

## Transforming Ingredient Manufacturing with Intelligent, Data-Driven Operations

### From Legacy complexity to Confident Control



Grain processors, food and drink ingredient manufacturers, and fermentation supply-chain businesses operate in some of the most complex and margin-sensitive environments in industry today. Managing variability in raw materials, yields, recipes, by-products, and regulatory requirements demands absolute accuracy and real-time visibility.

Yet many organisations remain constrained by **legacy systems that cannot support this complexity**. Spreadsheets, disconnected production tools, and outdated ERP platforms result in **inaccurate Bills of Materials**, limited traceability, and a lack of confidence in operational and financial data.

## Challenges faced



### Innaccurate Bills of Materials

Legacy systems struggle to model real-world production scenarios such as variable yields, co-products, losses, rework, and recipe changes. This leads to unreliable BoMs, inaccurate product costing, and uncertainty in margins directly impacting pricing and profitability.



### Lack of Real-Time Data and Insight

Operational and financial data is often delayed, duplicated, or manually reconciled. Without accurate, real-time visibility into production, inventory, and costs, decision-making becomes reactive rather than strategic.



### Rising Costs and Margin Pressure

Inefficient processes, manual intervention, and poor cost visibility drives unnecessary waste and overheads. In industries where margins are tight, even small inaccuracies can have significant financial impact.



### End- to-End Inefficiencies

Disconnected systems across procurement, production, quality, inventory, finance, and logistics introduce delays, errors, and risk. This makes it difficult to scale operations meet compliance requirements, or support future growth.

To compete effectively, organisations need more than system upgrades, they need **operational and business transformation**, underpinned by accurate data and intelligent automation.

## What our solution offers:

- **Accurate, Dynamic Bills of Materials**

Support for real-world manufacturing: variable yields, co-products, waste, rework, and recipe evolution. This ensures accurate product costing, margin transparency, and confidence in financial data.

- **Integrated Manufacturing & Inventory Management**

Production, inventory, procurement, and finance operate from a single source of truth, eliminating reconciliation, reducing errors, and improving operational flow.

- **Real-Time Data & Analytics**

Live dashboards and reporting provide visibility into production performance, inventory positions, costs, and margins, enabling faster, better-informed decisions across operations and leadership.

- **Process Automation**

Routine activities such as material consumption, postings, reconciliations, compliance documentation, and reporting are automated, reducing manual effort and operational cost.

Built on **Microsoft Dynamics 365 Business Central**, with integrated data, analytics, and AI services, the solution provides the control, accuracy, and insight required to manage complex ingredient and fermentation operations at scale.

## Transformation Outcomes

Organisations adopting this approach achieve clear cost transparency, sharper pricing decisions, and stronger margin control through trusted product costings and real-time insight. Reduced waste, rework, and manual effort accelerate reporting and decision-making, creating a scalable digital foundation that enables sustainable growth and rapid response to market change.

## AI Capabilities:

- **Predictive Forecasting & Early Insight**

AI-driven analytics anticipate trends, risks, and performance issues before they materialise enabling proactive decision-making rather than reactive response.

- **Cost & Yield Optimisation** Advanced models analyse cost drivers and yield performance to identify optimisation opportunities, improve margins, and support more accurate financial planning.

- **Anomaly Detection & Continuous Improvement** Intelligent monitoring flags deviations in real time, allowing teams to address issues early and continuously refine operations through data-led insight.



**We partner with ingredient and fermentation manufacturers to deliver end-to-end business transformation, replacing fragmented legacy landscapes with intelligent, industry-ready platforms. Get in touch to start your journey.**