

WORKED EXAMPLES

VTCDO Governance Suite · Meridian Wire and Cable Co.

Five instruments. One company.

This document shows how the five instruments in the VTCDO governance suite work together in a single engagement. Every example uses the same composite company, Meridian Wire and Cable Co., so you can trace the same AI systems, the same gaps, and the same people across all five instruments. Meridian is a composite: the names and details are invented, and the situation reflects problems Jay has seen and solved in manufacturing.

About Meridian Wire and Cable Co.: a \$280M mid-market industrial manufacturer producing specialty wire and cable products for industrial, automotive, and infrastructure markets. PE-backed since 2021. Three AI and data systems in active operation. A new CIO joined six months ago and is still orienting. The PE sponsor is targeting a 24-month exit window and has asked the leadership team to assess AI and data posture ahead of pre-marketing preparation.

THE THREE AI SYSTEMS IN SCOPE

AI system	Business function	Risk class	Decision criticality	Named owner	Current status
Demand Forecasting AI	Weekly production planning and finished-goods inventory decisions	MEDIUM	Critical	COO	Production: evidence Directional
Quality Inspection Model	Batch disposition: accept or hold	HIGH	Critical	VP Manufacturing	Production: evidence Audited
Pricing Recommendation Engine	Customer pricing approvals	MEDIUM	Significant	VP Sales	Production: no instrument coverage

Meridian at a glance: key posture metrics across the suite		
Metric	Current state (Meridian)	Source instrument
Overall portfolio maturity	2 - Proxy metrics (predominantly Directional evidence)	AI Portfolio Snapshot
Portfolio R/Y/G status	Y / G / R (Demand Forecasting / Quality Inspection / Pricing Engine)	AI Portfolio Snapshot
Diligence readiness score	2.5 - Investor-ready boundary; soft flag on Dimension 3	AI Diligence Readiness Review
Governance control posture	Emerging - 6 of 12 controls Not in place; 5 Partial; 1 In place	AI Governance Accountability Register
Highest-priority gap	Pricing engine: no decision rights, no override protocol, no evidence retention	All instruments
Regulatory exposure	Exposure assessment not yet completed; Article 50 in effect, high-risk from December 2, 2027	AI Governance Accountability Register - Section 3

FIVE INSTRUMENTS, ONE WORKFLOW

#	Instrument	What it answers for Meridian	Key finding in this example
1	AI Portfolio Snapshot	What AI systems does Meridian operate, and where are the gaps?	Pricing engine has no instrument coverage: priority gap. Overall portfolio maturity: 2.
2	AI Investment Business Case	Can Meridian's AI investment return narrative survive CFO scrutiny?	All three initiatives have Directional evidence only. Demand forecasting has the strongest case but is not investor-ready.
3	AI Governance Accountability Register	Who owns AI decisions at Meridian, and what controls are in place?	Pricing engine has no decision rights documentation. Six of twelve governance controls are Not in place.
4	AI Diligence Readiness Review	Is Meridian ready for a buyer's diligence team?	Overall score 2.5: Investor-ready boundary. Dimension 3 guardrail fires. Not ready to go to market without pricing engine decision rights remediation.
5	Board Questions Pack	What should Meridian's board be asking about AI?	Three questions a director should ask before the next value creation review. Management's current answers to each.

Example 1 of 5

AI Portfolio Snapshot

Instrument purpose: identify portfolio gaps and route initiatives to the right instrument

Worked example only. Do not use as a live instrument.

Portfolio snapshot table: Meridian Wire and Cable Co.

One row per AI system. The pricing engine status is Red: no instrument coverage and Directional evidence only.

G: Governed: owner named, evidence Audited or Operationally Verified, no overdue actions			Y: Attention needed: evidence Directional, maturity 1 to 2, or value timing delayed			R: Escalation: no named owner, no override, or instrument coverage = Neither	
R/Y/G	Initiative	Accountable exec	Investment	Maturity	Evidence confidence	Risk class	Instrument coverage
Y	Demand Forecasting AI	COO	\$450k	3	Directional	MEDIUM	Business Case: in progress
G	Quality Inspection Model	VP Manufacturing	\$280k	4	Audited	HIGH	Business Case ✓ Register ✓
R	Pricing Recommendation Engine	VP Sales	\$190k	2	Directional	MEDIUM	Neither: priority gap

Status reflects initiative health, not portfolio-wide governance posture. For governance control posture, see Example 3 (AI Governance Accountability Register).

Portfolio posture summary

Overall portfolio maturity 2: Proxy metrics <i>Most initiatives reporting activity metrics. No outcome-level measurement confirmed for two of three active systems.</i>	Primary portfolio gap Evidence and accountability gaps <i>Pricing engine has no formal business case and no accountable owner documentation. Demand forecasting is Directional only.</i>	Recommended first action Open AI Governance Accountability Register <i>VP Sales to name accountable owner for pricing engine by 2027-03-15. Open Register immediately for that initiative.</i>
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What this routes to: pricing engine, Neither coverage: open the AI Governance Accountability Register immediately. Demand forecasting, Yellow status: open the AI Investment Business Case to build Operationally Verified return evidence. Quality inspection, Green: no immediate action required.

Example 2 of 5

AI Investment Business Case

CFO variant: defending investment return to the finance function

Worked example only. Do not use as a live instrument.

Initiative inventory: CFO review

Five columns showing each initiative's committed investment, promised outcome metric, expected benefit timing, maturity level, and evidence confidence. All three Meridian systems start at Directional or worse.

Initiative	Committed investment	Promised outcome metric	Expected benefit timing	Maturity level	Evidence confidence
Demand Forecasting AI	\$450k	Reduce forecast error 8%; reduce FG inventory days by 2	6 months from go-live	3	Directional
Quality Inspection Model	\$280k	Reduce scrap cost 12%; achieve 94% correct disposition rate	12 months from go-live	4	Audited
Pricing Recommendation Engine	\$190k	Improve margin capture 3 to 5% through optimized pricing decisions	In-year	2	Directional

Evidence confidence: Audited = independently validated; Directional = management estimate only. Demand forecasting has the strongest directional case but is not yet investor-ready.

Activity-to-outcome gap analysis

What Meridian is currently reporting to finance versus what finance needs to see to defend continued investment.

Initiative	What is currently reported (activity)	What should be reported (outcome)	Metric owner
Demand Forecasting AI	Model deployed, 96% uptime, 6.2% forecast error reduction reported	Inventory carrying cost change in dollars; margin impact of reduced overstock	COO
Quality Inspection Model	94% correct disposition rate; 1,200 batches processed	Scrap cost reduction in dollars; yield improvement as percentage of production value	VP Manufacturing
Pricing Recommendation Engine	Recommendation engine live; 87% of quotes use system output	Margin capture improvement in percentage points; revenue per transaction change	VP Sales, not yet assigned

Gap summary

All three initiatives are reporting activity metrics rather than financial outcomes. The most significant gap is the pricing engine: no business case was ever documented, no outcome metric was ever defined, and no owner has been assigned to measure the return. The demand forecasting return narrative exists but has not been connected to inventory carrying cost or margin impact in a way that would survive CFO or investor scrutiny. Quality inspection is the only initiative with Audited evidence, but even there the original scrap cost reduction commitment has not been formally tracked.

CFO decision: recommended financial position

DECISION REQUESTED

- ☐ Continue full funding: return metrics are on track and defensible
- ☒ **Continue with revised metrics: return framing requires adjustment**
- ☐ Pause pending remediation: activity metrics are being substituted for outcome measurement
- ☐ Discontinue: investment cannot be connected to measurable operating outcome

Supporting rationale

Quality inspection is the only initiative with Audited return evidence and should continue at current funding. Demand forecasting should continue but requires a revised reporting framework connecting forecast improvement to carrying cost reduction. The COO and CFO should agree on the measurement methodology within 60 days. Pricing engine funding should be reviewed: no business case, no outcome metric, and no measurement in place after 18 months of operation is not a defensible position for a PE-backed company preparing for exit.

Example 3 of 5

AI Governance Accountability Register

Executive summary table and decision rights: who owns what at Meridian

Worked example only. Do not use as a live instrument.

Executive summary: AI governance status at a glance

One row per AI system. Color coding shows governance posture at a glance. Pricing engine is Red: no named owner for decisions, no instrument coverage.

G: Governed	Y: Attention needed	R: Escalation required
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R/Y/G	AI system	Material decision	Accountable exec	Decision criticality	Maturity	Confidence	Reconstructability	Last incident	Next review
Y	Demand Forecasting AI	Weekly production plan approval	COO	Critical	3	Directional	Partial	None	2027-03-15
G	Quality Inspection Model	Batch disposition: accept or hold	VP Manufacturing	Critical	4	Audited	Yes	None	2027-03-15
R	Pricing Recommendation Engine	Customer pricing approval	VP Sales	Significant	2	Directional	No	2026-12-14	2027-03-15

Reconstructability: the organization can reconstruct which system version was used, who approved the decision, what override rights existed, and what the outcome was. Pricing engine: No. This is the primary governance gap.

Decision rights register: pricing engine detail

The pricing engine is the gap driving the Red status. This is what the decision rights register looks like for that system compared to the quality inspection model.

Decision type	AI system	Human reliance level	Decision owner	Escalation owner	Decision frequency	Override protocol	Evidence retention
Batch disposition	Quality Inspection Model	Human approves every batch	VP Manufacturing	Plant Manager	Real-time	Documented hold/release protocol. Overrides logged in QMS.	7 years: regulatory schedule
Pricing approval	Pricing Recommendation Engine	Override available, but no documented process	VP Sales, not formally documented	None defined	Daily, high volume	No override protocol documented	None: no retention policy

GUARDRAIL: TRIGGERED

Decision Integrity Test 1: if the pricing engine were audited tomorrow, Meridian could not reconstruct which model version was in use, who approved any specific pricing decision, or what override rights existed. This is a standalone material risk. Decision Integrity Test 2: if the pricing engine went dark tomorrow, no one at Meridian could identify within one hour who was responsible for manual pricing decisions or what the fallback process would be.

Overall governance control posture

Overall control posture: Emerging

Six of twelve governance controls are Not in place. Five are Partial. One is In place (quality inspection decision rights). AI use policy exists in draft but is not board-approved. EU AI Act exposure has not been assessed. Article 50 obligations have applied since August 2, 2026, and high-risk obligations apply from December 2, 2027, so this is time-sensitive. The new CIO has identified all of these as priorities but the remediation plan is not yet formalized. Governance posture: Emerging.

Example 4 of 5

AI Diligence Readiness Review

Pre-exit variant: is Meridian ready for a buyer's diligence team?

Worked example only. Do not use as a live instrument.

Diligence readiness scorecard

All six dimensions scored. Overall average 2.5, at the Investor-ready boundary. Soft flag fires on Dimension 3.

Soft flag: Dimension 3 (Decision accountability) scores 2 (Developing). This is noted in the executive summary even though the overall average reaches the Investor-ready band. A developing posture on decision accountability creates narrative risk a mathematical average does not surface.

Dimension	Score	Primary readiness gap	Priority action
1 AI system inventory and documentation	3	Pricing engine absent from inventory until surfaced during this review	Complete formal inventory entry and owner attestation within 30 days
2 Investment and return evidence	2	All three systems have Directional evidence only: no Operationally Verified return	Develop Operationally Verified evidence for demand forecasting AI first
3 Decision accountability and reconstructability	2	Pricing engine has no decision rights, no override protocol, no evidence retention	Document decision rights and override protocol before going to market
4 Governance and control posture	2	AI use policy not board-approved. EU AI Act exposure unassessed	Board-approve AI use policy. Commission EU AI Act assessment
5 Operational resilience	3	Vendor contracts not reviewed for change of control. Quality inspection fallback untested	Initiate vendor contract review
6 Data and IP ownership	3	Third-party data feed contracts not reviewed for transferability	Commission legal review of data feed transferability
Overall average	2.5	$Sum\ 15 \div 6 = 2.5$	<i>Investor-ready band; see soft flag on Dimension 3</i>

OVERALL READINESS VERDICT

Transaction-defensible (avg 3.5 to 4.0)

► **Investor-ready (avg 2.5 to 3.4)** ← Meridian 2.5. Soft flag on Dimension 3 means this verdict requires qualification in the executive summary.

Developing (avg 1.5 to 2.4)

Not diligence-ready (avg 1.0 to 1.4)

Executive summary

Meridian's overall diligence readiness score is 2.5, placing the organization at the lower boundary of the Investor-ready band. The most significant gap, and the one that requires resolution before going to market, is Dimension 3: the pricing recommendation engine has no documented decision rights, no override protocol, and no evidence retention. This creates a standalone material risk regardless of the overall average. Meridian should not proceed to market without either remediating this gap or securing legal advice on disclosure obligations. The primary pre-marketing workplan should prioritize the pricing engine decision rights, the EU AI Act exposure assessment, and converting the demand forecasting return narrative to Operationally Verified.

GUARDRAIL: TRIGGERED

Dimension 3 (Decision accountability) scores 2 (Developing). The pricing engine decision rights gap is documented as a disclosed risk item in the executive summary above. Meridian should not proceed to market without either completing the decision rights documentation and override protocol, or securing legal advice on disclosure obligations to a prospective buyer.

Example 5 of 5

Board Questions Pack

Three questions a Meridian board director should ask at the next value creation review

Worked example only. Do not use as a live instrument.

These questions are drawn from the AI Governance Accountability Register and the AI Diligence Readiness Review for Meridian. A director who asks all three in sequence will surface the pricing engine gap, the evidence gap, and the EU AI Act exposure, the three highest-priority risks in Meridian's current AI posture, without needing to have read either instrument.

Question 1

For each AI system influencing a material business decision, who is the named individual accountable for that decision, and can you show me where that accountability is documented?

Why this question matters	What a good answer looks like	Meridian's current answer	Follow-up if the answer is weak
Named individual accountability is the first governance control to break down at scale. A team, a department, or a system cannot be held accountable; only a person can. If the board cannot get a name with a documented accountability assignment, it has no governance.	A named individual for each material AI-influenced decision, a reference to the decision rights register where the accountability is documented, and the date it was last reviewed.	The COO owns the demand forecasting production plan. The VP Manufacturing owns batch disposition. For the pricing recommendation engine, management cannot name a documented decision owner. The VP Sales uses the output but there is no formal accountability assignment.	Ask: when will a documented decision owner be named for the pricing engine, and who is responsible for ensuring this happens? If the answer is unclear, request that management return to the board with a named owner and documentation at the next meeting.

Question 2

For our AI investments, what is the financial return, how was it measured, and would that measurement survive scrutiny from a buyer conducting diligence on this company?

Why this question matters	What a good answer looks like	Meridian's current answer	Follow-up if the answer is weak
A specific financial outcome (cost reduction, margin improvement, inventory carrying cost change) with evidence that has been independently validated or at minimum operationally confirmed by the finance function. Not a system uptime percentage or a	A specific dollar or percentage financial outcome for each material AI initiative, the measurement methodology used to arrive at that figure, and the evidence confidence level: Audited, Operationally Verified, or Directional.	Quality inspection has Audited return evidence: scrap reduction confirmed by finance. Demand forecasting has a 6.2% forecast error reduction documented but the connection to inventory carrying cost has not been calculated. Pricing engine has no financial return documentation at all: no business case was ever written.	Ask: what is the plan to connect the demand forecasting improvement to a specific financial outcome, and by when? For the pricing engine, ask: on what basis did the board authorize this investment if no return metrics were defined?

Why this question matters	What a good answer looks like	Meridian's current answer	Follow-up if the answer is weak
deployment completion date.			

Question 3

Has the company assessed which of its AI systems fall under the EU AI Act's high-risk classification, and what is the status of compliance for any system that does?

Why this question matters	What a good answer looks like	Meridian's current answer	Follow-up if the answer is weak
A completed exposure assessment identifying which systems are in scope and in which role, the compliance status of each in-scope system, and a documented plan to reach compliance before the applicable date: Article 50 since August 2, 2026, and high-risk obligations from December 2, 2027.	A documented exposure assessment completed within the last 12 months, with a clear list of in-scope systems and a compliance status for each. If any system is in scope and not yet compliant, a remediation plan with a named owner and target date.	No formal EU AI Act exposure assessment has been conducted. The new CIO has identified this as a priority and committed to completing the assessment in Q1 2027, but no assessment currently exists. Whether any of the three AI systems falls in scope, and under which category, has not been formally determined.	Ask: given the Article 50 obligations already in effect and the December 2027 high-risk date, what is the specific timeline for completing the exposure assessment, who owns it, and when will the board receive a report on the findings? If the assessment cannot be completed in time, ask management to explain the company's risk posture in writing.