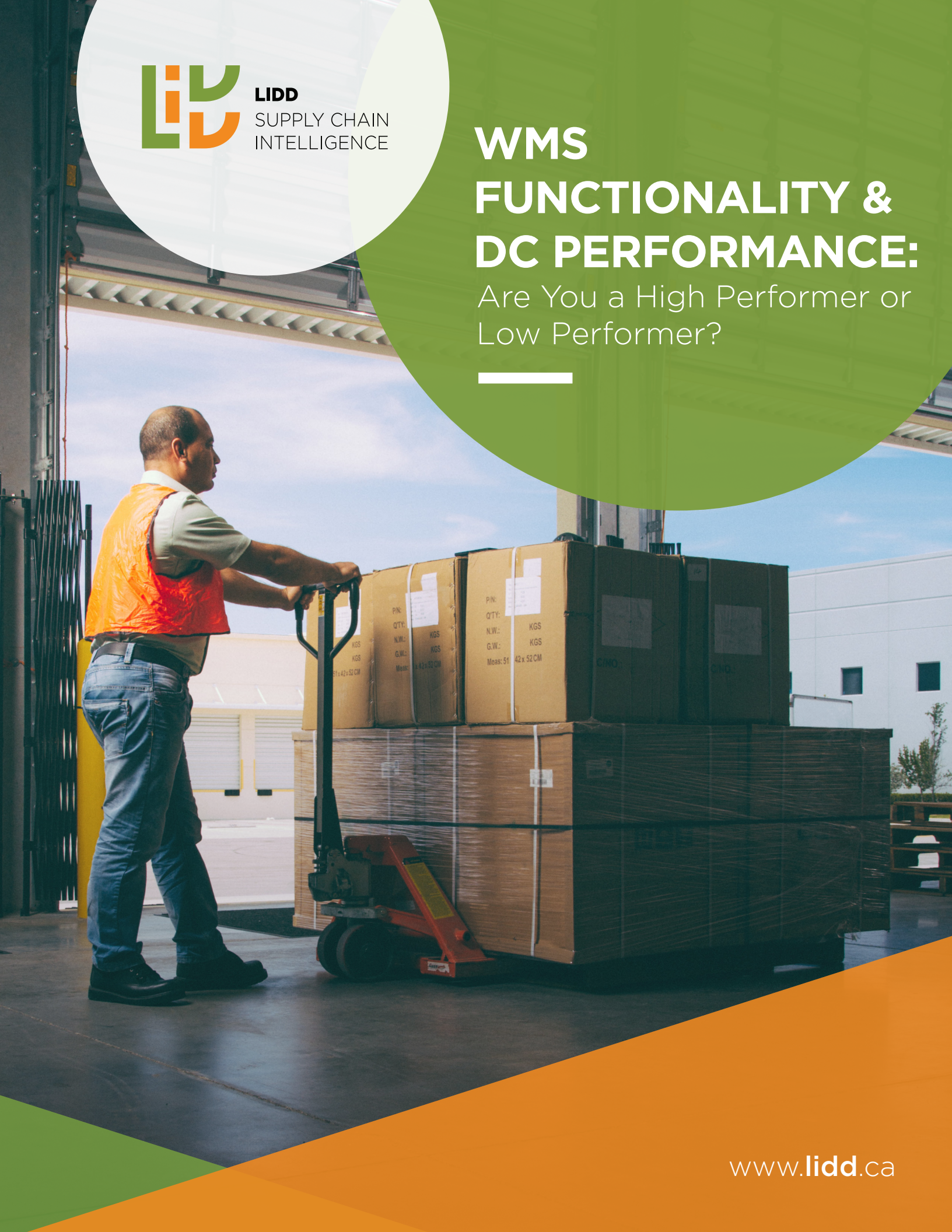
LIDD
SUPPLY CHAIN
INTELLIGENCE

WMS FUNCTIONALITY & DC PERFORMANCE:

Are You a High Performer or Low Performer?



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ABOUT THE AUTHOR

As a Project Manager and member of LIDD's team of supply chain consultants, Jeff Hamilton helps businesses to develop supply chain and logistics solutions that optimize their operations and asset utilization.

He analyzes distribution center data and operations to determine the best course of action with respect to designing or re-engineering a client's distribution centre.

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WMS FUNCTIONALITY & DC PERFORMANCE: ARE YOU A **HIGH PERFORMER** OR **LOW PERFORMER?**

A functional Warehouse Management System (WMS) is a critical pillar of your supply chain infrastructure and 80% of your Distribution Centre's (DC) performance outcomes depend on that infrastructure. LIDD's WMS Benchmark Assessment report is a unique and invaluable tool for assessing and benchmarking WMS functionality in the foodservice industry.

Here's how the benchmark works: participants answer a series of questions about their WMS functionality and DC characteristics. We compile the responses and create a benchmark score. By measuring each company's score against the benchmark, we can make a correlation between WMS functionality and DC performance, and classify participants as high performers or low performers.

SNAPSHOT OF PARTICIPANTS & **TECHNOLOGY**

LIDD analyzed responses from close to 60 companies. Participants ranged vastly in size, with 11% having less than 50 employees and 14% having more than 500 employees.

Notable participant characteristics include:

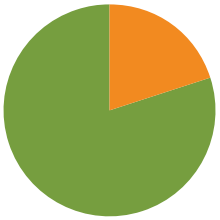
- **345,000 average weekly cases shipped**
- **9,350 average items across all three temperature zones**
- **130,000 average total facility square footage & 31' average clear height**

Looking inside the DC, there is no consensus on picking and putaway/letdown technology:

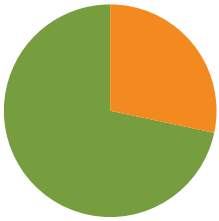
Picking technology breakdown:	35.7% **Paper**	38.6% **RF**	42.9% **Voice**
Putaway/Letdown technology breakdown:	31.4% **Paper**	74.3% **RF**	1.4% **Voice**

73% apply pick labels to every outbound case

In terms of software implementation:



25%
implemented
a WMS
before 2000



40%
implemented
a WMS
since 2010

A quarter of the companies surveyed have had their WMS for 15+ years, but many companies have a new WMS. However, an older WMS can still function at a high level if it is well-maintained, while a new one can quickly fall behind if not properly updated and supported:

- 50% **are using the most recent version of their WMS**
- 50% **are behind by at least one or more version**
- 56% **have annual support & maintenance contracts with their software provider**

To understand how tech utilization and decision-making affect DC operations and their efficiency, the benchmark questions included elements of both technology and operational performance.

THE BENCHMARK

The survey consists of about a hundred questions on a series of foodservice-related functionalities. Respondents had five ways to respond:

- **System has functionality and we use it**
- **System has functionality but we do not use it**
- **System does not have functionality but we want it**
- **System does not have functionality and we do not want it**
- **I don't know**

After compiling the results, the benchmark findings were as follows:

- **The average WMS had 57% of desirable features**
- **Of those features, respondents were using 76% of them (not using 24%)**
- **Of the features they did not have, respondents wanted 70% of them**

A benchmark WMS has just over half of the features listed in the WMS survey. The average performer is not using a quarter of these features. On top of that, the responses suggest that companies are seeking out more features. When looking at the combined lack of currently available features and the desire for new features, there is a big opportunity for the average to low performers to increase their WMS functionality.

OPERATIONAL **PERFORMANCE**

Delving a little deeper into overall performance relative to WMS functionality, there is a strong correlation between highly functional software and productivity. Splitting companies into two categories – **high performers & low performers** – there is a significant gap in performance:

	Low Performers - Companies Below Benchmark	Benchmark	High Performers - Companies Above Benchmark
WMS Functionality Score	26%	44%	63%
Cases Shipped per Order Selector Hour	53	85	116
Cases Shipped per Hour (All Warehouse)	27	35	43
Selector Hours as % (All Hours)	58%	48%	37%
Cases Shipped per Sq.Ft.	13	24	35

- **High performers are shipping 63 more cases per order selector hour, equivalent to a 120% productivity increase over low performers**
- **High performers are 60% more productive per work hour in terms of cases shipped than low performers**
- **In terms of DC space utilization, high performers are shipping cases at a rate nearly three times higher than low performers**
- **High performers are using 20% less of their total DC work hours on picking than low performers. They focus more of their efforts on processes that surround picking to generate a more efficient picking process that minimizes disruptions and fills orders at a higher rate**

While these results present a staggering amount of evidence that companies should be focused on a highly functional WMS, there is an important caveat; many other factors drive these results, such as:

- Shipping volumes
- Order profiles
- SKU counts
- Layout
- Slotting
- Management

Bear in mind that DC managers cannot control SKU counts, shipping volumes and order profiles. They can control layouts, slotting and management, and the decisions surrounding them have a salient effect on performance. In combination with serviceable IT infrastructure, these factors are the backbone of any profitable business in the foodservice industry.

HOW A HIGH PERFORMING WMS **DIFFERS** FROM A LOW PERFORMING WMS

With regard to specific DC processes, high performers leverage their software tools more frequently and efficiently than low performers. Here are some concrete examples from basic warehouse operations:

RECEIVING

› **100% of high performers can compare the expiry date of a new product with the minimum acceptable shelf life for that item compared to 18% of low performers.**

Preventing old product from hitting the pick line eliminates wasted work to get it there, as well as disruptions to picking activities that would inevitably occur as a result.

› **36% of high performers can enter comments and pictures on a device and attach them to the receiving document. No low performers are using this feature.**

This streamlines communications between purchasing and DC operations, allowing for quicker resolution of supply issues.

PUTAWAY

- **64% of high performers are using their WMS to direct putaway, compared to 18% of low performers.**
- **73% of high performers compare the pallet height to the opening height when determining putaway location, while none of the low performers are doing this.**

Directed putaway only works well if the putaway directions are feasible.

REPLENISHMENT

- **91% of high performers compared to 27% of low performers create replenishment tasks when inventory in a pick location drops below a minimum threshold.**
- **100% of high performers create replenishment tasks when daily demand exceeds the inventory available in the pick slot, while only 36% of low performers do this.**

Generating replenishment tasks based on parameters created in the WMS automates replenishment and avoids disturbances during picking.

PICKING

› **73% of high performers vs. 9% of low performers track picking errors with their WMS.**

To find the source of picking errors, they must be tracked.

› **18% of high performers vs. 63% of low performers use paper picking.**

The majority of low performers still use paper picking. Voice picking provides a hands-free experience and reduces errors.

REPORTING

› **55% of high performers report storage utilization in terms of percent of locations available, while none of the low performers do this.**

WMS reporting gives a valuable snapshot of DC utilization that would otherwise be difficult to acquire. A WMS should manage the warehouse assets as much as anything else.

› **36% of high performers report storage utilization in terms of percent of cube available and fronts available, while none of the low performers do this.**

It is not enough to know how many locations are available as the slots may be small or misleading in terms of real capacity.

CONCLUSION – WHAT DOES ALL THIS MEAN?

High performers only spend 37% of their warehouse work hours on picking vs. 58% for low performers. By investing substantial hours and capital into intelligent warehouse processes that support order picking, they outperform their counterparts.

This performance gap between high performers and low performers is highlighted by:

1. Shipping more than twice as many cases per picker.
2. Shipping 60% more cases per hour.
3. Shipping almost three times more cases per square foot.

To put this into perspective, to ship 10,000 cases, low performers require 6 extra employees compared to high performers, adding upwards of $200,000 in yearly operating expenses. Based on the findings from LIDD's 2016 WMS Benchmarking Assessment Survey, **WMS functionality has a direct correlation with DC performance.**

THE **LIDD** DIFFERENCE

SELECTION & IMPLEMENTATION OF WMS, MES, TMS & ERP SYSTEMS

The software you choose needs to have the right functionality but the partner you select to help you implement it is just as critical to your success.

Our footprint on your project can be as big or as little as you need. Drawing on a wide range of expertise, we can assist in defining your business requirements and ensure that your building's layout leverages your systems' capabilities. We can also manage all phases of an implementation project – from selection to final delivery.

INTEGRATION & OPTIMIZATION OF SYSTEMS

Many businesses run multiple systems to meet their distribution needs.

It is critical that the integration and optimization of these systems are done correctly. We have a deep understanding of system integrations and can analyze and optimize your application park to ensure decisions are made by the right systems and that the proper data is shared among them.

ONGOING SUPPORT

After a successful implementation, we can provide additional tech support and assist you with any additional projects related to your supply chain infrastructure. Our team of experts are highly trained in the technologies we support and are committed to helping you adapt to a new world that includes a shift towards on-demand fulfillment and personalized service.

OUR SUPPLY CHAIN **INFRASTRUCTURE** SERVICES

Facility Engineering

- Distribution center sizing & design
- Slotting analysis
- Capacity and productivity optimization
- Project commissioning of new facilities and expansions

Supply Chain Optimization

- Multi-site network studies
- E-commerce / omni-channel distribution
- Transportation resource analysis

Information Technology

- Selection of WMS, MES, TMS and ERP software
- Integration and optimization of systems
- Ongoing support

Please share this with your team as well as with all the players in your value chain and join in the discussions on our blog and LinkedIn page.

We'd like to **hear your opinions** and learn from one another's experiences. After all, in a world filled with noise, the only way we can win is to cut through the clutter and invest time and effort in **making real connections.**

CONTACT US

Schedule a **Discovery Call** to talk about your goals & define your needs

Learn more about becoming a client

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