LEVERS OF DIGITAL SOPHISTICATION

WHAT WILL SEPARATE COMPANIES EXPERIMENTING WITH AI FROM THOSE RUNNING THEIR OPERATIONS ON IT?

THE GAP IS NO LONGER ABOUT INTENT.
IT'S ABOUT EXECUTION.

DEEP CURRENT

A Study by Deep Current AS, May, 2026

Executive Summary

Over the past decade, the logistics industry has embraced digital transformation, albeit at a slower pace than many other industries. Freight forwarding and logistics companies have invested in technology, from operational systems and automation tools to more recently, artificial intelligence. Chatbots have been piloted, predictive models tested, and dashboards have become more sophisticated.

Yet despite this visible progress, the way operations actually run has remained largely manual. Logistics workflows continue to rely heavily on fragmented systems, manual processes, and unstructured communication. Documents are still processed manually, emails continue to drive critical workflows, and decisions depend on human interpretation across disconnected systems.

This disconnect between progress and reality lies at the heart of the industry's current challenge.

Deep Current operates at the intersection of logistics operations and applied AI, working closely with freight forwarders and logistics teams to automate document-heavy workflows and embed intelligence into day-to-day execution. This provides us direct visibility into where digital initiatives succeed, where they stall, and what breaks when systems attempt to scale.

To better understand the gap between ambition and execution at an industry level, Deep Current conducted a survey across logistics companies in Europe and the Middle East. The findings highlight a clear divergence between intent and operational reality:

- **72% of companies plan to invest in document automation in the next 12–18 months**
- **Only 29% have implemented digital tools across core operational workflows**
- **57% report shipment delays caused by document errors**
- **61% still rely on emails and spreadsheets for operational communication**
- **47% cite legacy system integration as the biggest barrier to adoption**

This is not a lack of ambition. It is a lack of operational clarity and prioritisation.

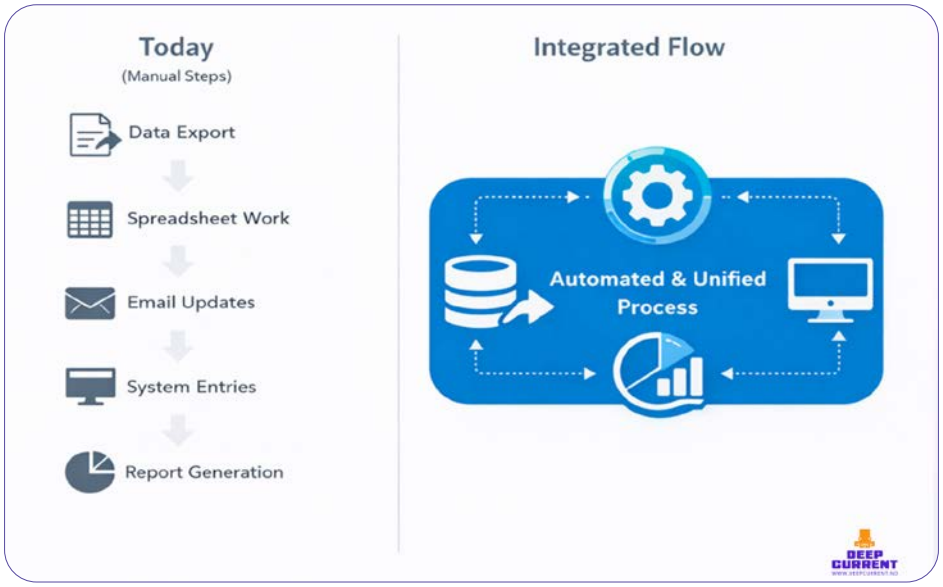
After several years of experimentation, expectations have shifted. Boards and leadership teams are no longer looking for pilots, rather they are looking for measurable operational outcomes. At the same time, teams cannot absorb additional complexity, disruptions continue to test resilience, and efficiency is becoming a key competitive differentiator.

As a result, 2026 represents a turning point. Not because AI has suddenly become more powerful, but because the pressure to make it work has intensified.

The companies that will lead will not be those that simply adopt AI, but those that operationalise it. This means embedding intelligence into workflows, enabling real-time decision-making, connecting systems and data, and building resilience into operations.
In this context, digital sophistication becomes the defining capability. It is not a single tool or system, but the ability to align data, decisions, workflows, resilience, and governance into a cohesive operating model.

LEVER 1
Integrated digital foundations

Integrated digital foundations refer to the ability of systems, data, and workflows to operate as a connected environment, where both structured and unstructured information flows seamlessly across operations.



Most logistics companies today run on unconnected, fragmented operating and tech systems, where human layer has become the “integration layer”, solving problems with both structured and unstructured data sources.

Across most organisations, the core systems, like TMS, ERP, WMS, do not operate as a unified environment. Alongside them sits an even more critical layer: emails, PDFs, spreadsheets, and messaging threads where much of the real operational work actually happens. Data exists everywhere. But it does not flow.

This fragmentation was also highlighted in the December 2025 survey that Deep Current initiated:

- **61% of logistics teams still depend on emails and spreadsheets for communication**
- **47% cite legacy systems as the biggest barrier to integration**

“Digital maturity in 2026 will depend less on owning technology and more on connecting it.” Shared Tamim Fannoush, founder and CEO, Deep Current.

Once we have an integrated network, the system can achieve synchronisation across various levels such as real-time communication between shipment, document, and financial flows. Till today, one of the biggest blind spots remains unstructured communication. For example, inputs from various sources such as bills of lading, invoices, customs declarations, contracts, and operational emails still drive critical decisions, yet most AI pilots tend to ignore these critical inputs because they are messy. Without structured access to all files and communication flows, AI remains superficial.

"AI is not limited by model capability anymore, rather it is limited by data readiness. If your documents and communication streams are not structured and connected, your AI will never move beyond surface-level automation." – Tamim Fannoush, Founder & CEO, Deep Current AS

WHAT THIS MEANS OPERATIONALLY

- Reduced dependency on manual data handling
- Fewer document-driven errors and delay
- Faster processing across shipments and communications
- A system where AI can operate with full context, not partial visibility

LEVER 2
Decision intelligence beyond visibility

If we were to sum up progress in the last decade, the entire logistics industry has been chasing visibility. Dashboards, control towers, alerts, and tracking systems have made it simpler to see what's happening across shipments.

Teams have dashboards to catch delays, monitor deviations, and see what's working, in real time. But visibility doesn't generate value for its own sake. Even if you do know something has gone wrong, that's just the beginning. The real difficulty is determining what to do next.

Digitally sophisticated organisations are shifting the paradigm in the event of an escalation from – "what is happening" to "what are our best options." Systems start to, instead of just bringing up raw information:

- √ Prioritise which issues should be addressed first.
- √ Recommend actions based on context.
- √ Highlight trade-offs (cost vs service impact).
- √ Use historical trends to inform decisions.
- √ Allow for quicker implementation through predetermined guardrails.

The role of the operator changes from analysing every situation to validating and acting on recommendations. This transition only works when decision support is interwoven directly with workflows. Not as a dashboard. Not as a separate tool.

WHAT THIS MEANS OPERATIONALLY

- **Quicker response times for exceptions.**
- **Less cognitive load on teams.**
- **Improved decisions with greater regularity.**
- **Reduced reliance on personal experience.**
- **Capacity to scale-up without enlarging number of workers.**

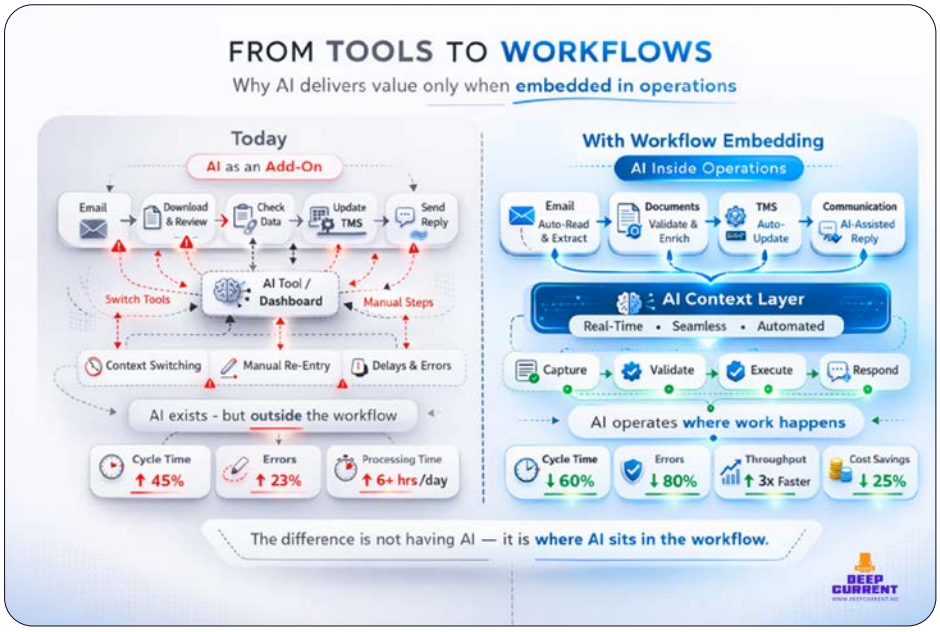
In logistics, the companies who win, are not the ones who see problems first, but the ones who solve them fastest.

AI becomes operational when it augments decision loops, not when it adds another dashboard. This is where platforms like Ada (Deep Current's AI tool that handles the inbox and manages client queries in real time) come into play. By synthesising structured and unstructured inputs into contextual recommendations, decision support becomes embedded in workflows rather than layered on top.

"Visibility tells you there is a problem, while decision intelligence tells you what to do about it. In 2026, the competitive edge comes from shortening the time between signal and action." – Tamim Fannoush, Founder & CEO, Deep Current AS

LEVER 3
Workflow embedding of tools

Most causes for an AI implementation failure are rooted in the fact that they are treated as add-ons. Looking at a typical workflow where a new tool gets implemented and a pilot is launched, eventually a new dashboard is created as an output, but the core operational workflow remains unchanged.



Here's where Deep Current's AI tools come into play

Tools like Documus Prime and Extractor Max address this friction by introducing intelligence directly into document-heavy steps of the workflow.

Extractor Max interprets and extracts data from both structured and unstructured documents with high accuracy, while Documus Prime identifies document types and cross-checks information across documents to detect discrepancies.

Together, they convert unstructured inputs into structured, usable data and enable real-time validation within existing workflows — reducing manual intervention and allowing AI to support execution where decisions are actually made.

What this looks like today

A typical workflow still follows a familiar pattern:

An email arrives with shipment details. An operator downloads the document, checks key fields, and updates the TMS. If something looks off,

they open another tool or dashboard to investigate. They go back, correct entries, and send a response.
At multiple points in this process, the operator is forced to switch between tools, re-establish context and manually bridge gaps between systems. Each step is small. But together, they create friction.

This is also reflected in the data:

- **Only 29% of companies have implemented digital tools across core workflows**
- **57% report shipment delays caused by document error**

Why add-on AI breaks down

When AI operates outside the workflow, It requires manual input to function, it produces outputs that need interpretation, it introduces additional steps instead of removing them.

Over time, teams stop relying on these tools, not because they are ineffective, but because they disrupt the way work actually happens.

Workflow embedding shifts AI from a destination to an infrastructure. Instead of sitting in a separate interface, AI becomes part of each step in the process.

The same workflow transforms:

- **Emails are automatically read and interpreted**
- **Documents are validated and cross-checked in real time**
- **System updates happen without manual entry**
- **Responses are generated with full operational context**

There is no need to switch tools, re-enter data or reconstruct context. AI operates within the workflow, not alongside it.

Where this becomes operationally critical

This shift is especially critical in document-heavy environments, where even small errors can create large disruptions.

A missing HS code, an incorrect consignee detail, or a mismatch in invoice data can delay an entire shipment. Traditionally, these issues are caught manually — often too late.

When intelligence is embedded into workflows:

- **documents are interpreted as they arrive**
- **inconsistencies are flagged instantly**
- **corrections happen before they impact execution**

This transforms workflows from reactive to continuous.

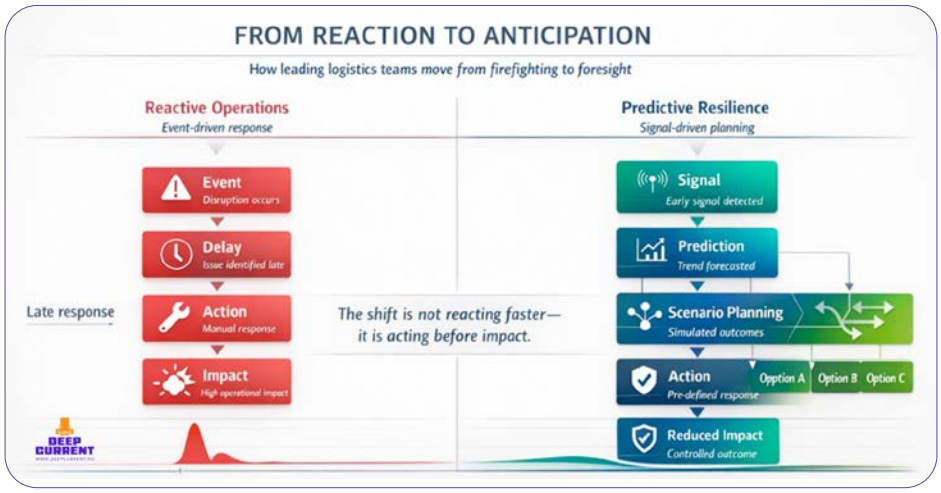
WHAT THIS MEANS OPERATIONALLY

- Reduced cycle time across shipment processing
- Fewer document-driven errors and delays
- Lower dependency on manual intervention
- Increased throughput without additional headcount
- More consistent execution across teams

Workflow embedding is where AI stops being an experiment and starts becoming an operational capability. Because the difference is not whether AI exists, it is where it sits in the workflow.

LEVER 4
Predictive resilience and scenario capability

It's a given that geopolitical volatility is now the new world order. For years, the industry has responded to this volatility reactively. A disruption occurs, teams assess impact, and resultantly, actions are taken under pressure. But in 2026, this approach is no longer sufficient. The competitive advantage is shifting from reaction to anticipation.



Without forward visibility, organisations are constantly firefighting, solving immediate problems without understanding future implications. Predictive resilience enables organisations to move from *"What just happened?"* to *"What is likely to happen next and how should we respond?"*

This is achieved through:

- **Scenario modelling across routes, capacity, and demand**
- **Predictive signals based on historical and real-time patterns**
- **Risk scoring across shipments, suppliers, and trade lanes**
- **Early warning systems that highlight potential disruptions before they occur**

Instead of reacting to events, teams can simulate outcomes and choose the most effective course of action in advance.

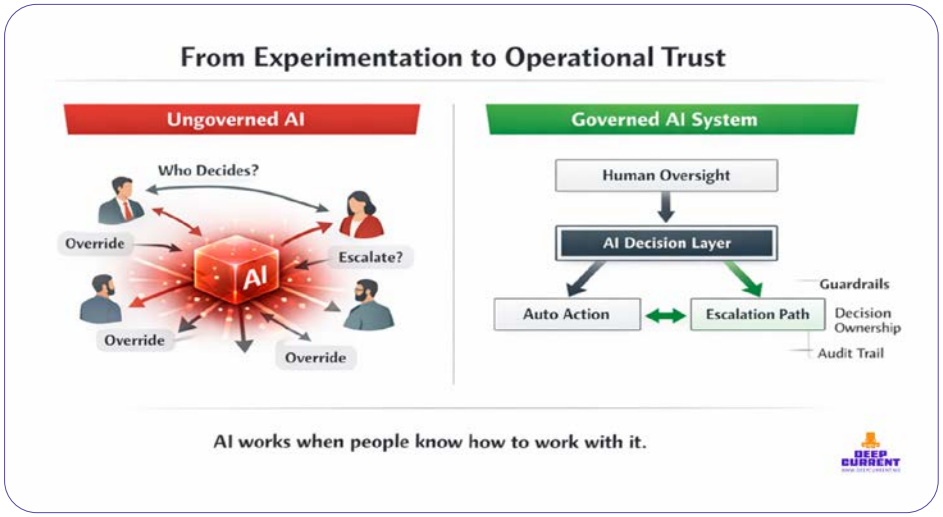
WHAT THIS MEANS OPERATIONALLY

- Earlier identification of potential disruptions
- Better planning across capacity and routing decisions
- Reduced impact of delays and exceptions
- Improved customer communication and expectation management
- More stable and predictable operations in volatile conditions

"Resilience in 2026 is not about reacting faster, it is about seeing sooner. The companies that simulate before they suffer will consistently outperform those that simply respond." – Tamim Fannoush, Founder & CEO, Deep Current AS

LEVER 5
Governance, skills, and human-AI partnership

"Operational AI is not about replacing logistics professionals. It is about elevating them. Governance and skills will determine whether AI becomes a multiplier or a liability."
– Tamim Fannoush, Founder & CEO, Deep Current AS



As AI moves from experimentation into core operations, a new set of questions emerges which are not about capability, but about control.

- **Who owns AI-assisted decisions?**
- **Where are the boundaries of automation?**
- **When should a system act, and when should a human intervene?**
- **How are errors identified, audited, and corrected?**

These are not technical questions, they are operational and organisational.

In many organisations, AI is introduced without a clear operating model. Tools are deployed, but decision ownership remains ambiguous, escalation paths are undefined, teams are unsure when to trust the system and accountability is fragmented.

As a result, decisions are either over-automated or constantly overridden, teams fall back to manual processes and AI adoption stalls after initial pilots. The issue is not resistance to technology. It is lack of clarity.

Why governance becomes critical

As AI begins to influence real operational outcomes like shipment routing, document validation, customer communication, the stakes increase. Without governance:

- **errors become harder to trace**
- **inconsistencies increase across teams**
- **trust in the system erodes**

At scale, this creates risk, not just operational, but reputational. This is why many organisations struggle to move beyond pilot stages, even when the technology is proven.

What digitally mature organisations do differently

Digitally sophisticated organisations treat AI as an operational capability, not just a tool.

They establish:

1. Clear decision ownership

- Defined responsibility for AI-assisted actions
- Visibility into who approves, overrides, or escalates

2. Structured guardrails

- Rules for when AI can act autonomously
- Thresholds for human intervention

3. Auditability and feedback loops

- Ability to trace decisions back to inputs
- Continuous learning from past outcomes

The shift in human roles

As workflows become more automated and decisions more guided, the role of operational teams evolves.

From:
- manual processing
- repetitive validation
- reactive coordination

To:
- exception management
- decision supervision
- strategic prioritisation

This is not a reduction in human involvement.
It is a shift toward higher-value work.

WHAT THIS MEANS OPERATIONALLY

- Clear accountability across AI-assisted workflows
- Faster adoption and higher trust in systems
- Reduced risk of errors and inconsistencies
- Better alignment between technology and teams
- Sustainable scaling of AI across operations

Organisations that combine structured data, embedded workflows, and clear governance frameworks are the ones that successfully transition from experimentation to operational AI.

Where Do You Stand Today?

Most organisations today are not starting from zero.
But very few are operating with fully integrated, AI-enabled systems.
The question is not whether digital tools are present, but whether they are working together to drive real operational outcomes.

A useful starting point is to assess where your organisation stands across the five levers:

- **Are your documents and communication fully integrated into your operational systems?**
- **Are decisions guided by intelligence, or manually interpreted at every step?**
- **Does AI operate within your workflows, or outside them?**
- **Can your teams anticipate disruptions, or only respond once they occur?**
- **Are governance structures in place to ensure consistent, accountable use of AI?**

For most organisations, the answers reveal a gap between capability and execution.

Closing this gap is what defines the transition from digital adoption to operational AI.

The Deep Current Approach

Deep Current is built around a simple idea:

Operational AI only works when it is embedded where work actually happens.

In logistics, that means going beyond systems and dashboards, into the documents, emails, and workflows that drive day-to-day execution.

Deep Current enables this by:

- **Converting unstructured inputs such as documents and communication into structured, usable data**
- **Embedding intelligence directly into operational workflows**
- **Supporting real-time, context-aware decision-making across teams**
- **Integrating seamlessly with existing systems, without requiring full replacement**

Take the next step

If you are exploring how to move from fragmented digital adoption to operational AI:

- **Assess your maturity across the five levers**
- **Identify where operational friction still exists**
- **Explore how intelligence can be embedded into your existing workflows**

Connect with the Deep Current team to see how these capabilities can be applied in practice.

AI TOOLS FOR LOGISTICS - BUILT BY LOGISTICS PROS, FOR LOGISTICS PROS

ADA - YOUR AI SALES ASSISTANT FOR LOGISTICS

Ada handles incoming emails from clients, instantly, accurately, and 24/7.

- Replies immediately to client requests
- Collects key delivery details like size, destination, and timing
- Supports your team by handling the first contact

Benefit: Keeps your clients happy and your sales team focused.

MUSUBI - CULTURAL COMMUNICATION INTELLIGENCE

Musubi ensures communication is accurate and contextually appropriate.

- Converts English communication into culturally accurate Japanese
- Supports formal, casual, and informal business contexts
- Maintains tone precision across communications

Benefit: Improves clarity and trust in cross-border communication.

DOCUMUS PRIME - AI FOR LOGISTICS PAPERWORK

Documus Prime reviews and improves your shipping documents fast.

- Finds missing or incorrect data
- Suggests fixes and ensures compliance
- Works with your existing systems

Benefit: Reduce costly errors and get paperwork right the first time.

WHY DEEP CURRENT

Built by Logistics Pros, For Logistics Pros

- We've walked in your shoes and lived your pain points, from ops chaos
- to cargo delays.
- Our tools are rigorously tested and trusted by logistics professionals
- before coming to market.
- Seamless integration with your existing suite; we respect your operational reality rather than forcing you to redesign your tech stack around us.

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