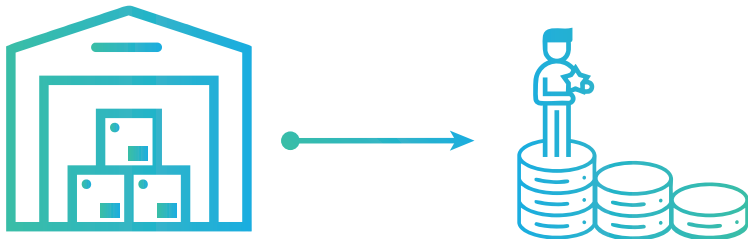




The Unified Warehouse Data Playbook

A Step-by-Step Guide to Driving Operational Excellence
through Unified Data, Labor Analytics, and AI





Turn Warehouse Data Into Your Competitive Advantage

In today's hyper-competitive landscape, operational leaders can't afford blind spots. Between market volatility, labor shortages, razor-thin margins, and increasing customer expectations, success hinges on real-time visibility, precision, and agility. Warehouses today are flooded with data—from automation systems, WMS platforms, labor tracking, and more. But simply having access to more data isn't the advantage; **knowing how to use it is.**

That's where Warehouse Performance Management (WPM) comes in. It's the emerging discipline that can transform a sea of raw information into actionable insights. With its methodology, you can take control of your operations by treating data as a core operational tool—not just a reporting afterthought.



This is the story of how National Logistics Services (NLS), a leading Canadian 3PL specializing in lifestyle brands, with 1.7 million square feet of capacity across nine strategically located facilities, unified data to transform warehouse performance across its network. Facing inefficiencies like 20% of paid hours going unaccounted for and inconsistent data across sites, NLS turned to Easy Metrics to unify its systems, standardize metrics, and gain the real-time insight needed to act fast.



The result? Missing time reduced to 4%, daily profitability dashboards for every GM, and an enhanced company-wide culture of continuous improvement.

We spoke with Val Ramroop, the Vice President of Operations at NLS to break down exactly how his team at NLS accomplished smart warehouse performance management in a series of steps—and how you can, too.



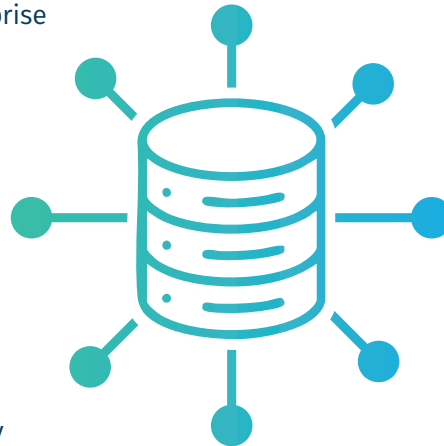
STEP 1:

Build the Foundation with Unified Data

Before anything else, you need to **clean and connect your data**.

For NLS, the first step was to implement an enterprise data warehouse using Snowflake. This served as a central hub to unify operational data from warehouse management, time and attendance, billing, transportation, and more. But integration alone wasn't enough—they needed consistency.

Each of NLS' nine sites had developed its own terminology for basic processes, making cross-facility comparisons nearly impossible. For example, the same task might be labeled differently across locations. NLS addressed this by auditing every workflow, reclassifying data, and creating a shared operational taxonomy.



LESSON LEARNED:

It's critical to standardize nomenclature across systems and sites. It can be a time-consuming step, but without it, even the best data platform couldn't deliver meaningful insight.

With that groundwork complete, NLS could finally generate unified, accurate reports—and share reliable data with Easy Metrics. This, in turn, enabled them to get a real-time view of their operations and paved the way for deeper performance analytics.



TAKEAWAY:

Clean data, consistent terminology, and connected systems are non-negotiables.



“One of the big lessons learned is definitely the nomenclature ... even stuff like ‘receiving’ had different names across sites.”

- Val Ramroop, VP of Operations, NLS

STEP 2:

Implement Labor Management with Intentional Change Management

Once NLS had its data house in order, the next move was to put that data to work through labor management. The company partnered with Easy Metrics to implement labor analytics across nine facilities—but they knew that simply deploying a new platform wasn't enough. Success would hinge on how well people across the organization embraced and adopted it.

To do this, NLS didn't just approach labor management as a mere software rollout – instead, they treated it like an **organizational transformation**.

First step: Validating their internal reports against Easy Metrics data, starting with one site. That first validation took about 30 days, as the team worked to align internal KPIs with external metrics. Once the process was nailed down, each new facility came online faster—eventually requiring just one week for data validation.

But what really set NLS apart was their approach to change management. In addition to Easy Metrics' standard 30-60-90 day best practices, NLS created its own parallel plan, including a few critical elements:

- ▶ The launch of a clear communication campaign so every facility knew what to expect.
- ▶ Rolling out three waves of supervisor training, complete with role-playing exercises on how to coach performance using new data.
- ▶ Creating new, custom training videos to drive home best practices and build confidence among managers.



LESSON LEARNED:

Data systems only work when people trust and understand them. NLS invested in training, communication, and top-down engagement to create a culture that welcomed transparency and accountability.

The result? A smooth, efficient rollout across nine sites—in just three months.



TAKEAWAY:

Don't just install software. Lead your people through the change.

“We didn't just implement software—we invested in change management and training so people would embrace it.” - Val Ramroop

STEP 3:

Focus on the Right Metrics

With labor analytics in place, NLS turned its attention to the metrics that truly move the needle. The goal wasn't to measure everything—it was to **measure what mattered**. That meant identifying a set of high-impact KPIs that could drive both operational efficiency and accountability.

The most transformative metric? Missing time. When NLS began its journey, approximately 20% of paid hours went unaccounted for—time that couldn't be tied to any productive or billable activity. Through the visibility provided by Easy Metrics, they were able to identify the root causes and implement targeted solutions. Within two years, **NLS brought missing time down to just 4%—best-in-class performance in the industry.**

In addition to missing time, they focused on Engineered Labor Standards (ELS) and indirect time. These allowed them to evaluate how employees were performing against expected productivity benchmarks and to better understand where hidden inefficiencies were lurking.

And most importantly, they used this data every single day. Site managers weren't just looking at dashboards—they were acting on them.

NLS built daily routines around labor performance, including:

- ▶ Coaching conversations with the bottom three performers per site
- ▶ Recognition for the top three performers
- ▶ Highlighting the “most improved” to reward effort and progress



LESSON LEARNED:

Metrics only matter if you use them consistently.
By creating daily habits around performance data, NLS made analytics part of the operational fabric—not just a reporting tool.



TAKEAWAY:

Use metrics to create feedback loops for improvement and engagement.

“We focus daily on our bottom three performers, give kudos to the top three, and recognize the most improved.” - Val Ramroop

STEP 4:

See Operational Profitability in Real Time

NLS didn't stop at tracking labor productivity—they went deeper. By integrating their customer rate tables directly into Easy Metrics, they unlocked the ability to view both cost and revenue side-by-side for each process. This created a **live view of profitability**, enabling GMs to make adjustments daily rather than waiting on end-of-month financials.

Previously, profitability analysis required layers of spreadsheets and complex accruals. Now, it's built into daily operations. GMs can instantly see whether they're hitting revenue goals, where costs are rising, and how process shifts (like changes in order type or customer mix) impact the bottom line.

This real-time view of **operating margins** has also empowered customer conversations. NLS can now clearly explain why certain clients or workflows are more costly—and back it up with data. That opens the door for NLS to do things like:

- ▶ Aligning pricing models with operational profiles
- ▶ Partnering with clients to drive mutual process enhancements



LESSON LEARNED:

You can't manage what you can't see. Visibility into profitability—at the daily and process level—is key to making smart decisions and building better, more cost-conscious client relationships.



TAKEAWAY:

Profit analytics are a game-changer for customer and margin management.

“We can pinpoint where performance issues are tied to workflow changes, and have smarter client conversations.” - Val Ramroop

STEP 5:

Operationalize Continuous Improvement (CI)

Once data and profitability were under control, NLS made continuous improvement (CI) the backbone of their operations. But rather than keeping CI confined to a specialized team, they democratized it.

Their approach? **Train everyone.** NLS created an internal white belt certification program to introduce every employee to Lean and continuous improvement thinking. Ten internal trainers rolled out the curriculum across sites, empowering associates at every level to identify waste, suggest improvements, and speak the language of process efficiency.

To support this, NLS implemented a **maturity model** that categorized facilities by performance tier—baseline, bronze, silver, and gold—based on key metrics like ELS, missing time, and indirect hours. Each site was expected to maintain baseline performance and move upward through the tiers over time.



LESSON LEARNED:

CI works best when it's part of everyone's job. By making CI training universal, and aligning it to clear performance goals, NLS created a culture where innovation comes from the ground up.



TAKEAWAY:

Make CI part of the culture—not just a department.

“Every employee is getting white belt certification. The best ideas come from the associates on the floor.” - Val Ramroop

STEP 6:

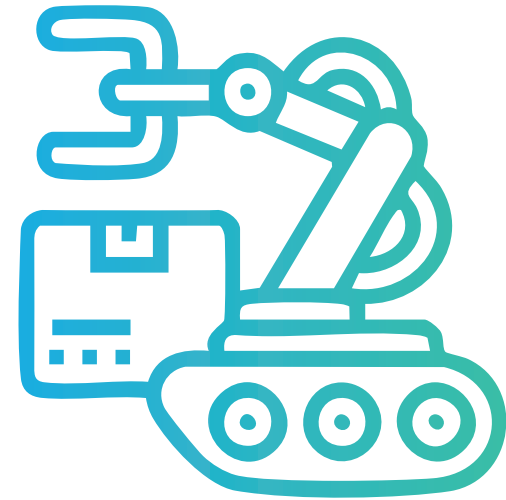
Prepare for What's Next – AI, Robotics, and Predictive Intelligence

The final step in NLS's journey is one of foresight. With a solid foundation of data and process control, they've been able to turn their attention to the future—investing in automation and AI to keep their competitive edge.

Their new facility, a fully automated site opening soon, is equipped with goods-to-person robotics, smart conveyance, and integrated scanning systems. But they aren't relying solely on hardware. NLS has also explored lightweight AI solutions that optimize labor and operations without heavy infrastructure costs.

Some of their forward-thinking applications include:

- ▶ AI-driven labor forecasting – Internal models outperformed customer forecasts by 10–20%, making staffing more precise.
- ▶ Pick-path optimization – Software analyzes orders and warehouse layout to create the most efficient travel routes.
- ▶ Video-based SOPs – AI generates training documentation and SOPs by observing workers on the job.
- ▶ Real-time SOP translation – Supports a multilingual workforce by instantly translating instructions.



LESSON LEARNED:

AI doesn't have to be a future-state concept—it's already here. The key is having a strong data foundation that lets you plug in these technologies where it makes the most sense, with confidence.



TAKEAWAY:

AI isn't just hype. It's already delivering value for forward-thinking 3PLs.

"You're looking at the employee actually performing, and [AI] is developing the SOP and training videos for you. So as the employee is working, it's following along, and it's developing the SOP." - Val Ramroop



"Now that we have this visibility, I don't think we could ever go back to where we were before." - **Val Ramroop**

The Bottom Line:

Build a Data-Driven Foundation for Ongoing Success

The most successful 3PLs in the coming years will be those that act like data companies. NLS has proven that with a clear strategy, the right technology, and a culture of continuous improvement, operational excellence is not only achievable—it's sustainable.

From reclaiming labor hours to smarter forecasting, from improved client margins to innovation at the edge, the blueprint for operational profitability is here.

Start with the data. Build the foundation. Engage your people. **And get ready to win.**



Request a demo today
at **EasyMetrics.com.**