



Data-Driven Operational Excellence for the World’s Largest Renewable Manufacturer

Azure powered cloud solution and Power BI visualizations improve overall equipment effectiveness (OEE) – boost uptime, cut costs and energy consumption

Founded 100 years ago, our client is one of the world's largest producers of renewable products. With North American roots and a global vision, they drive the demand for green building materials. They produce lumber, pulp, and paper from sustainably managed forests at more than 50 facilities in Canada, the United States, and Europe.

Challenges

When real-time visibility into plant operations became a challenge for one of the world’s largest integrated forest products producers, they knew it was time to imagine and realize a change and be the factory of the future.

- Lack of real-time visibility across systems delayed downtime resolutions by plant teams
- Limited historical insights restricted proactive maintenance and efficiency decisions
- Manual configuration across production units caused inconsistencies and slowed operational response

Collaboration

With strong experience in Industry 4.0 technologies and a specialized Microsoft partner in Data & AI within the manufacturing industry, the client chose Xoriant as its technology partner. We teamed up with the client's engineering and leadership team to understand, design and orchestrate a solution that empowered their physical and digital worlds seamlessly using Azure Platform.

Designed

A scalable, cloud-based data ingress solution for diverse machine and system data

Implemented

Data ingestion for equipment & machine utilization, quantity, quality metrics to unify operational & SaaS sources

Deployed

A Power BI web app for real-time and historical plant performance views

Built

A digital twin model to mirror physical assets for remote monitoring

Enabled

Data processing, validation, integration transformation, enrichment through business rules and logic

Engineered

An admin tool using Power App to configure and integrate new production units, machines and thresholds easily

Business Value

>

Improved

Uptime from 65% to 85% and optimized OEE with continuous monitoring & alerts, achieved by deploying the solution across multiple facilities

>


Projected

Substantial annual cost savings of up to half a million dollars using real time, robust monitoring and alerting

>


Realized

Sustainability efforts with forecasted 17% lower energy use with configurable production unit controls that improved response times

Microsoft
Solutions Partner

Data & AI
Azure

Specialist
Analytics
AI Platform on Microsoft Azure

Microsoft
Solutions Partner

Digital & App Innovation
Azure

Specialist
AI Platform on Microsoft Azure

Technology Stack

Azure Cloud Services | Azure DevOps | Power BI | .NET Core | Angular
Redis Cache | Synapse | Azure Monitor | Key Vault | Power BI

Xoriant provides advanced technology solutions and software development services for global banks, software product companies and F500 market leaders. Based in the U.S. with 18 global offices and 5000+ engineering professionals, Xoriant demonstrates exceptional experience in banking and finance infrastructure modernization and cloud migration. We deliver expert digital engineering, as well as offsite and offshore services, across high tech, healthcare, pharma, industrial manufacturing, telecom, and automotive sectors. Customers credit technological innovation and delivery excellence for our shared success over three decades.