

Technology, Talent and Transformation

in an Increasingly Complex Industry

Orchestrating AI in Finished Vehicle Logistics

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The challenge is not whether AI will enter FVL.
The challenge is whether the system can perform as one.



RAIL



ROAD



YARD



PORT



VESSEL



DATA NODES

Why this discussion matters now

Complexity is in the FVL ecosystem is not noise. It is polyphony.



Volatility

Demand swings, production changes, disruptions and short-term re-planning.



Fragmentation

Multiple transport modes, assets, compounds, IT systems and regional practices.



Pressure

Cost, capacity, CO₂, service quality and customer visibility must be balanced at once.



Accountability

Decisions increasingly require traceability, data quality and governance discipline.



**AI becomes relevant when it improves decisions across this complexity —
not when it merely automates isolated tasks.**

The AI Challenge

**The AI adoption challenge is fading.
The organizational challenge is beginning.**

BCG finds that companies are increasingly investing in AI, but many still have no or little gains in business value.

42%

of regular frontline AI users
report saving a full workday
or more per week

66%

still receive limited or no
guidance on what to do with
the time saved

**If AI frees capacity, but the if operating model remains
unchanged, value leaks out instead of being captured.**



*Better instruments create no value
if the organization does not know
how to perform with them.*

The Value Added

**AI in FVL should not be framed as a catalogue of tools.
It should be framed as a new capability for decision intelligence
across the logistics ecosystem.**

The Technology

Data, models, integration and automation that improve operational decisions.

The Governance

Decision rights, accountability, risk controls and responsible AI operating discipline.

The Human factor

Skills, adoption, trust and work redesign so people can use AI well.

Value is created only where all three mature together.

Where AI can, and already does create Value in FVL



Planning & capacity

- ✓ Planning & capacity
- ✓ Volume forecasts
- ✓ Capacity allocation
- ✓ Network optimization



Execution control

- ✓ Execution control
- ✓ ETA prediction
- ✓ Exception detection
- ✓ Dynamic re-routing



Yard & compound

- ✓ Yard & compound
- ✓ Vehicle localization
- ✓ Slotting logic
- ✓ Dwell-time reduction



Quality & damage

- ✓ Image recognition
- ✓ Damage coding
- ✓ Evidence management



Sustainability

- ✓ Modal split support
- ✓ CO₂ estimation
- ✓ Empty-mile reduction



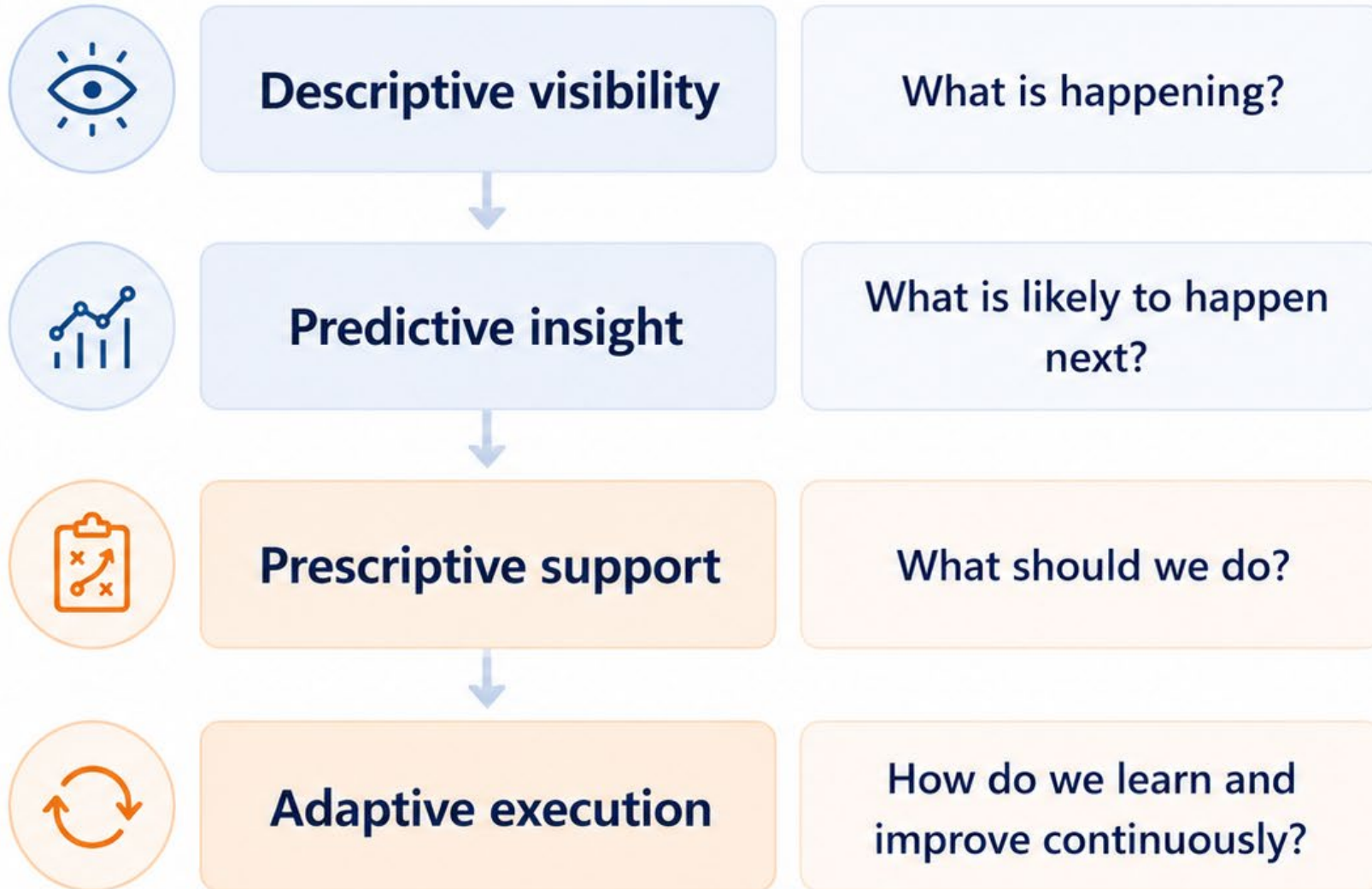
Customer visibility

- ✓ Status transparency
- ✓ Predictive alerts
- ✓ Service-level monitoring



Start with decisions that are frequent, data-rich, operationally painful and economically relevant.

AI Technology: from Automation to Decision Intelligence



The most valuable AI systems are not the ones that produce more data.

They improve the quality, speed and consistency of operational decisions.

***Responsible AI* must become an Operating Capability**

***BCG and MIT Sloan Management Review* report that *responsible AI* is widely adopted in principle, but much less mature in practice.**

85%

of companies have
implemented a *responsible*
AI program

25%

have fully mature frameworks to
manage risk, build trust and
scale AI

Regulatory horizon

The EU AI Act entered into force on 1 Aug 2024 and becomes broadly applicable from 2 Aug 2026, with exceptions and staged obligations.

For FVL, responsible AI is not just legal readiness. It is operational readiness: knowing where AI may decide, where humans must decide and where the system must stop.

The Governance: Building Trust before Scaling AI

Building AI is getting easier. Building trust is not.

Decision rights

Who may accept, override or escalate an AI recommendation?

Data governance

Who owns data quality, access, lineage and sharing rules?

Model assurance

How are performance, bias, drift and failure modes monitored?

Operational controls

Which safeguards protect safety, service levels, compliance and cybersecurity?

Ecosystem rules

How do OEMs, LSPs and IT partners share accountability?

Governance is not a brake on AI.

It is the condition for scaling AI across organizations that depend on each other.

The Human Factor: AI Changes Work before it Changes Organizations

The hidden risk is not resistance to AI. The hidden risk is unmanaged adoption.



Trust

People must understand when AI is reliable — and when it is not.



Skills

Operational experts need data literacy, prompt literacy and AI judgement.



Role clarity

AI changes what planners, dispatchers, quality experts and managers are expected to do.



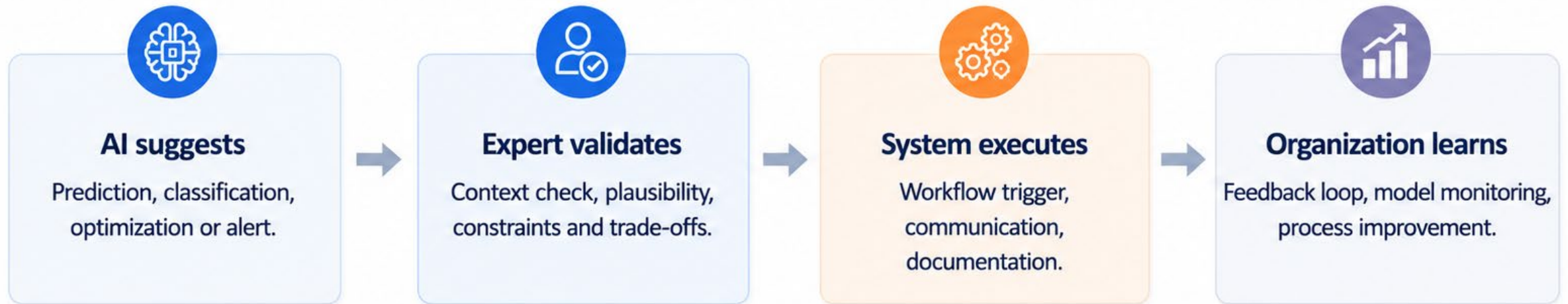
Work redesign

Freed-up time must be redirected into higher-value work: exception logic, customer collaboration, risk prevention.



AI adoption and transformation is foremost also a leadership task: translating productivity into new work, not just faster old work.

A Practical Operating Model: Human-in-the-Loop where it matters



Three non-negotiables for FVL

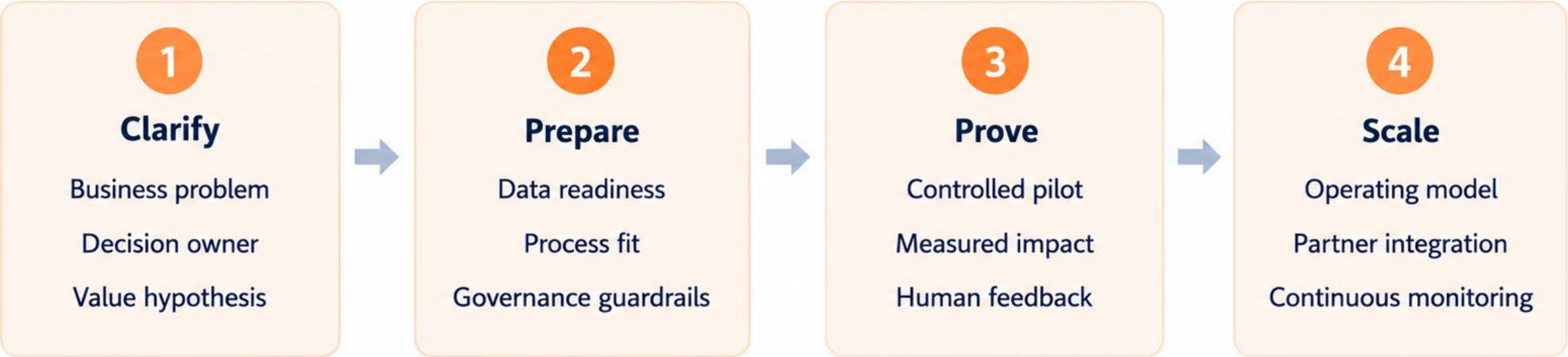
- 1 Define decision classes: routine, supervised, critical.
- 2 Make escalation paths explicit.
- 3 Capture overrides as learning data, not as failure.



**A human-in-the-loop model is weak
if it only adds approval.
It is strong when it captures expertise
and improves the system.**

From Pilots to Scale an AI Readiness Roadmap for FVL

AI Readiness Roadmap for FVL



A pilot proves that AI can work. Scaling proves that the organization can work with AI.



Suggested sequencing: do not start with the most impressive use case; start with the use case where data quality, accountability and measurable value are strongest.

The FVL Ecosystem

What OEMs, LSPs and IT partners each need to bring



OEMs

- ✓ Demand signals
- ✓ Business priorities
- ✓ Governance expectations
- ✓ Data-sharing logic



LSPs

- ✓ Operational expertise
- ✓ Execution data
- ✓ Exception knowledge
- ✓ Feasibility feedback



IT partners

- ✓ AI architecture
- ✓ Integration capability
- ✓ Model assurance
- ✓ Security-by-design



**AI in FVL will not scale as a unilateral project.
It requires shared standards, shared trust and shared accountability
across the network.**

TECHNOLOGY
creates options

GOVERNANCE
creates trust and coordination

TALENT
converts both into judgement and action

The next phase of AI in Finished Vehicle Logistics is not about adding more tools. It is about preparing the business — structurally, responsibly and humanly — for **AI-enabled value creation**.