The Hidden Risk of Integrating Around Native ERP Functionality

Why duplicating core ERP capabilities (like Production) creates long-term operational and financial risk

Industry: All
Primary Persona: CEO, CFO, VP of Operations
Sales Stage: Discovery / Pre-Demo

Many organizations implementing ERP systems consider integrating external solutions for functions the ERP already provides—such as production, planning, or scheduling.

While this may appear to accelerate implementation or preserve familiar processes, it often introduces significant long-term risk.

The reality:

Integrating around native ERP functionality frequently leads to fragmented operations, unreliable financials, and increased total cost of ownership.

Leading organizations take a different approach:

They adopt a "native-first" strategy, integrating only where there is a clear, strategic gap—not to replicate core ERP capabilities.

Where the Risk Begins

When core functions like production exist in both the ERP and an external system, the organization unintentionally creates:

Two Systems of Record

- Production activity tracked outside the ERP
- Financials, costing, and inventory managed inside the ERP

This creates a structural misalignment that is difficult—and often impossible—to fully reconcile.

Key Business Risks

1. Loss of Data Integrity

- Production orders, inventory, and completion status fall out of sync
- Planning decisions are based on incomplete or outdated information

Impact: Reduced confidence in system data and increased manual intervention

2. Financial Inaccuracy

- ERP owns costing, WIP, and financial reporting
- External systems drive operational activity

Impact:

- Inaccurate job costing
- Distorted margins
- Unreliable financial reporting

For CFOs, this is often the most critical failure point.

3. Operational Fragmentation

- Teams operate across multiple systems
- Shop floor, planning, and finance are not aligned

Impact: Lower productivity, increased training burden, and reduced adoption

4. Increased Complexity & Cost

- Ongoing integration maintenance

- API failures and synchronization issues
- Additional testing during upgrades

Impact: Higher total cost of ownership and dependency on technical resources

5. Limited Ability to Evolve

- ERP enhancements cannot be fully utilized
- Organization becomes locked into legacy processes

Impact: Reduced agility and missed opportunities for improvement

Why This Happens

In most cases, integration decisions are driven by:

- Familiarity with legacy systems
- Misunderstanding of ERP capabilities
- Desire to minimize change in the short term

However, these decisions often **transfer short-term comfort into long-term complexity**.

Recommended Approach: Native-First Strategy

Leading organizations follow a disciplined model:

1. Adopt Native ERP Capabilities First

- Fully evaluate and utilize built-in functionality
- Configure and extend where appropriate

2. Establish Clear System Ownership

For every function, define a single system of record:

- **Production:** ERP *or* external system (not both)
- **Inventory & Costing:** ERP (non-negotiable)

3. Integrate Only for Strategic Differentiation

Valid integration scenarios include:

- Advanced manufacturing execution (MES)
- Industry-specific compliance requirements
- Engineering or design systems (e.g., CAD/PLM)

4. Design Integration as a Controlled Exception

- Avoid duplicating core ERP logic
- Minimize real-time dependencies
- Ensure resilience and clear ownership

A Practical Decision Framework

Before approving any integration, executive teams should ask:

- Does the ERP already provide this capability?
- Are we avoiding native functionality due to preference or perception?
- What is the long-term cost of maintaining this integration?
- How will this impact financial accuracy and reporting?
- Will this limit our ability to adopt future ERP enhancements?

Key Takeaway

ERP success is not determined by the number of integrations—but by the discipline of how they are used.

Organizations that:

- Minimize duplication
- Maintain a single source of truth
- Align operations with financial systems

…consistently achieve stronger outcomes, faster adoption, and lower long-term cost.

Final Perspective

Integrations should **extend** the ERP—not **compete with it**.

When core functionality like production is handled outside the ERP without a clear strategic justification, the organization introduces unnecessary risk that compounds over time.