yooz

The Lean Finance Blueprint for Factories

The missing link in Lean Manufacturing

Chapter 1

The missing link in Lean Manufacturing

Manufacturing is an industry that runs on efficiency. Production on factory floors has been optimized to design, build and construct in rigorous, lean fashion.

And in production, the consequences of inefficiency are obvious: lower output, wasteful consumption of resources, lower quality products and money down the drain.

But waste is hiding off the factory floor too. Finance workflows in manufacturing carry it as well. **Paper invoices, rekeying, approvals buried in email chains, fragmented ERPs**, just to name a few.

And the consequences are as severe, if not more so, as inefficient production. On the factory floor, poor-quality products are visible and reduced unit output is obvious. But the costs of inefficient finance operations are hidden:

- Cost leakages
- Latency
- Fraud exposure
- A weak signal for working capital decisions

Precisely the areas where margins are won or lost.

On top of this, payments fraud and BEC attempts remain pervasive, so manual, opaque processes are a huge enterprise risk.

Closing this gap matters, now. Volatile input costs and supply constraints (only made more fragile through geo-political events) demand faster, cleaner P2P signals to protect margins and throughput.

Efficiency in manufacturing finance flows is essential. And there's a missing link for teams that may be struggling to get there: Lean Financial Operations™.

There's a new, Lean standard of financial operations in manufacturing.
One that makes finance fitter, faster, and flow easier.

It's made up of four core pillars:

- Waste elimination
- Increasing flow
- Continuous improvement
- Strengthening control

When you apply these pillars of Lean Financial Operations™ to manufacturing finance workflows, finance flows as seamlessly as materials. You get **lower cost per invoice, shorter cycle time, fewer exceptions/ defects, higher cash visibility and better discount capture.**

- → From **batch approval** to **distributed, low-touch flow.**
- → From **paper** and **email** to **touch less capture + guided exceptions.**
- → From **ad-hoc approvals** to **policy-routes** (role, value, risk).
- → From **rear-view reporting** to **real-time spend and cash posture.**

But how can you elevate your manufacturing finance to the new lean standard?

This blueprint brings the Lean Financial Operations™ philosophy to manufacturing companies, showing how automation in Accounts Payable (and across purchase-to-pay) can mirror the same operational excellence principles that drive manufacturing efficiency.

Chapter 2

Where financial waste hides (and how to remove it)

Waste shows up everywhere in manufacturing finance, but to tackle it properly, we need to speak its language.

In Lean Manufacturing, waste is diagnosed through 7 classical areas. When you apply the same lens to financial operations, the sources of AP and finance inefficiency become unmistakably clear:

1. **Defects:** data errors, mismatches, miscoded lines, incorrect records
2. **Over-processing:** rekeying, manual signatures, repeated checks, extra handling
3. **Waiting:** email approvals, stalled exceptions, invoices sitting in inboxes
4. **Inventory:** invoices queued up, reconciliations pending, exceptions unresolved
5. **Motion:** constant switching between ERP, Excel, email, portals
6. **Transportation:** PDFs and data moving between systems instead of captured at the source
7. **Over-production:** oversized spreadsheets, manual trackers, duplicate records

Once you see financial workflows through this lens, the sources of waste in your AP process are impossible to ignore.

→ **Paper files and spreadsheets**
Over-production and transportation

→ **Duplicate invoices**
Defects that trigger rework and late-cycle exceptions

→ **PO mismatches and tax/freight miscodes**
Classic defects, caused by over-processing and motion between systems

→ **Incorrect inventory records**
Defects that cascade into matching delays and exceptions

→ **Manual v-lookups and corrections**
Over-processing that signals upstream issues with data capture

→ **Rekeying supplier bank charger, PDF printing, and signing**
Over-processing and transportation waste with every touchpoint

In manufacturing, these wastes concentrate in a few predictable “hiding places”

Manufacturing AP is uniquely complex, making certain areas of waste even more prevalent:

Multi-line, complex invoices tied to POs with change orders, surcharges and split cost centres.

3 and 4-way matching requirements creating high exception rates when managed by email/spreadsheets.

Multi-entity/multi-ERP landscapes after acquisitions, fragmented policies, duplicate vendors, and brittle integrations.

EDI and portals that still drop PDFs for non-EDI suppliers, “the last mile” where defects creep in.

But some of the clearest signs of financial waste are also the most familiar: complex spreadsheets, sticky notes and whiteboards acting as the “real” system of record.

When AP teams rely on sprawling Excel workbooks, formula-heavy tabs and manual trackers, it’s a visible indicator that work is being managed outside the ERP and a clear signal of rework, defects and process fragility.

The same is true for email-based processes. Email is an unstructured, invisible process that creates latency, bottlenecks and a lack of accountability: invoices get forwarded into inbox black holes, approvals stall with no visibility, and responsibility stays with the sender.

These forms of manual and unstructured work directly contradict lean principles of removing waste and adding value, and they are often the biggest opportunity for Lean improvement in finance.

Waste leaves the door ajar for fraud

All these spaces where waste accumulates (manual entry, email approvals, disconnected spreadsheets, last-mile PDFs, fragmented ERPs) also create ideal conditions for fraud to slip through.

90% of companies were targeted by financial fraud in 2024, and the weighted impact of AP fraud was $103b in 2023.

With these odds, you've either found fraud in your operations or you're about to.

Fraud is widespread, expected, and increasingly sophisticated in both consumer and business contexts. Companies of every size are targeted, and fraudulent invoices often look legitimate at a glance.

Invoice validation alone is not enough. It must be paired with vendor validation, bank-detail verification, and strong security controls that close backdoors in the process. Without this discipline, even well-run manufacturing organizations leave themselves exposed to duplicate invoices, forged documents, and vendor impersonation.

The key to removing waste and fighting fraud? Automation..

- **Smart capture** normalizes any invoice/format into structured data; duplicate/forgery checks reduce defects at the door.
- **Policy-driven routing** by plant, category, risk, and value; SLA timers surface "waiting" waste.
- **Automated 3/4-way match** against PO/receipt/inspection data; exception playbooks for tax/freight/tolerance.
- **Bank-change verification + RBAC + audit trails** to shut fraud backdoors (BEC/vendor impostors).

Want to explore where waste might be hiding in your financial operations?

You can use this table to document what kind of waste your organization struggles with, then identify where and how frequently you see this waste, as well as how much it's costing you.

Waste type	Example in my process	Frequency	Cost
List your last 20 invoices and record where time or data was lost: manual entry, PO mismatch, duplciate, tax, error, etc. **Goal: Identify your top three recurring sources of waste to prioritise for automation**	Document at what point in your procure to pay process your top three recurring sources of water occur.	How may times does this occur invoice-to-invoice? Is it every time? Some of the time? Try and aim for an average.	How much time / money on average is this waster causing your company?
Waste type #1			
Waste type #2			
Waste type #3			

Chapter 3

Designing Lean Finance for factories flow

Flow is everything

On the shop floor, smooth flow means fewer delays and higher output. In finance, it means invoices, payments and data move seamlessly from purchase request to reconciliation, without piles of paper or email threads slowing things down.

What a Lean finance flow looks like:

1. Request

   A purchase requisition or order is created and approved, giving Finance early visibility of upcoming spend.

2. Capture

   AI ingests incoming invoices in any format and extracts data accurately.

3. Validate

   Vendor and PO information is checked automatically.

4. Match

   3-way (or 4-way) matching confirms everything lines up before payment.

5. Approve

   Approvals are routed instantly to the right person, with reminders built in.

6. Pay

   Digital payments are made on time, every time.

7. Report

   Every transaction is visible in real time, no surprises at month end.

This is the foundation of the new and Lean standard for financial operations: real time visibility and faster payments. When that happens, vendors are happier, discounts get better and there are fewer disruptions to production.

When looking for a financial operations automation partner to do this, it's vital that they integrate easily with your existing ERPs (like MS Dynamics, Epicor, Sage and NetSuite). That way you can build Lean flow without overhauling your systems.

A simple worksheet to help you identify processes, systems, data flows and manual touchpoints in one view, so you can see where to get more lean.

Process step	System(s) used	Who uses it?	Information flow in/out	Manual touchpoints
Invoice intake				
Validation				
Matching (3-or-4-way)				
Approval routing				
Payment				
Reconciliation & reporting				

Chapter 4

Continuous improvement with AI

It is important to recognize that many manufacturing organizations begin their AI journey from behind. Unlike high-tech or pharmaceutical sectors, traditional manufacturers have historically been slow to adopt modern finance technology. Many still invest far below recommended benchmarks, often spending a fraction of the ~3% of revenue advised for maintaining modern operational systems.

This long-term underinvestment makes finance workflows especially vulnerable to waste, exceptions and broken flow, and heightens the value of AI-driven improvement.

How AI brings Lean to manufacturing finance

Just as production lines use data to improve quality, AI continuously refines financial accuracy and efficiency. Every invoice processed teaches the system to be smarter and faster next time.

To do this, AI:

- Prevents errors before they happen by spotting anomalies.
- Learns and iterates from every transaction to reduce exceptions over time.
- Highlights bottlenecks in approvals so you can keep flow steady.
- Flags suspicious activity to stop fraud before it costs you.

The results are higher accuracy, fewer manual touchpoints, faster approvals and cleaner data.

Lean finance doesn't aim for 100% automation of every scenario. Nor should it. The goal is exception-based processing: automate the normal, known workflows that follow expected patterns, and direct human attention only to the small subset of invoices that require judgement.

In practice, that means letting automation handle the bulk of standard activity while AP teams focus on exceptions such as duplicates, mismatches between PO and invoice amounts, unknown vendors or unusual variances.

With exception-only work, AP teams not only operate more efficiently but also contribute directly to process quality and control.

Your Lean manufacturing AI action plan

Step 1: Identify what AI capabilities are crucial for manufacturing

These capabilities are a great place to start:

- → **Expert document knowledge** (multi-format invoices, multi-currency, multi-line) to reduce OCR misses and manual keying.
- → **Cross-document validation** (PO, receipt, inspection, contract) to reduce false positives in 3/4-way matches.
- → **Fraud signals:** bank-detail anomaly checks, duplicate/forgery detection, role anomalies, and BEC-style metadata patterns. (Payments fraud remains widespread; controls must reflect that reality.)

Step 2: Build AI feedback loops

Here are some AI feedback loops you can start to explore:

- → **Defect prevention loop:** anomaly detection finds out-of-pattern invoices (amounts, vendors, metadata) before posting; flagged defects are labelled and fed back to improve models.
- → **Exception-shrink loop:** track top exception caused by plant/category; suggest supplier data fixes (unit of measure, tax schema) or PO discipline (required fields) to cut repeat issues.
- → **Throughput loop:** identify bottlenecks (approver X, plant Y, category Z); rebalance queues and adapt thresholds to hit SLA.
- → **Fraud defense loop:** AI identifies patterns associated with fraudulent invoices, vendor impersonation attempts, suspicious bank detail changes or metadata anomalies. Suspected cases are diverted into an exception bucket, never entering the main flow, and the system learns from each flagged case to strengthen future detection.

AI, when used well, amplifies your team and helps them learn faster. So Lean teams get time back to focus on quality, strategy and supporting the business.

Chapter 5

CFO control and strategic visibility

Modern CFOs need modern tools to fulfill their new strategic scope

In manufacturing, the CFO's remit has expanded far beyond financial stewardship. Today, they're responsible for the operational signal that keeps the entire business flowing: cash exposure, supplier stability, production continuity, and risk management.

But the visibility required to govern that scope simply doesn't exist in most manufacturing finance environments. AP data is scattered across disconnected tools, manual processes, and plant-level workarounds.

Even the most sophisticated manufacturing organizations struggle with signal distortion. The challenge is that inputs are fragmented, slow or plain invisible:

Manual approvals and email threads hide crucial information

Invoices sit in inboxes. PO changes are shared informally. Exceptions circulate through CC chains. No system knows the true status.

Multi-plant, multi-ERP complexity creates fractured signals

A CFO may need data from 5 plants and 3 ERPs just to answer: "What are our outstanding liabilities today?"

Cycle time delays aren't visible until cash is already impacted

If Plant A is consistently approving invoices 5 days late, Finance may not know until AP realises discounts were missed.

Accruals and commitments are buried in spreadsheets

Plant controllers keep local files with GRNs, accrual notes, partial receipts and pending orders.

Vendor risks are only detected after the damage

A sudden spike in exceptions, a mismatched PO, or a suspicious bank detail change rarely gets surfaced fast enough to prevent fraud or disruption.

Month-end reporting culture = rear-view leadership

By the time month-end closes reveal cash variances, the problems that caused them are long gone, and often repeated the next month.

The costs of not having strategic visibility

When visibility breaks, risk compounds:

- Working capital decisions rely on stale or incomplete information
- Cash forecasts lose accuracy because operational flow isn't seen or measured
- Discounts are missed, costing real money
- Late fees multiply across plants
- Fraud slips through brittle manual checks
- Production can be disrupted when vendors aren't paid or exceptions stack up

With Lean Financial Operations™, CFOs get something they rarely have today: A single operational truth. Accessible, accurate, and updated in real time.

With a Lean, AI-powered model, decisions are faster. Risks are lower. Strategy becomes proactive instead of reactive.

This exercise reveals where your essential daily CFO metrics actually come from. It exposes hidden blind spots and fragilities, making it easy to see exactly where Lean Financial Operations™ can deliver immediate visibility and control.

CFO Visibility Checkbox:

Metrics	Where do you currently find this metric? (ERP, spreadsheet, inbox, etc.)	Does it update in real time?
Invoices in flight		
Average cycle time		
Exceptions by plant		
Discount capture rate		
Cash forecast accuracy		

Chapter 6

The Lean Payoff

Ultimately, only the new lean standard set by Yooz's Lean Financial Operations™ will deliver meaningful results across the finance function:

Real-time invoice and approval tracking

Every invoice, approval, exception and touchpoint is visible instantly, at plant level and group level.

AI-driven fraud and anomaly detection

Spot vendor impersonation, duplicate invoices, suspicious metadata, and bank detail changes before payment is made.

A unified operational picture across multiple ERPs

Yooz normalizes data across disparate ERP instances, giving CFOs a clean, consolidated view.

Policy-driven approvals

Every approval follows a clean, transparent route, no more hidden delays or inbox black holes.

Automated 3- and 4-way matching

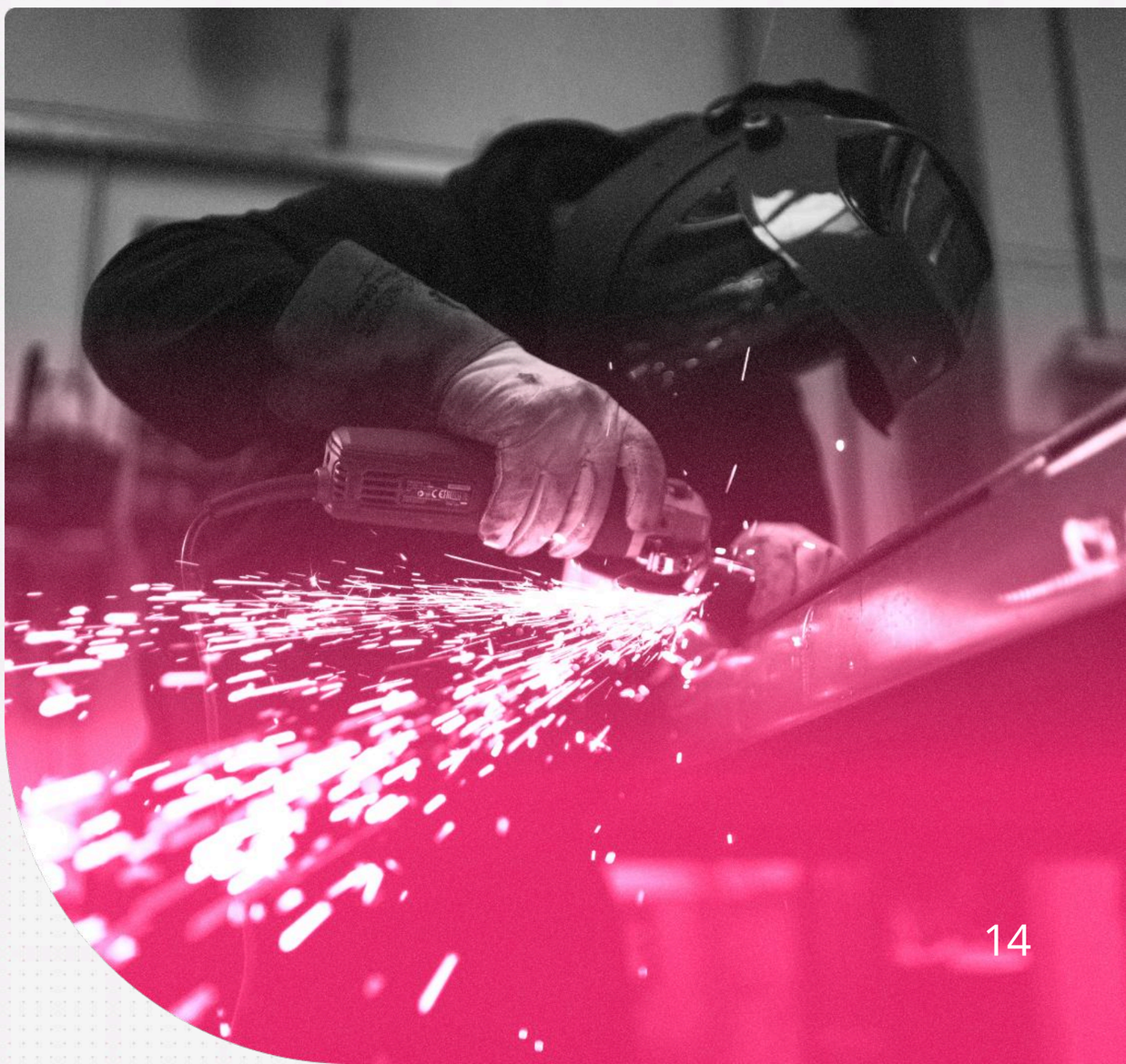
Removes the uncertainty of mismatched records and reduces dependence on local spreadsheets.

Audit trails that eliminate blind spots

Every action is logged, visible and traceable.

Live dashboards for cycle times, exceptions, liabilities and spend

CFOs can see bottlenecks, risks and cash exposure as they emerge, giving them the cash flow intelligence they need to feel strategically confident.



The payoff?

Lower cost per invoice through touch less processing (industry uses this KPI); leaders materially outperform laggards.

Shorter cycle times

- → More early-pay discounts and fewer late fees
- → Better forecasts; fewer exceptions/defects
- → Less rework

Fraud losses avoided via bank-change controls, audit trails, and anomaly detection, critical as fraud attempts remain elevated.

And the results for companies that have bought in speak for themselves:

↑ 80% **faster invoice processing**

↓ **Up to** 70% **fewer errors**

↓ 80% **reduction in paper and manual work**

↓ **Up to** 80% **lower cost per invoice**

The bigger picture

Lean Financial Operations™ helps manufacturers run finance with the same precision and efficiency as their production lines, eliminating waste, reducing risk, and freeing people to focus on growth.

Ready to give it a go?

If you want to see how Lean Financial Operations™ could benefit your factory finance, we should talk.

Let’s review your financial operations