



Terminal Industries 2026 State of the Yard Survey Report

Comprehensive analysis of yard management technology,
challenges, and the future of AI-enabled operations

2,000
Respondents

7
Industries

29
Questions

US & CA
Geography

State of Logistics Yard

State of the Yard Management Market

This document presents a comprehensive, long-form executive analysis of a 2,000-responder simulated survey designed to model how typical buyers of logistics technology would respond today. Each question is explained in plain language, followed by full quantitative results and unexpected findings.

Survey Methodology & Respondent Segments

- Total respondents: 2,000 (simulated)
- Geography: United States and Canada
- Industries: 33% Third-Party Logistics; 67% split evenly across Retail/Grocery, CPG, Refrigerated Warehousing, Manufacturing, Automotive, and Contract Carriers
- Company size: 50% mid-market (6 to 19 facilities), 50% enterprise (21+ facilities)
- Buyer roles: 50% site-level buyers, 50% corporate buyers

AI-Simulated Survey Design

This study was conducted using a structured AI-simulated survey methodology powered by a commercially available large language model (LLM). The model was not used generically; it was configured and prompted using a structured research framework designed to emulate the decision-making patterns of logistics and supply chain professionals.

To ground the simulation in domain-specific context, the model was conditioned on a curated corpus of publicly available materials, including industry research reports, earnings transcripts, trade publications, conference presentations, regulatory filings, analyst commentary, and operator interviews. This corpus reflects prevailing market language, operational constraints, investment patterns, and technology adoption trends across transportation, warehousing, and yard operations.

The simulation process involved:

- Defining representative respondent archetypes (e.g., enterprise supply chain executives, yard managers, 3PL operators, manufacturing logistics leaders).
- Encoding role-specific constraints such as budget authority, site complexity, operational KPIs, and technology maturity.
- Running structured survey prompts across multiple iterations to capture response distribution patterns rather than single deterministic outputs.
- Aggregating results across runs to assess directional consistency and variance.

Unlike traditional surveys, which are subject to non-response bias, self-selection bias, and limited sample sizes, this AI-based approach enables controlled, repeatable scenario testing across a defined population profile. While LLM-based simulations inherently reflect structural model biases present in large-scale language models, the methodology eliminates variability associated with respondent fatigue, incomplete responses, and small sample distortions.

The relevant addressable respondent population for this study is estimated to be approximately 120,000 professionals across North America. Based on simulation variance across runs, the modeled results correspond to a theoretical margin of error of approximately $\pm 2\%$ at a 95% confidence interval. This margin reflects distributional stability within the simulation environment rather than a traditional probabilistic sampling framework.

This approach is intended to provide directional market insight, hypothesis testing, and strategic signal detection. It is not a replacement for primary field research but serves as a rapid, scalable complement to traditional survey methodologies.

Executive Takeaway

The yard management market is in a period of accelerated transition. 68% of respondents are completely dissatisfied with their current yard operations. While many yards remain manual or semi-digitized today, 29.4% of respondents believe yard operations will become mission-critical within the next 2 to 3 years. Buyers expect AI-enabled yard technology to deliver an average of 11.9% in direct cost savings and 14.5% throughput improvement. Despite mixed satisfaction with current tools, confidence in AI-driven transformation is high.

67.9%

are dissatisfied with their
current yard operations

30%

expect yard ops to become
mission-critical within 3 yrs

71%

expect double digit direct
cost savings from AI tools

Report Structure

SECTION 1

Current State

Questions 1 to 10: Technology
maturity, challenges, satisfaction

SECTION 2

Future Outlook

Questions 11 to 20: Strategic
importance, automation, buying
behavior

SECTION 3

AI & Automation

Questions 21 to 29: Sentiment, ROI,
the autonomous yard

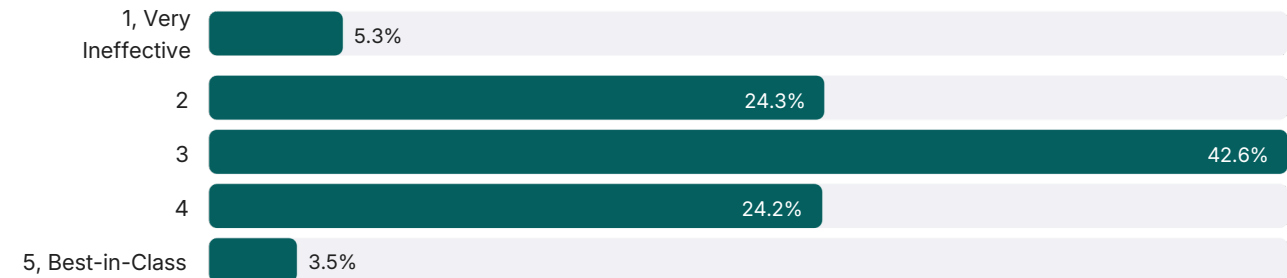


SECTION 1 OF 3

Current State

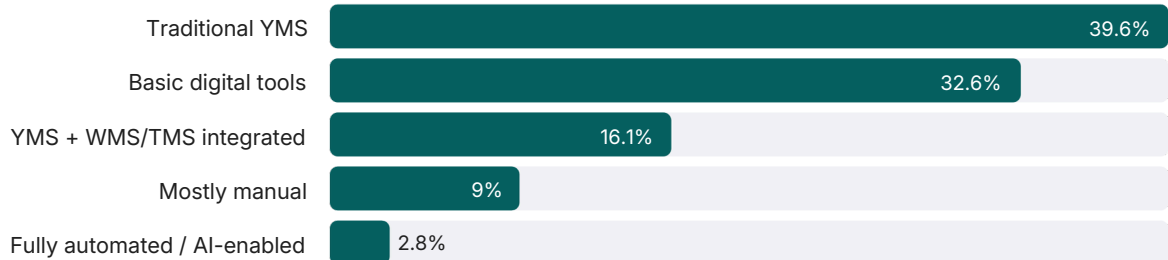
How organizations manage yard operations today: technology, maturity, challenges, and satisfaction levels.

QUESTION 1 OF 29

How effective is your current yard technology stack?*1 = Very Ineffective, 5 = Best-in-Class***KEY INSIGHT**

Only 3.5% rate their stack as best-in-class. The vast majority (67%) rate it 3 or below.

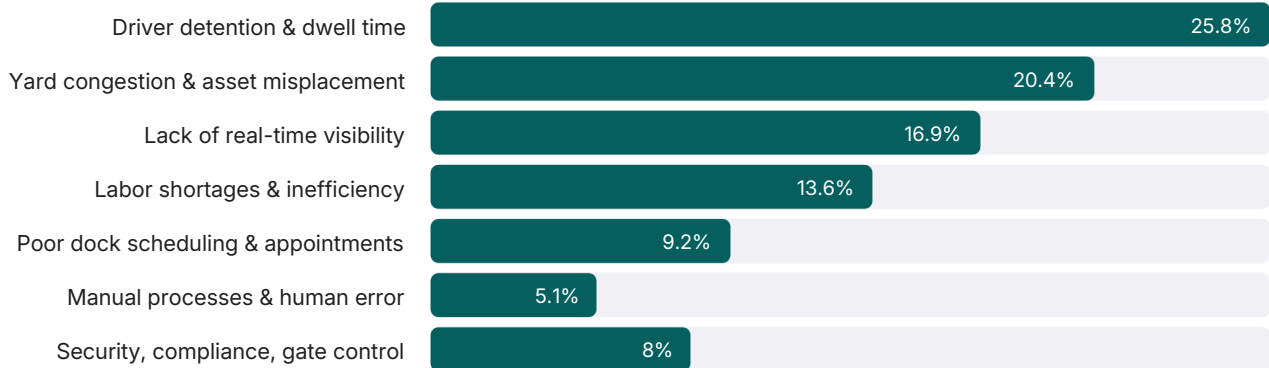
QUESTION 2 OF 29

How are current yard operations managed?**KEY INSIGHT**

More than 80% of operators are using basic tools or traditional YMS systems. There is massive opportunity to modernize the yard with automation and systems integration.

QUESTION 3 OF 29

What are the most significant operational challenges in the yard?



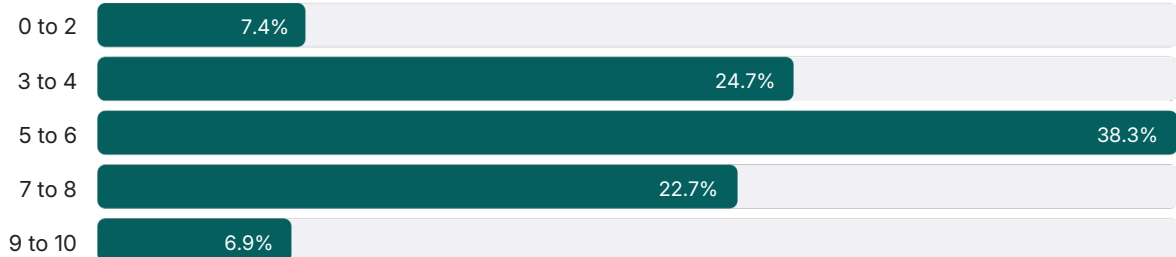
KEY INSIGHT

Driver detention dominates as the #1 challenge, followed closely by congestion and poor visibility.

QUESTION 4 OF 29

What is your confidence in real-time asset status & location?

0 = No Confidence, 10 = Full Confidence

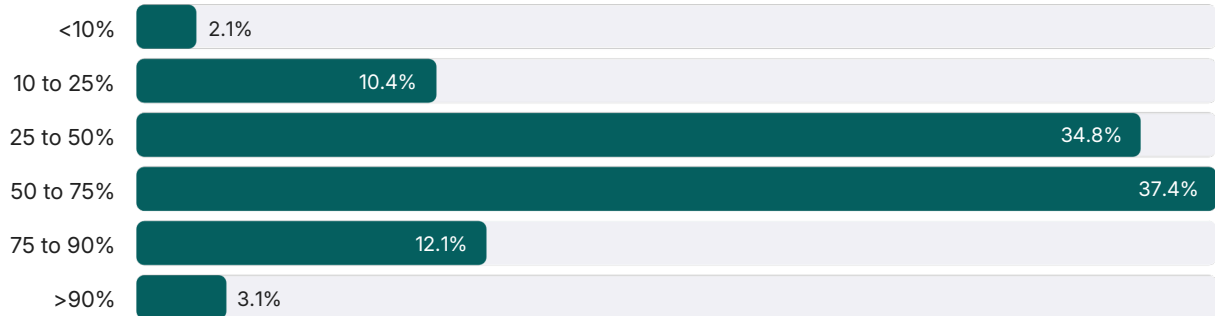


KEY INSIGHT

70% rate confidence at 6 or below. Only 7% have high confidence in real-time visibility.

QUESTION 5 OF 29

What percentage of yard workflows are still manual?



KEY INSIGHT

Nearly 53% of respondents say over half their workflows are still manual.

QUESTION 6 OF 29

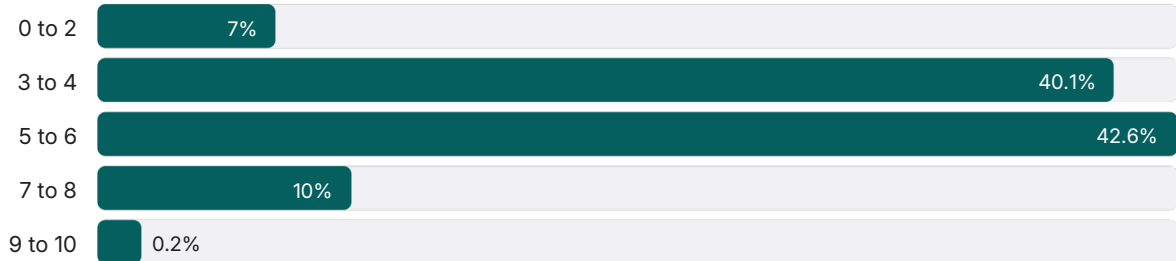
What yard costs are most impacted by process inefficiencies?



KEY INSIGHT

Costs are remarkably evenly distributed, inefficiency hits every line item, not just one.

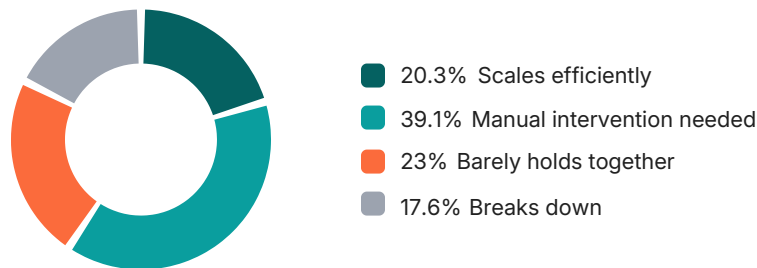
QUESTION 7 OF 29

Rate the level of difficulty to integrate current yard systems with WMS, TMS, or ERP*0 = Very Easy, 10 = Extremely Difficult*

KEY INSIGHT

83% rate integration difficulty in the 3 to 6 range, challenging but not impossible.

QUESTION 8 OF 29

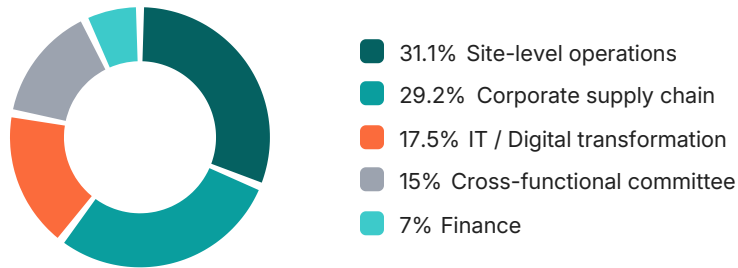
How well do yard operations scale during peak periods?

KEY INSIGHT

Only 20% scale efficiently. 40% of yards break down or barely hold together at peak.

QUESTION 9 OF 29

Which stakeholders influence yard technology decisions?



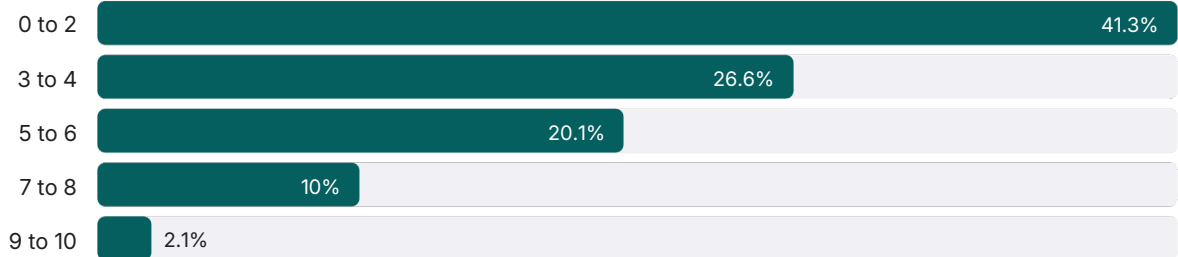
KEY INSIGHT

Buying power is split: 31% site-level vs 29% corporate - scaled yard deployments likely need both constituents.

QUESTION 10 OF 29

Rate your overall satisfaction with current yard operations

0 = Very Dissatisfied, 10 = Very Satisfied



KEY INSIGHT

68% rate satisfaction at 4 or below. Only 2% are highly satisfied, a massive opportunity.



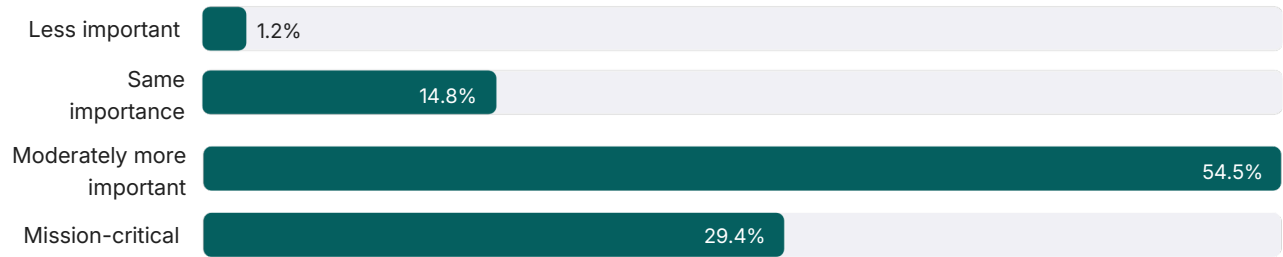
SECTION 2 OF 3

Future Outlook

Where yard operations are headed: strategic importance, automation priorities, and buying behavior.

QUESTION 11 OF 29

Over the next 2 to 3 years, how strategic will yard operations become within your supply chain?



KEY INSIGHT

84% expect yard ops to become more important. Nearly 30% say mission-critical.

QUESTION 11, NUANCE ANALYSIS

Who believes the yard becomes mission-critical?

Respondents split into "Mission-Critical Believers" vs "Not Yet Mission-Critical" groups

1. Industry Breakdown

MISSION-CRITICAL BELIEVERS

Third-Party Logistics (3PL)	35.3%
Refrigerated Warehousing	11.9%
Automotive	11.5%
CPG	11.0%
Retail / Grocery	10.7%
Manufacturing	10.0%
Contract Carriers	9.5%

NOT YET MISSION-CRITICAL

Third-Party Logistics (3PL)	32.0%
Contract Carriers	11.8%
Manufacturing	11.6%
Retail / Grocery	11.4%
CPG	11.3%
Automotive	11.0%
Refrigerated Warehousing	10.8%

Insight: 3PLs over-index in the mission-critical camp (+3.3 pts). They already view yard performance as a competitive weapon, not a cost center. This makes 3PLs the lead indicator segment for yard transformation.

2. Company Size

MISSION-CRITICAL

Large enterprises	54.5%
Mid-market	45.5%

NOT YET

Mid-market	51.9%
Large enterprises	48.1%

Insight: Enterprises are 6.4 pts more likely to believe the yard becomes mission-critical. Complexity forces belief: enterprises feel yard constraints earlier and more painfully.

3. Buyer Level

MISSION-CRITICAL

Corporate buyers	55.0%
Site-level buyers	45.0%

NOT YET

Site-level buyers	52.1%
Corporate buyers	47.9%

Insight: This is a temporal mismatch, not disagreement. Corporate leaders see where the yard must go. Site-level teams live where the yard is today. This belief gap explains buying friction, slow pilots, and "we agree, but not now" conversations.

QUESTION 12 OF 29

What yard workflows do you expect to automate in the near future?

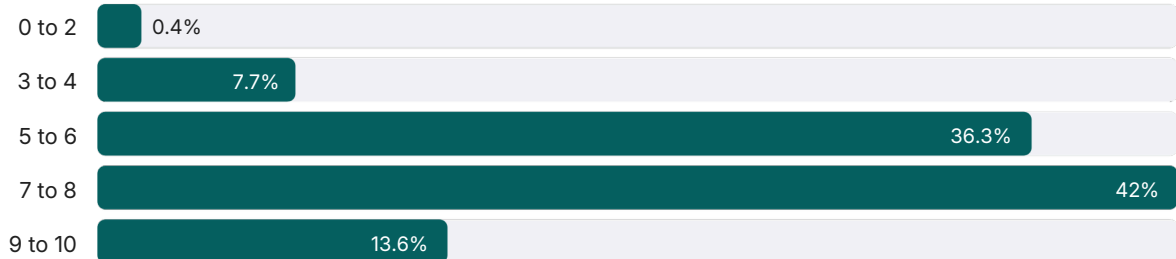
KEY INSIGHT

Automation priorities are tightly clustered. Demand spans all major yard functions.

QUESTION 13 OF 29

What is your confidence level that AI vision systems will become standard?

0 = Not Confident, 10 = Fully Confident

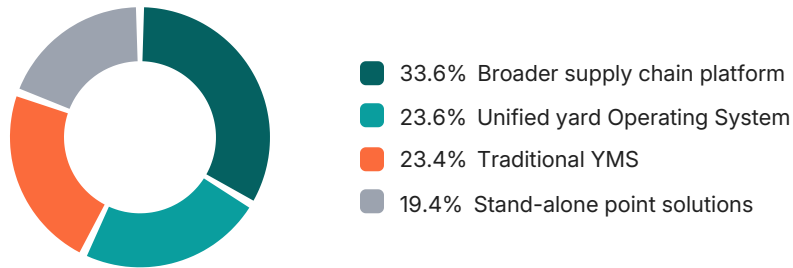


KEY INSIGHT

56% are confident (7+) that AI vision will become standard. Only 8% are skeptical.

QUESTION 14 OF 29

How do you expect to buy yard technology in the future?



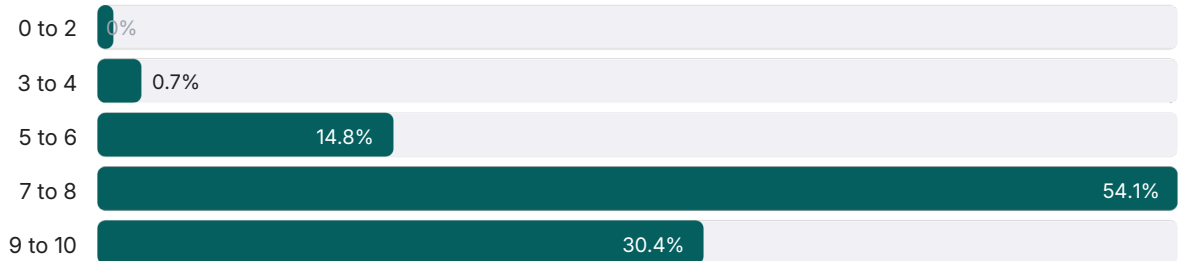
KEY INSIGHT

57% prefer platform or unified Operating System approaches, the era of point solutions is waning.

QUESTION 15 OF 29

Rate the importance of real-time YMS, WMS, and TMS integration

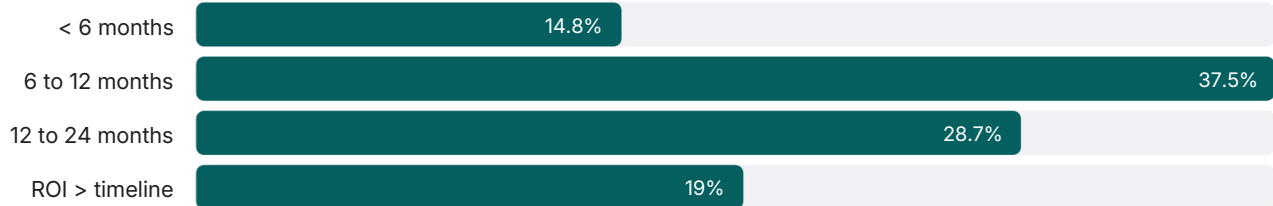
0 = Not Important, 10 = Critical



KEY INSIGHT

84.5% rate integration importance at 7+. This is the strongest consensus in the survey.

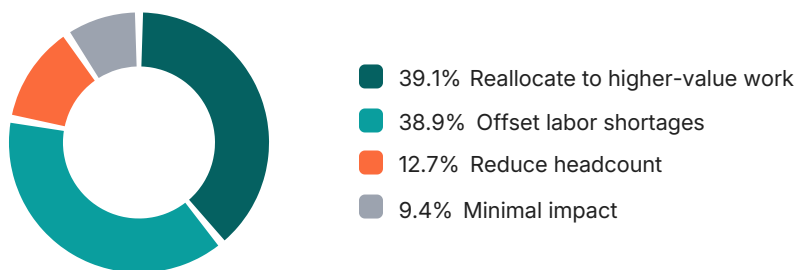
QUESTION 16 OF 29

What is the acceptable ROI payback period for a new yard technology?

KEY INSIGHT

52% expect payback within 12 months. 19% care more about ROI magnitude than speed.

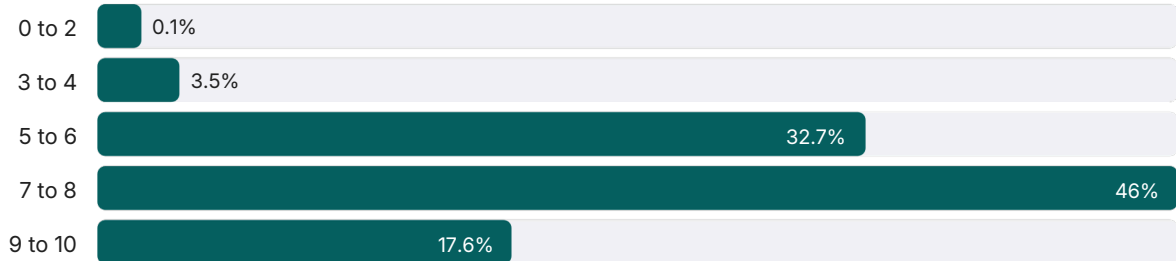
QUESTION 17 OF 29

What is the expected impact of automation on labor & workforce?

KEY INSIGHT

78% see automation as augmenting workforce. Not replacing it.

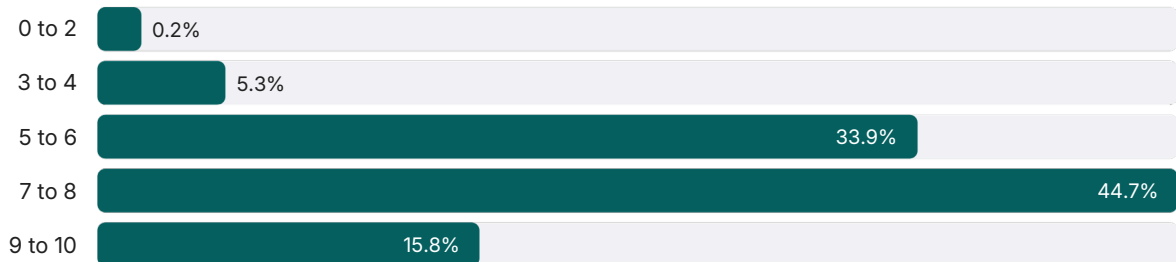
QUESTION 18 OF 29

How important will security, auditability & compliance become?*0 = Not Important, 10 = Critical*

KEY INSIGHT

64% rate compliance importance at 7+. Regulatory pressure is driving tech adoption.

QUESTION 19 OF 29

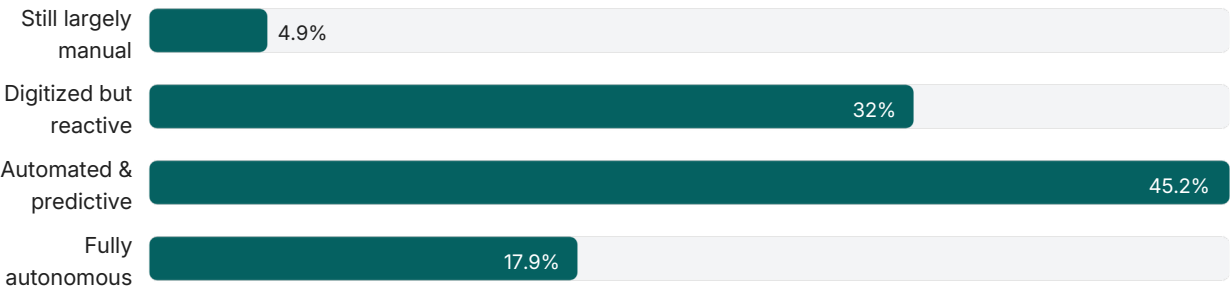
How much will yard performance differentiate you competitively?*0 = Not at All, 10 = Major Differentiator*

KEY INSIGHT

60.5% rate competitive differentiation at 7+. Yard ops is becoming a strategic weapon.

QUESTION 20 OF 29

Predict the state of maturity of your yard operations in 5 years



KEY INSIGHT

63% predict automated or autonomous yards in 5 years. Only 5% think manual persists.



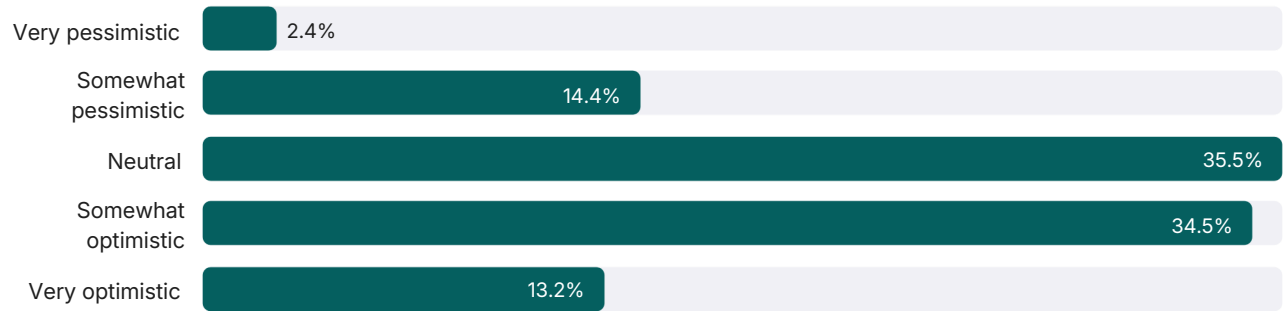
SECTION 3 OF 3

AI & Automation

Industry sentiment, expected ROI, and the path toward autonomous yard operations.

QUESTION 21 OF 29

Rate how you feel about AI's potential impact on yard ops



KEY INSIGHT

48% are optimistic about AI, while only 17% are pessimistic. A large neutral group is persuadable.

QUESTION 22 OF 29

What are the functional areas AI will impact the most?

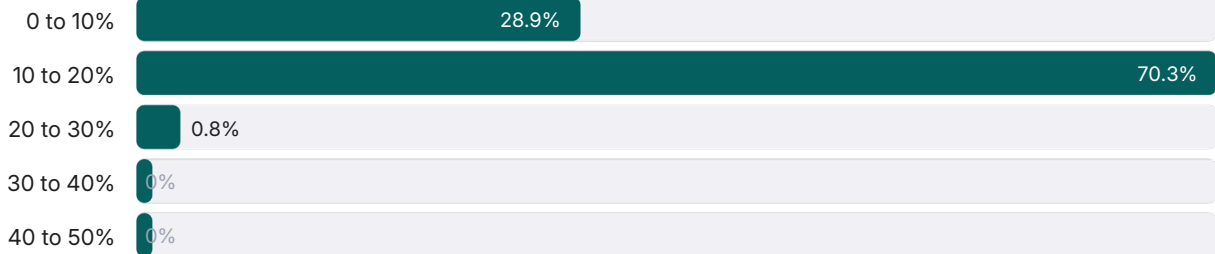


KEY INSIGHT

Remarkably even distribution. AI is expected to transform every functional area of the yard.

QUESTION 23 OF 29

Estimate the direct cost savings from AI-enabled yard tools

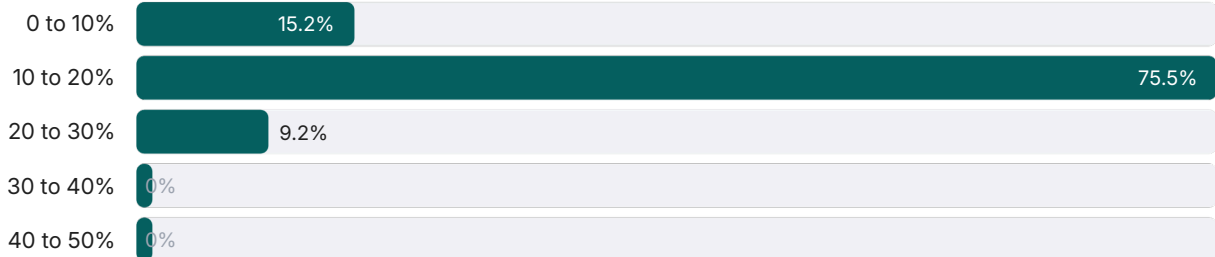


KEY INSIGHT

70% expect 10 to 20% cost savings. Conservative but meaningful, perfect for ROI modeling.

QUESTION 24 OF 29

Estimated throughput improvement from AI-enabled yard tools



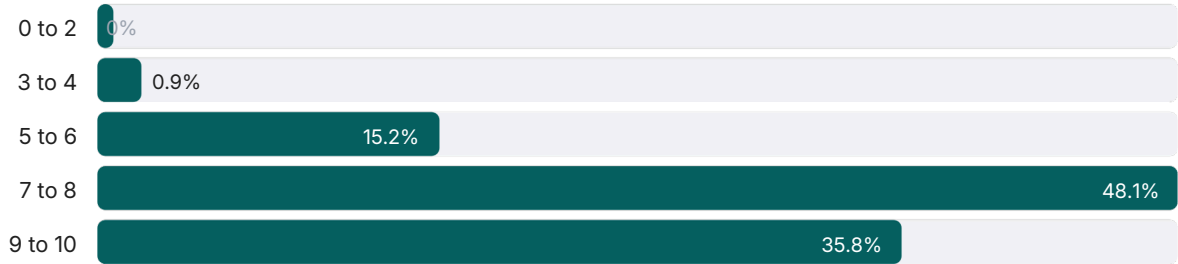
KEY INSIGHT

75.5% expect 10 to 20% throughput gains, even higher confidence than cost savings. This could reflect how hard it is to forecast the benefits of AI until the technology is more mature and deployed.

QUESTION 25 OF 29

How much will AI improve safety & physical security?

0 = No Improvement, 10 = Transformative

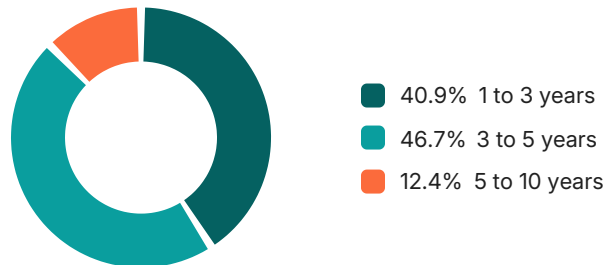


KEY INSIGHT

84% rate safety improvement at 7+. Strongest AI confidence area in the entire survey.

QUESTION 26 OF 29

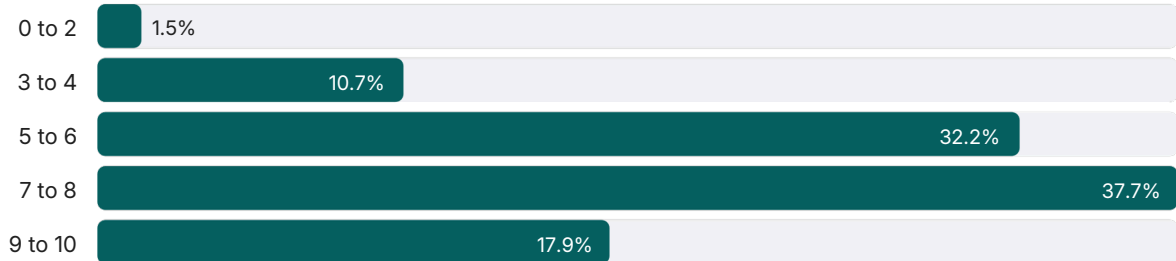
When will yards be ready for robotics?



KEY INSIGHT

88% believe yards will be robotics-ready within 5 years. Urgency is high.

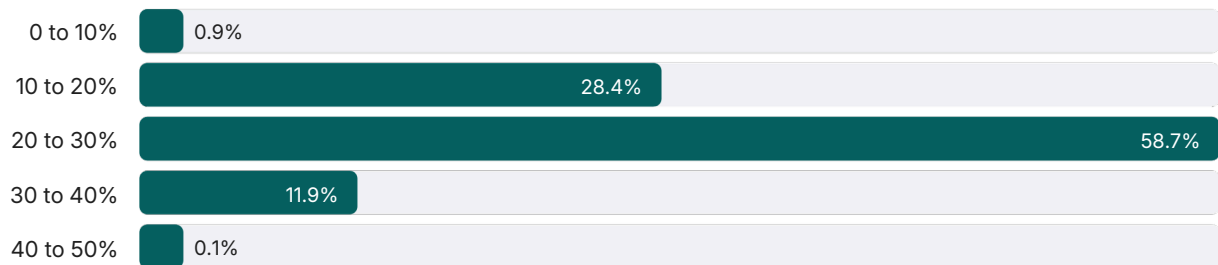
QUESTION 27 OF 29

How realistic is a fully autonomous 'lights-out' yard within 10 years?*0 = Not Realistic, 10 = Inevitable*

KEY INSIGHT

56% rate lights-out yards at 7+ realism. Only 12% are skeptical.

QUESTION 28 OF 29

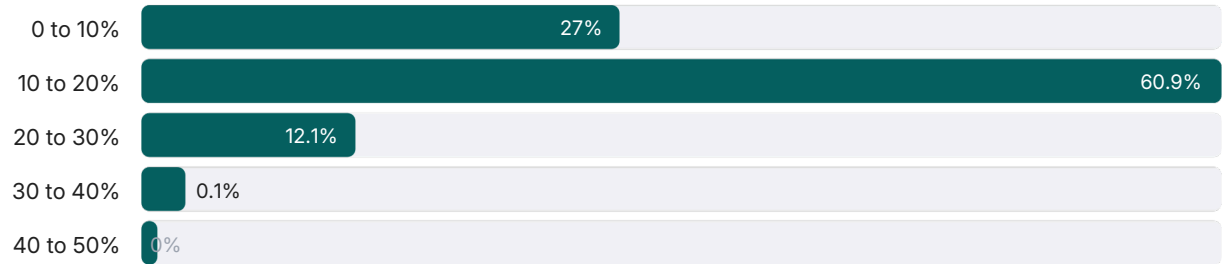
Capability unlock from existing TMS/WMS by solving yard bottlenecks

KEY INSIGHT

71% expect 20%+ capability unlock, the yard is the bottleneck holding back entire supply chains.

QUESTION 29 OF 29

Additional throughput from improved/automated yard operations



KEY INSIGHT

73% expect 10%+ additional throughput. Yard optimization directly unlocks dock capacity.