

# THE TRUST SHIFT

*From Commodity Testing to the Compliance Operating System*

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Strategic Analysis of the Global TIC Industry | Board Strategy Deck

February 2026 | DNAVentures Insight

84 sources validated | Confidence: 8/10

# EXECUTIVE SUMMARY

**The TIC industry is undergoing a structural, regulation-driven transformation from commodity testing toward integrated compliance platforms and ESG assurance.**

**Market size:** \$240–312B (2025), growing at 3–6% CAGR to ~\$540B by 2035. Growth is driven by CSRD (50,000 companies by 2028), DPP (batteries 2027, textiles 2027), and UFLPA enforcement.

**Incumbents are NOT passive:** 1,300+ M&A deals (2015–2025) focused on digital/AI capabilities.

AI-native entrants (Inspectorio, Altana, Prewave) are scaling rapidly — Inspectorio manages 4B products, \$340B customer revenue.

The shift from LABS to DIGITAL CUSTOMER PORTALS and from SPEED/COST to RISK MANAGEMENT/PREDICTION is **real in premium segments** (enterprise, EU-regulated) but **geographically uneven** (EU leading; US uncertain under deregulation) and **segment-bifurcated** (SMEs remain price-sensitive).

**Winners will hybridize 'unimpeachable truth' of physical labs with frictionless API-first digital connectivity. Pure testing commoditizes; pure digital lacks regulatory trust.**

## CONFIDENCE LEVELS on PREDICTION SCENARIOS — 5 KEY CLAIMS

**HIGH**

Structural shift thesis

**HIGH**

EU regulatory expansion

**LOW**

US regulatory continuity

**MED**

Premium willingness-to-pay

**MED**

DPP standard interoperability

# THE TRUST SHIFT: TIC Industry Evolution 2015–2030

Physical & Digital Layers | Triggers | Buyer Evolution

	2015–2019 Speed & Scale Era	2020–2024 Transition Phase ⚡	2025–2030 Compliance OS Era	
TRIGGERS during TRANSITION	① Regulatory Tsunami CSRD · DPP · CSDDD · CPSC	② Global Supply Chain Fragmentation China+1 · Friend-shoring	③ Emergence Retailer-as-Regulator Amazon DV · Inditex · Walmart	④ AI & Tech Disruption Inspectorio · Altana · GenAI
PHYSICAL LAYER	Growth of Incumbents: Scale M&A		ransition	Automated Data Factories
	<ul style="list-style-type: none"><li>Geographic + vertical M&amp;A growth</li><li>Efficiency + Cost + One throat to choke</li><li>Value = pass/fail certificate</li><li>Test = commodity "tax"</li></ul>	<ul style="list-style-type: none"><li>COVID exposes fragility</li><li>Speed + Cost (minimum)= Right to Play</li><li>Data + Adaptability Regulation= Right to Win</li><li>Remote audits emerge</li></ul>		<ul style="list-style-type: none"><li>Labs = automated data factories (TLA)</li><li>Specialize: batteries, 5G, biopharma,etc</li><li>Green Lane = logistics accelerator</li><li>Integrate with client ERP + retailer APIs..</li></ul>
DIGITAL LAYER	Digitization (Not Digitalization)		Platform Emergence	Compliance Operating System
	<ul style="list-style-type: none"><li>Portals = data movers for PDFs</li><li>Siloed systems: LIMS ≠ PLM ≠ ERP</li><li>Manual entry "swivel chair" transfer</li><li>Workflow Tracking only</li></ul>	<ul style="list-style-type: none"><li>Single portal vision emerges</li><li>Supply chain transparency (all tiers)</li><li>"Golden Record" concept materializes</li><li>Push to buyer (not pull from portal)</li></ul>		<ul style="list-style-type: none"><li>Combine Quality and Compliance</li><li>Embedded in the client ERP &amp; PLM</li><li>Interoperate with regulators</li><li>PROActive workflow mgmt / flag risks</li><li>Automate &amp; organize → VERY STICKY</li><li>AI: predictive, horizon scanning</li></ul>
BUYER EVOLUTION	Sourcing Director / QA Mgr Optimizes: Speed · Cost · Coverage		CSO / CRO / CIO (Buying Committee) Optimizes: Risk · Assurance · Interoperability	Board-Level / Embedded in ERP Optimizes: Resilience to regulation change · Predictive · Automation
CONVERGENCE → By 2030 the lab IS the data factory · the platform IS the customer interface · WINNERS HYBRIDIZE BOTH				

← — — — — VALUE MIGRATION: Commodity Testing → Compliance Operating System — — — — — →

# TOP 6 DRIVERS continue to drive CHANGE

## 01 REGULATORY TSUNAMI

CSRD expanding to 50,000 companies by 2028. DPP mandatory for batteries (2027), textiles (2027). UFLPA adding 78 entities. Creates non-discretionary demand.

*EU Commission Dec 2025 [5]; Circularise Jan 2026 [7]; Debevoise Dec 2025 [13]*

## 02 SUPPLY CHAIN FRAGILITY

83% of executives rank resilience equal to cybersecurity. 76% of European shippers had 5+ disruptions in 2024. \$184M avg. disruption cost (Fortune 500).

*Supply Chain Challenges 2025 [15]; BCG 2025 [38]*

## 03 RETAILER AS REGULATOR

Amazon Direct Validation bypasses sellers; Inditex/Walmart enforce closed-loop ecosystems. Platform accreditation now as important as ISO.

*SGS press release Oct 2025 [29]; Intertek announcement [24]*

## 04 AI & TECH DISRUPTION

AI-natives (Inspectorio 4B products; Altana multi-tier mapping; Prewave 250K+ suppliers). 67% automotive TIC digitalized. Lab robotics market: \$2.79B → \$5.21B by 2034.

*BusinessWire Jan 2026 [18]; GM Insights Oct 2025 [36]; Vision Research [34]*

## 05 ESG INSTITUTIONALIZATION

SGS targeting CHF 600M sustainability revenue by 2027. 6–8% price premiums accepted for verified ESG. ESG is now investment-grade data, not voluntary reporting.

*SGS 2024 Integrated Report [26]; Astute Analytics [46]*

## 06 GEOGRAPHIC DIVERGENCE

EU accelerating (CSRD, DPP, CSDDD). U.S. uncertain — BCG flags 'deregulation could limit growth tailwind.' Creates multi-speed regulatory world.

*BCG TIC 2025 [32]; EU Commission [5]*

# THE TIC INDUSTRY: BEFORE, NOW & THE SPEED OF CHANGE

## BEFORE (2015–2019)

**Business model:** Transactional — per test / per inspection

**Value proposition:** Pass/fail certification, geographic coverage

**Technology:** PDF portals, siloed LIMS — data mover, not insight

**Competition:** Lab footprint, turnaround speed, price

**Growth strategy:** M&A for scale — geographic 'white spots'

**Supply chain Visibility:** Tier 1 only — direct supplier

**Margins:** 10–15% EBIT baseline (BCG 2018)

**Market:** Homogeneous segmentation (testing = commodity)



## NOW (2024–2026)

**Business model:** Hybrid: transactional + SaaS + 'Digital Handling Fees'

**Value proposition:** Verified data interop, supply chain transparency, risk intelligence

**Technology:** Integrated platforms (67% automotive); API-first for ERP/Amazon

**Competition:** Platform ecosystems, AI insights, ESG assurance (premium)

**Growth strategy:** Digital M&A — cybersecurity, AI, sustainability (1,300+ deals)

**Supply chain:** Multi-tier to raw material (UFLPA/CSDDD mandate)

**Margins:** 6–8% on average high variability

**Market:** Bifurcating: premium ESG ↑ vs. commodity testing ↓

## SPEED OF CHANGE BY GEOGRAPHY

EU

FAST — CSRD (50K firms by 2028), DPP mandatory 2027, CSDDD enforced

9/10

US

SLOW — Deregulation risk; UFLPA continues, ESG politicized

4/10

ASIA

MIXED — China own standards; SE Asia follows buyers; India leapfrog

6/10

*A multi-speed regulatory world. EU sets the pace; others follow or diverge. Winners build modular 'rules engines' that adapt by jurisdiction.*

# EVERYONE ENDS UP HERE

*Large or small. Sophisticated or not. The question is not if — it is when.*

## CITIZENS ARE WATCHING

ESG is now investment-grade data. Consumer transparency expectations rising. Social media amplifies failures instantly. Greenhushing is not an option.

## GOVERNMENT IS WATCHING

CSRD (50K firms). DPP (batteries + textiles 2027). UFLPA (78 entities). CSDDD (due diligence). EU sets the standard; others follow.

## BUYERS ARE WATCHING

Amazon Direct Validation. Walmart closed-loop. Inditex mandates. Platform accreditation = new ISO. Can't push data via API? You don't play.

## EU — ARRIVING NOW

Regulation is non-discretionary. CSRD, DPP, CSDDD are mandated. Clients already demanding platform compliance.

## US — ARRIVING 2027–2030

Buyer-led, not regulator-led. Amazon/Walmart requirements will drive adoption even without federal mandate.

## APAC — ARRIVING 2030+

Follows buyers, not regulators. This is why APAC does not see the urgency on portals today — the pressure has not yet arrived at their door.

APAC does not see the urgency on the portals because the regulatory and buyer pressure arrives later. But it WILL arrive. Build now or retrofit at 3x cost.

## \$2B+ Is Flooding Into Platforms That Compete With Us

Verified funding data from Crunchbase, CB Insights, and PitchBook (Feb 2026). These are not startups — they are scaled, well-funded competitors.



### QIMA — THE HYBRID THREAT

4,000+ inspectors across 88 countries • 30,000+ clients • 32% revenue CAGR • PE-backed (TA Associates) • Physical + Digital hybrid

# IMPLICATIONS FOR INCUMBENTS

## PHYSICAL LABS

**Automate over scale:** Invest in TLA islands, robotic sample prep, AI visual inspection. Lab automation cuts labor costs up to 80%, boosts productivity 30%.

**Become data factories:** Every test result digitized and API-ready. Retire legacy LIMS for cloud-native systems. Reduce 'time-to-data' to near zero.

**Specialize in high-barrier verticals:** Battery testing, 5G/IoT, biopharma. Generalist labs face commoditization; high margins in complexity.

**Accredit for retailer programs:** Amazon Direct Validation, Walmart approved lab status = new sales channel. Green Lane customs integration.

**Defend margins through tech:** SGS targets +150bps margin improvement. 82% of US mid-sized manufacturers implementing automation.

**Bridge to digital platforms:** Labs must connect into cOS ecosystems. Physical truth + digital connectivity = competitive moat.

## DIGITAL PLATFORMS

**Evolve to Compliance Operating System:** Manage full quality/compliance lifecycle. Not portals — orchestration engines. Create 'sticky' ecosystems with high switching costs.

**Monetize interoperability:** Charge for API connectors to Amazon, Walmart, EU DPP registry, SAP. Transform from vendor to infrastructure partner.

**Deploy AI exception management:** Flag the 5 reports out of 1,000 that need attention. Predictive analytics to identify at-risk suppliers before production.

**Build the 'Golden Record':** Single, immutable, interoperable compliance record per product. Enables premium pricing + lock-in. Justifies 'Digital Handling Fees'.

**Integrate with enterprise stacks:** SAP, Oracle, Salesforce integration. Move TIC data out of its silo and onto C-suite dashboards.

**Enable Green Lane logistics:** Digital validation as logistics accelerator. Link compliance data to customs clearance speed and working capital optimization.



# STRATEGIC 2×2: WHERE VALUE IS MIGRATING

SERVICE-ONLY  
(Human-Capital Intensive)

PLATFORM-ENABLED  
(Tech-Capital Intensive)

## THE NICHE SPECIALISTS

*Exova, specialized engineering firms*

High-complexity, low-volume (nuclear, aerospace, biopharma). Deep expertise, high barriers.

**Risk: Talent shortages, scales only via headcount.**

## THE ORCHESTRATORS ★ TARGET STATE

*SGS Strategy 27, BV LEAP|28*

End-to-end assurance + predictive risk + 'Golden Record'. Hybridize physical network with AI platform.

**Risk: High R&D burn, lab/tech culture clash.**

## THE LEGACY GENERALISTS ✗ KILL ZONE

*Traditional TIC model*

Volume testing, fast turnaround, footprint. M&A for scale, cost-cutting.

**Risk: Rapid commoditization, margin erosion, 'race to the bottom'.**

## THE DATA AGGREGATORS

*Amazon Compliance, Inspectorio, Prewave, Altana*

Automated data validation, report gathering, connectivity. Low marginal cost, network effects.

**Risk: Lack of 'physical truth', reliance on third-party data.**

← Value migration →

- The industry is migrating from **Legacy Generalists (bottom-left)** toward the **Orchestrator quadrant (top-right)**.
- **Tech** entrants attack from **bottom-right**, moving up by adding domain expertise.
- The 'kill zone' is **bottom-left** where firms compete solely on price without digital differentiation — these face severe **margin compression**.
- The **bifurcation** is between
  - **integrated** platform players (digital + physical) and
  - **Commoditized** testing-only providers,
- **Not between pure physical vs. pure digital.**

# THREE SCENARIOS FOR TIC (2026–2028)

## TRUST STACK CONSOLIDATION

MOST LIKELY (55%)

Big Three (SGS, BV, Intertek) successfully execute platform strategies. Hybrid physical + digital 'Trust Stack' creates barrier to entry for pure-play tech. EU DPP + US eFiling require verified data that only accredited labs can generate.

**WHO WINS:** Integrated incumbents with hybrid lab/platform model.

**KEY TRIGGER:** Successful DPP implementation requiring lab-verified data.

## TECH BIFURCATION

PLAUSIBLE (30%)

AI-native platforms (Altana, Inspectorio, Prewave) capture the intelligence layer. Traditional TICs relegated to 'lab-for-hire' subcontractors. Brands use tech platforms for decisions; labs via API calls only. 'Brain' moves to Silicon Valley; 'body' stays in labs.

**WHO WINS:** Tech-first orchestrators + efficient lab networks.

**KEY TRIGGER:** Legacy TICs fail to deploy usable software; tech solves 'physical truth' via IoT/partnerships.


## REGULATORY ROLLBACK

RISK CASE (15%)

Political pushback against ESG mandates (US under Trump, potential EU far-right shift). Demand reverts to core safety testing. Heavy investments in sustainability platforms face write-downs. Return to 'Speed and Cost' paradigm.

**WHO WINS:** Lean, cost-efficient testers.

**KEY TRIGGER:** Repeal of key EU directives or significant US/EU standards divergence.

 *Critical Assumption: EU regulatory continuity (codified, HIGH confidence). U.S. trajectory uncertain (BCG 2025). SME willingness-to-pay for premium digital untested at scale.*

# RISK MATRIX: LIKELIHOOD × IMPACT WITH MITIGATIONS

RISK	LIKELIHOOD	IMPACT	RATING	MITIGATION
Platform Commoditization (ERPs replicate basic features)	HIGH	HIGH	CRITICAL	Build proprietary data moats (chemical lists, unique risk datasets). 'Golden Record' creates lock-in.
US Regulatory Rollback (Trump deregulation of ESG)	HIGH	MEDIUM	HIGH	Diversify: ensure sustainability services also deliver operational ROI. Market efficiency, not just compliance.
Regulatory Fragmentation (EU vs US vs China standards)	HIGH	MEDIUM	HIGH	Build flexible 'rules engines' that adapt workflows by jurisdiction. Modular compliance architecture.
AI 'Hallucination' Liability (Errors in safety certifications)	MEDIUM	CRITICAL	HIGH	Human-in-the-loop for critical safety. Clear liability boundaries in SaaS contracts. Insurance.
Talent Shortage (Tech + Lab professionals)	HIGH	HIGH	HIGH	Lab automation decouples growth from headcount. Acquire boutique firms for specialized talent.
'Greenhushing' Demand Shock (ESG investment pullback)	MEDIUM	HIGH	MEDIUM	Position sustainability = efficiency. Ensure services survive regulatory pauses by delivering cost savings.
M&A Integration Failure (SGS-BV merger failed; TIC Solutions struggles)	MEDIUM	HIGH	MEDIUM	Prioritize cultural integration. Smaller, targeted bolt-on acquisitions over mega-mergers.
Geopolitical Decoupling (US-China trade collapse)	LOW	CRITICAL	MEDIUM	Build regional platform variants. Ensure architecture can operate in 'multi-polar' mode.

**KEY INSIGHT:** The two highest-rated risks (Platform Commoditization + Talent Shortage) reinforce each other — without digital differentiation, TIC players compete on price and need more headcount, not less. The 'Golden Record' strategy mitigates both simultaneously by creating proprietary data moats that require fewer people to operate.

# WHAT DOES A TIC PLATFORM NEED IN 2026

8 Capability Statements — Priority Ordered | Scored 0–10 across 5 dimensions

#	CAPABILITY REQUIREMENT	RIGHT TO PLAY (Market)	RIGHT TO WIN (Client)	COMPETITORS	XXXX TODAY IMPROVED BY ZZZ	HOW FAR CAN XXXX GO?
P1	Digital Product Passport (DPP) Minting — Generate compliant EU DPP QR codes/data files meeting ESPR standards with all the required correct data from all Tiers	9	10	5	5	8
P2	Multi-Tier Supply Chain Traceability — Interactive mapping to raw material origins with verified audit at each node (UFLPA/CSDDD)	9	10	4	0→5 (ZZZ)	7
P3	One-Click Retailer Integration — Push test data to Amazon/Walmart/Target via API, zero-latency compliance updates	10	8	6	1	7
P4	AI Regulatory Horizon Scanning — Portfolio-specific alerts for upcoming regulatory changes, 6–12 months in advance	7	9	5	1	6
P5	Predictive Risk Scoring — Algorithmic supplier risk profiles from historical data, news sentiment, geopolitical stability	7	9	6	0	5
P6	Automated CAPA Workflows — Digital corrective/preventive action management with supplier collaboration and auto follow-up	8	7	5	0	7
P7	AI-Enhanced Visual Inspection — Computer vision for defect detection in factory audit photos, reducing human error	6	8	4	0→5 (ZZZ)	7
P8	ESG/Carbon Footprint Verification — ISO-compliant product-level Scope 3 calculation integrated into test reporting for CSRD	8	9	3	0	6

**READING:** 'Right to Play' = market minimum to compete. 'Right to Win' = what we need to differentiate.

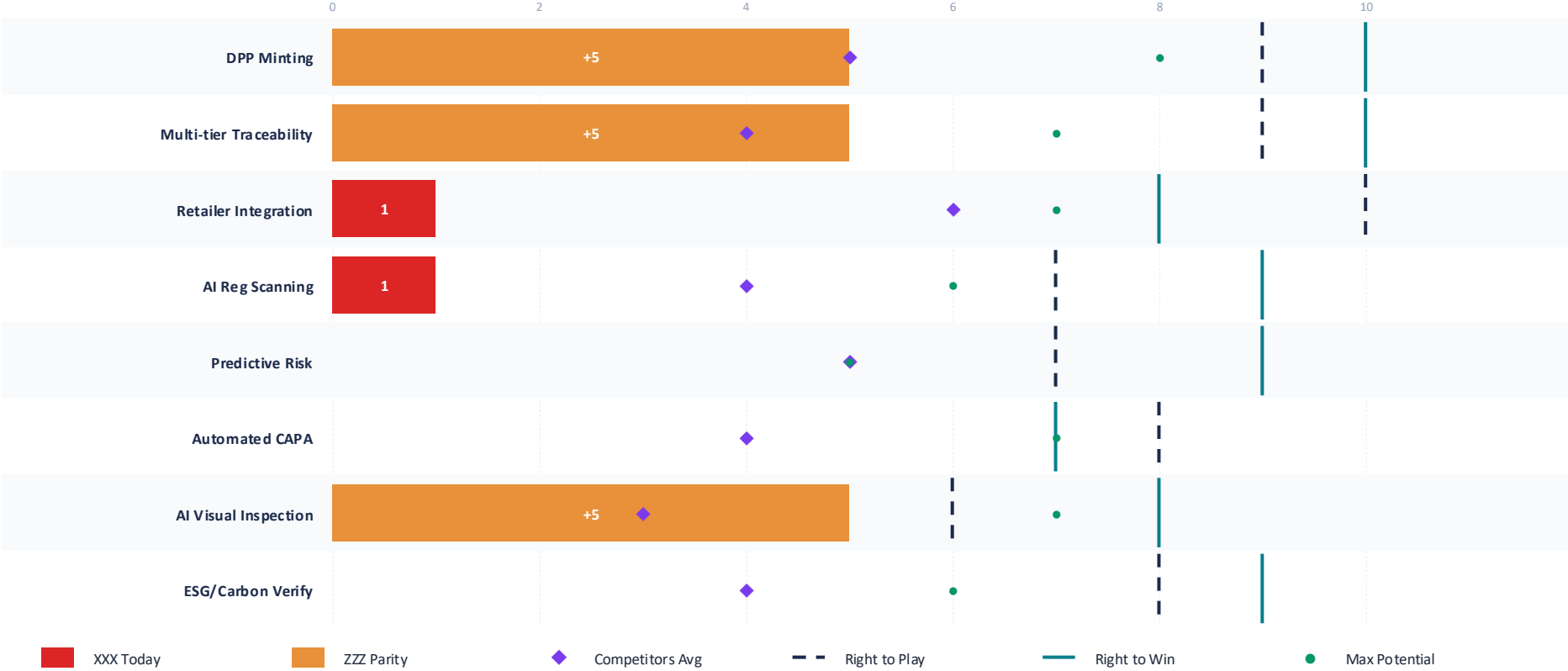
**GAP ALERT:** XXXX scores 0–1 on 5 of 8 critical capabilities. ZZZ is pushing two capabilities from 0→5. Competitors avg 4–6 across the board.

**IMPLICATION:** Without accelerated investment, XXXX risks falling below 'right-to-play' threshold in DPP (mandatory 2027) and traceability (UFLPA enforcement intensifying).

**BOTTOM LINE:** DPP and Traceability (P1, P2) are non-negotiable by 2027. Retailer Integration (P3) determines whether XXXX is a vendor or a partner. The gap between 'XXXX Today' and 'Right to Play' is the investment case.

# How does XXX Compare with those needs?

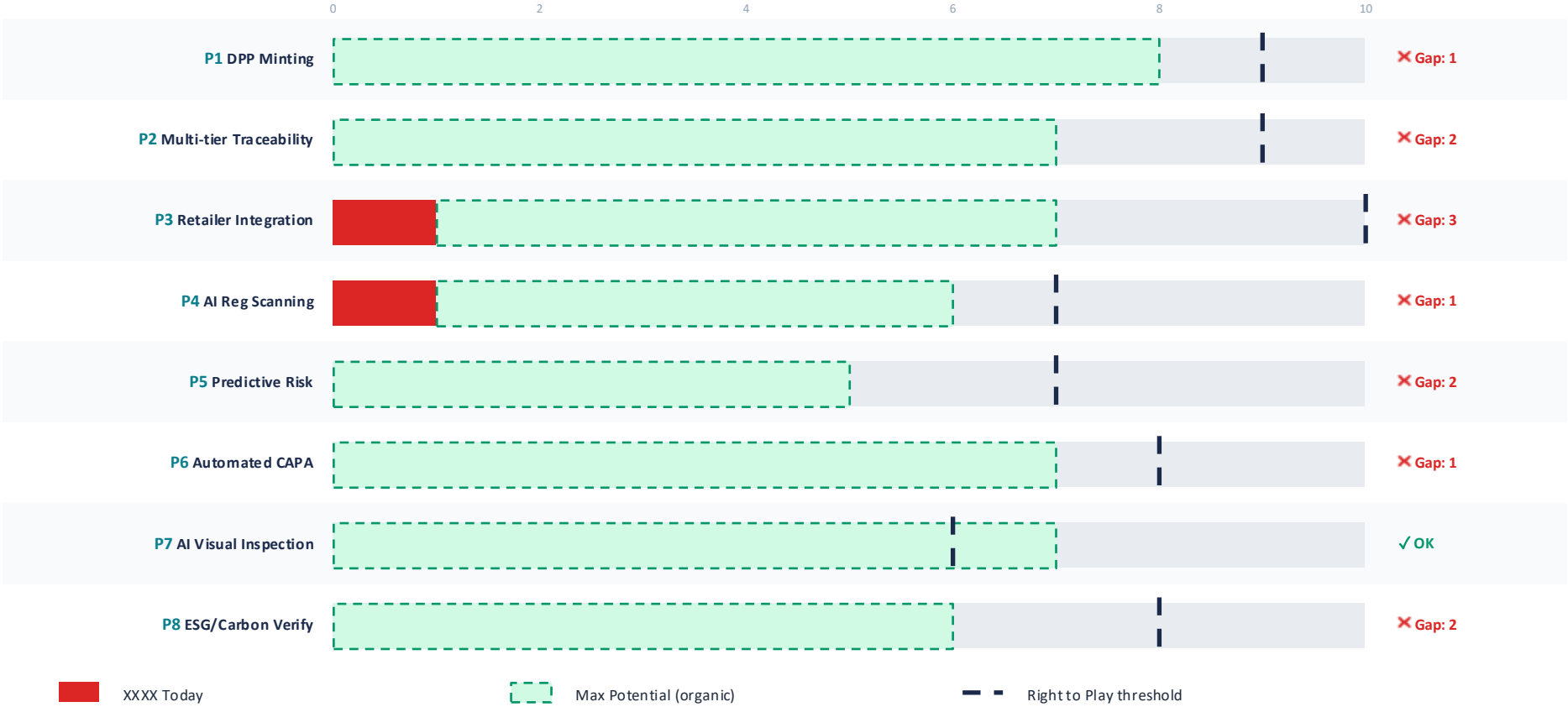
Capability gap analysis — XXX today vs. what clients need. Scale: 0–10.



**GAP:** XXX scores 0–1 on 6 of 8 capabilities. ZZZ lifts only 3. Competitors already at 3–6. The distance from red to the dashed line IS the investment case.

# HOW FAR CAN XXXX GO?

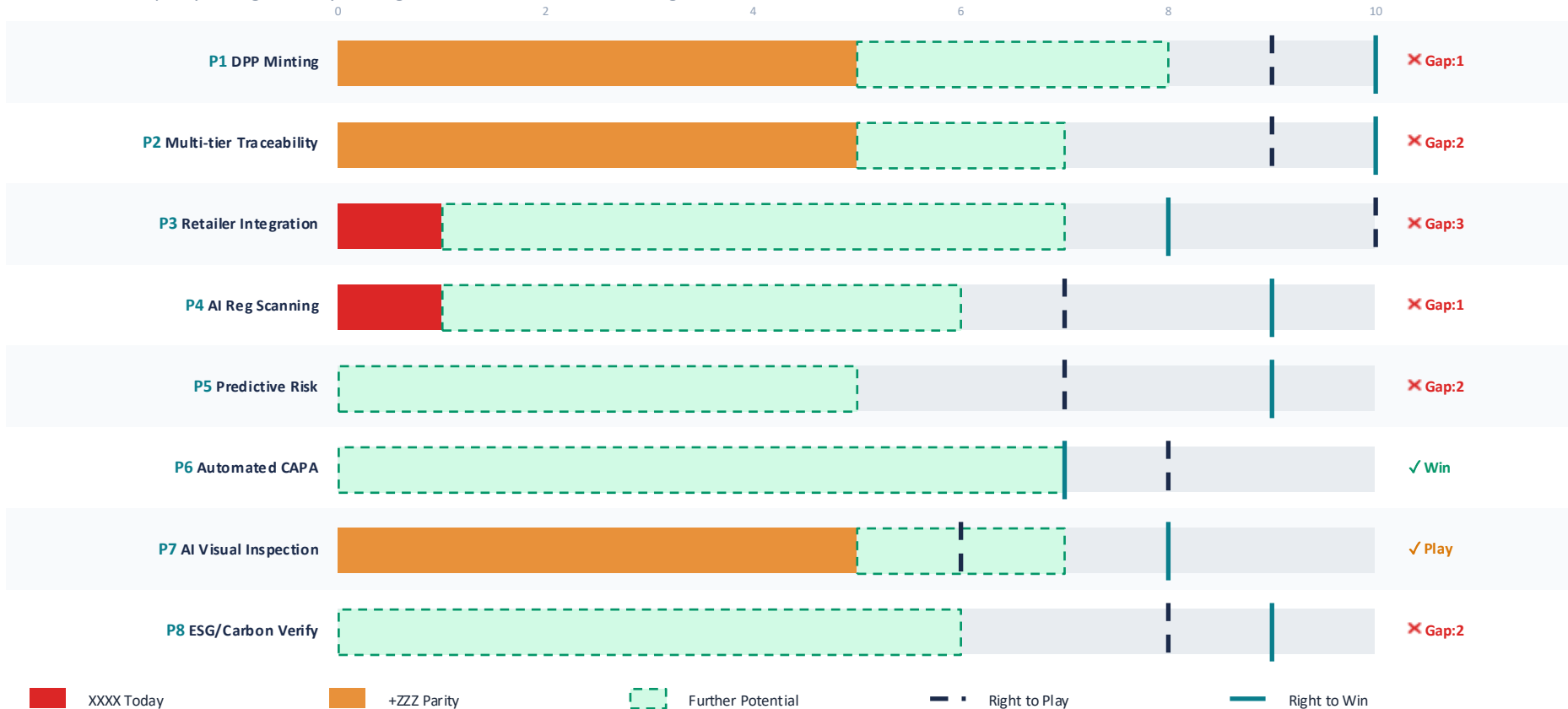
XXXX Today vs. Right to Play threshold — organic capability ceiling without ZZZ



**VERDICT:** XXXX can grow from 0–1 to 5–8 organically on most capabilities. But on DPP Minting, Traceability and ESG it cannot reach Right to Play without acquisition or partnership.

# HOW FAR CAN XXXX + ZZZ GO?

XXXX + ZZZ parity vs. Right to Play and Right to Win — the combined ceiling



**WITH ZZZ:** 3 capabilities jump to 5 (DPP, Traceability, Visual Inspection). Combined max reaches Right to Play on 5 of 8. **Still short on Retailer Integration, Risk Scoring, and ESG without further investment.**

# RECOMMENDED ACTIONS & ROI

1

## BUILD THE 'GOLDEN RECORD' CAPABILITY

NOW → Q4 2026

Invest in data architecture enabling a single, immutable, interoperable compliance record per product. Priority: DPP readiness by Q4 2026 for battery/textile mandates.

**ROI:** Enables premium 'Digital Handling Fees' (est. 15–20% uplift on service contracts). Increases switching costs significantly. Non-negotiable for EU market access by 2027.

2

## MONETIZE INTEROPERABILITY

Q1 2026 → Q3 2026

Develop and charge for API connectors to Amazon Direct Validation, Walmart, EU DPP registry, SAP. Stop giving away the portal — charge for the 'middleware of trust'.

**ROI:** New recurring SaaS revenue stream. Transforms vendor relationship into infrastructure partnership. Automation platforms deliver 347% ROI over 3 years (Boomi/Forrester).

3

## DEPLOY AI EXCEPTION MANAGEMENT

Q2 2026 → Q1 2027

AI to filter passing results and focus human attention on failures/risks. Predictive analytics to identify at-risk suppliers pre-production.

**ROI:** 30–40% reduction in operational overhead for account management. Faster turnaround times. Competitive defense against Inspectorio/Prewave.

4

## ACQUIRE 'DATA-FIRST' COMPETITORS

H2 2026 → H1 2027

Shift M&A from physical lab capacity to niche software (supply chain mapping, AI risk scoring). Bolt-on acquisitions to accelerate platform maturity.

**ROI:** Immediate digital talent + IP. Cross-sell digital services to entire physical client base. Premium M&A multiples concentrated on specialized, scalable TIC businesses (Aventis 2025).

5

## PIVOT TO 'GREEN LANE' VALUE PROPOSITIONS

Q3 2026 → 2027

Market testing as 'logistics acceleration', not just compliance. Partner with customs brokers to offer integrated clearance. Link compliance data to working capital.

**ROI:** Direct impact on client working capital cycles — justifies higher margins. Speed-to-market is a value driver procurement will pay for. Only 1,200 UK trusted traders = early-mover advantage.



# THE WINDOW IS OPEN. NOW.

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The structural shift is real and irreversible in premium segments.

**Winners hybridize physical lab credibility with digital platform connectivity.**

Pure testing commoditizes. Pure digital lacks regulatory trust.

**DPP mandatory timelines (2027) create a hard deadline for platform readiness.**

XXXX must close capability gaps on 5 of 8 critical dimensions — or fall below 'right-to-play' threshold.