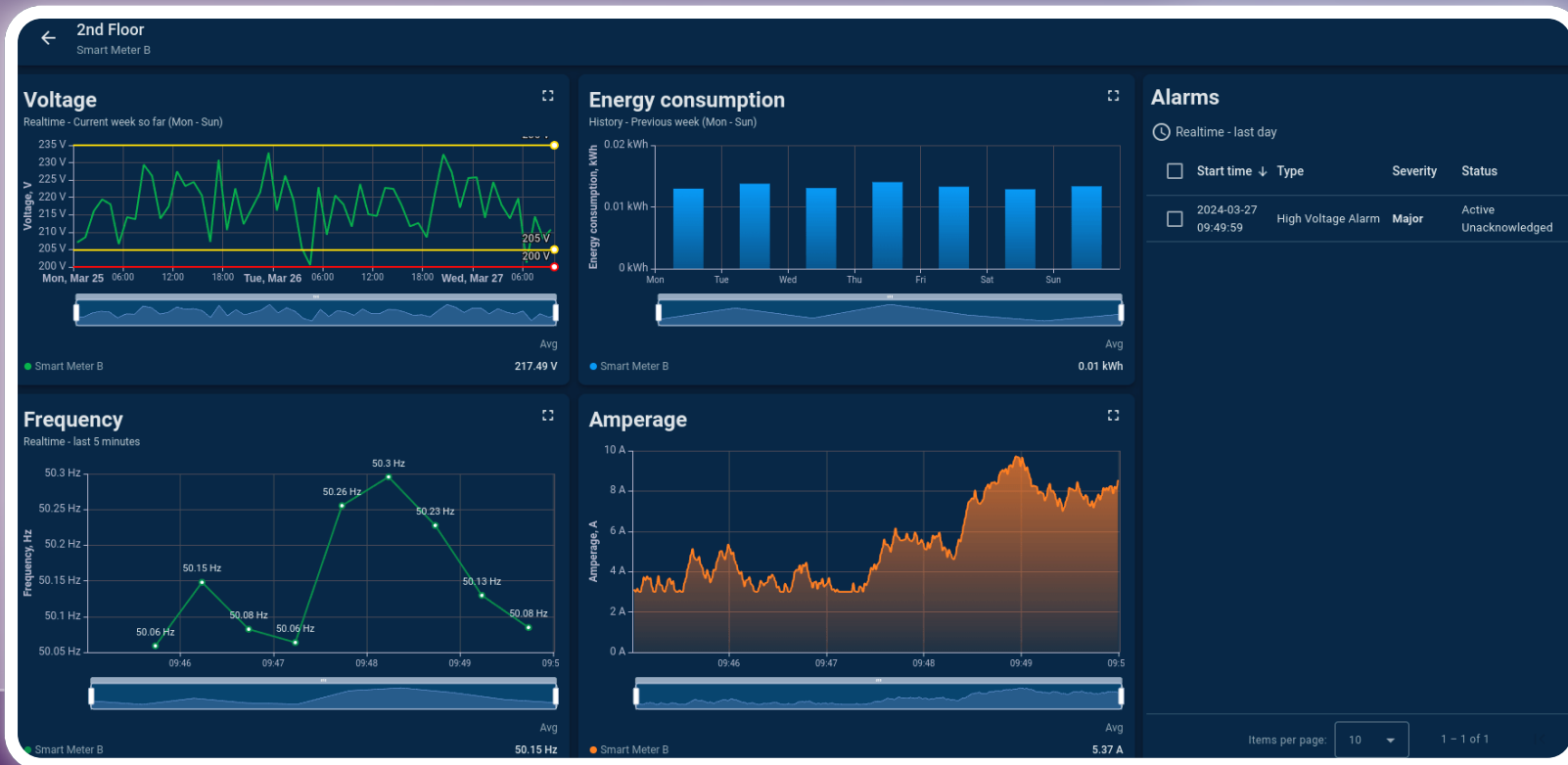
Solution Components



Non-Intrusive Integration with Existing Systems: A key advantage of the NexAI solution was its ability to integrate with The Packaging Place's existing legacy systems, PLC's and sensors without requiring a disruptive and expensive system overhaul. This non-intrusive approach allowed The Packaging Place to maximise their return on investment while minimising disruption to their ongoing operations.

Dynamic Dashboards


NexAI has numerous pre-built dynamic dashboards and widgets ready to deploy for all of your telemetry data, reducing the time to value, cost of solution and providing an incredible Return on Investment (ROI).





Outcome

The implementation of the NexAI platform, in conjunction with the additional micro-PLC's sensors and Ewon gateway, yielded impressive results for The Packaging Place.

- **Enhanced Visibility and Decision-Making:** NexAI's unified dashboards transformed how The Packaging Place viewed and managed its manufacturing operations. Having real-time insights into key performance indicators across all critical machines enabled data-driven decision-making at all levels of the organisation.
 - **Improved Operational Efficiency and OEE:** NexAI's real-time monitoring and data analysis empowered The Packaging Place to identify and address operational bottlenecks, optimise machine performance, and streamline its manufacturing processes. These improvements led to a noticeable increase in Overall Equipment Effectiveness (OEE).
 - **Cost Savings through Energy Optimisation:** By better understanding energy consumption, Packaging Place was able to schedule manufacturing activities around the most effective energy tariffs, reducing operational expenses.
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