

Smart logistics playbook

Turn dark data into
dynamic operations

 unisys



Contents

Wake-up call: the hidden value in your data	3
Beyond visibility: the intelligence imperative	4
Danger zones: where data goes dark	5
Breaking through: four steps to transform data	6
Execution excellence: making data work	7
Proving impact: key performance indicators	8
Transform your logistics future with Unisys	9

Wake-up call: the hidden value in your data

Two-day delivery is now considered slow. Real-time tracking is now table stakes. While organizations invest millions in optimizing their physical operations to stay ahead of changing expectations, many overlook their most valuable asset, and it's hiding in plain sight: the data that powers operational intelligence.

Every shipment, route and customer interaction generates valuable data that could drive strategic decisions and revenue growth. Yet in most organizations, this potential remains trapped in disconnected systems or goes uncaptured entirely.

1. [Demystifying digitalization: best practices for supply chain transformation](#)

The implications are significant: 63% of frontline logistics employees lack access to real-time operational data, according to Travis Eide, IDC's transportation and logistics research director.¹ This creates a widening gap between capability and potential, which impacts the following:

- **Market position:** Digital-native competitors are gaining ground by treating data as a strategic asset.
- **Customer experience:** Service expectations are evolving faster than operational capabilities.
- **Revenue growth:** Optimization opportunities remain hidden in disconnected data.
- **Operational agility:** Decision-making lags behind market demands.
- **Innovation capacity:** Valuable patterns and insights stay buried in data silos.

Beyond visibility: the intelligence imperative

Basic shipment tracking has become standard across logistics operations. Leading companies now leverage predictive intelligence to reshape operations in four critical ways:

From tracking to anticipating

- Spot potential delays before they affect deliveries
- Adjust resources based on real-time conditions
- Plan ahead to prevent disruptions

From recording to analyzing

- Turn daily operations data into actionable insights
- Identify efficiency opportunities automatically
- Link operational decisions to business impact

From reacting to preventing

- Address issues before they reach customers
- Create systematic problem-solving approaches
- Scale solutions across your network

From managing to optimizing

- Align physical and digital operations in real time
- Focus resources on highest-value activities
- Adapt quickly to changing conditions

Companies using predictive intelligence improve customer satisfaction, reduce operating costs and solve problems faster.

Danger zones: where data goes dark

The path to intelligence-driven operations requires identifying and addressing the key areas where valuable data disappears from view. Understanding these patterns is crucial for systematic improvement. Common danger zones include:

Fragmented systems

- Multiple systems creating conflicting sources of truth
- Incompatible data formats preventing system integration and your ability to make data-driven decisions in real time
- Legacy systems limiting modernization efforts

Process blind spots

- Undocumented workflows hiding valuable operational knowledge
- Institutional knowledge from staff that hasn't been systematically captured
- Exception handling processes that bypass standard data collection
- Partner interactions occurring outside the primary data systems

Data quality issues

- Incomplete records limiting analytical potential
- Inconsistent data formatting that prevents automated processing
- Outdated information leading to suboptimal decisions
- Validation gaps reducing data reliability
- Manual data entry introducing delays and errors

These challenges compound over time, creating what we call "data debt" — a growing barrier to operational excellence that becomes more expensive to address the longer it persists.

Breaking through: four steps to transform data

Transforming fragmented data into strategic intelligence requires a systematic approach to organizational change. The most successful transformations follow a clear progression:

1

Discovery phase

Start with a comprehensive understanding of your current state.

- Map existing data flows across your ecosystem, including partner touchpoints.
- Document both formal systems and informal workflows that capture critical data.
- Identify high-value data currently lost or underutilized.
- Prioritize gaps based on business impact and implementation effort.

2

Clean-up campaign

Before you can leverage advanced technology, you need clean, reliable data.

- Develop clear data standards that align with business objectives.
- Implement validation rules that ensure data quality at the source.
- Cleanse existing records to create a reliable historical baseline.
- Archive obsolete data while preserving valuable historical insights.

3

Governance implementation

Long-term success requires robust governance that balances control with agility.

- Establish clear ownership for data quality and management.
- Create metrics that measure both data quality and business impact.
- Design update protocols that maintain data integrity without introducing bottlenecks.
- Implement security standards that protect data while enabling appropriate access.

4

System integration

The real power of data emerges when systems work in concert.

- Connect disparate systems through standardized interfaces.
- Establish real-time data flows that enable predictive operations.
- Implement APIs that allow flexible system integration.
- Create feedback loops that continuously improve data quality.

Execution excellence: making data work

Great data alone doesn't drive better business results. Success comes from how effectively your teams use data every day. This requires focusing on three key areas:

1

Empower your frontline

Your workforce is the crucial link between data and action, requiring intuitive interfaces that make information both accessible and actionable. This access must extend beyond desktops to mobile solutions, bringing intelligence directly to the point of decision-making and creating clear feedback channels for frontline insights.

2

Transform decision-making

Intelligence-driven operations demand a fundamental shift from reactive to predictive decision-making through real-time dashboards and advanced analytics. By combining quantum computing capabilities for complex scenarios with routine-task automation, your organization can focus its human capital on strategic innovation.

3

Build data culture

Sustainable transformation begins with digital literacy programs that build confidence and competence with data tools across all levels of the organization. Success requires meaningful incentives that reward data-driven decision-making while fostering cross-functional collaboration that multiplies the value of insights.

Proving impact: key performance indicators

Measuring success requires an approach that captures both immediate improvements and long-term value creation:

Operational metrics

Track the fundamental improvements in your data capability.

- **Real-time data accessibility:** percentage of operations with live data access
- **System integration levels:** degree of automated data flow between systems
- **Data quality scores:** accuracy, completeness and timeliness of critical data
- **Process automation rates:** percentage of decisions automated through data

Business impact

Monitor how improved data operations translate to business results.

- **Revenue per shipment:** capturing optimization opportunities
- **Customer satisfaction scores:** reflecting service improvements
- **Resource utilization rates:** showing efficiency gains
- **Market response times:** measuring operational agility

Cultural evolution

Measure the human side of transformation.

- **Employee data literacy:** capability to use data tools effectively
- **Digital tool adoption:** usage rates of new systems
- **Process compliance:** adherence to data standards
- **Innovation metrics:** new insights generated from data

Remember: This transformation is about creating a more intelligent, responsive and profitable logistics operation.

Transform your logistics future with Unisys

The journey to intelligence-driven operations starts with powerful data foundations. Unisys brings 40+ years of logistics expertise embedded in our pre-trained AI models, delivering value from day one.

Our approach combines strategic vision with practical execution and innovative technologies:

- End-to-end visibility that connects all operational touchpoints
- Real-time optimization powered by reinforcement learning that adapts to your business
- AI models that continuously learn from your data to drive predictive operations
- Patent-pending diverse compute capabilities that deliver real-time recommendations for even the most complex scenarios

We work alongside your team to:

- Leverage our pre-trained models built on decades of logistics data
- Implement AI solutions that evolve with your business needs
- Enable frontline teams through comprehensive onboarding and training
- Drive continuous improvement through measured outcomes

Ready to transform your dark data into strategic advantage? [Visit us online](#) or [contact us today](#) to begin your journey toward logistics excellence.

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