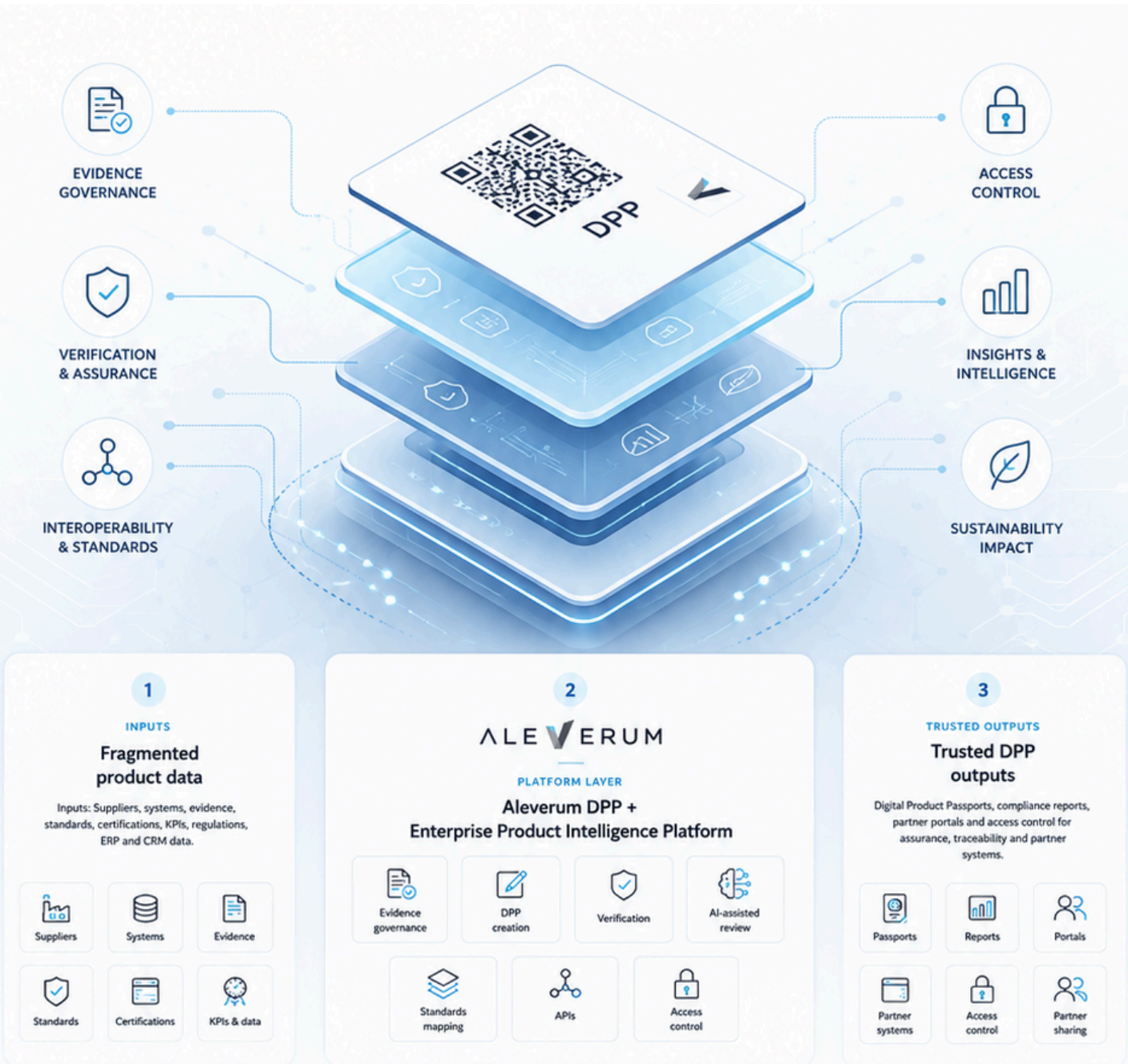




Trusted Digital Product Passports

Why evidence-backed product data, verification, and governance are becoming the decisive layer in the DPP market



Executive perspective

Digital Product Passports are becoming a trust problem as much as a transparency problem. The organizations that win this shift will not only publish product data. They will be able to prove it, govern it, and reuse it across procurement, compliance, and connected product ecosystems.

Executive Summary

Digital Product Passports have moved from policy concept to implementation architecture. The main shift since 2025 is not a new vision, but the building of operating rules around identifiers, data carriers, access rights, service-provider governance, and a central EU registry and portal.

The strategic center of gravity is moving away from the QR code alone and toward the evidence-backed data layer behind it. Regulation is defining the floor, standards bodies are shaping interoperability, and the market is increasingly rewarding systems that can verify, govern, and reuse trusted product information.

Batteries are the clearest near-term proving ground. Under the EU Batteries Regulation, specified battery categories must carry a battery passport from 18 February 2027, making batteries the first large-scale compliance and operating test for passport models across sectors.

For Australian organizations, the core issue is exposure, not local mandate timing. Even without an Australian-wide DPP requirement, EU export rules, multinational customer demands, procurement expectations, and circular-economy reform proposals are already pulling traceability and product-data discipline upstream. This is the market opening Aleverum™ is addressing: helping organizations work with DPP-ready product data in ways that support procurement, assurance, compliance, and future machine-readable commerce workflows.

Market Outlook

Bottom line

This sector is evolving into compliance infrastructure for circular trade. The strongest players will use DPP capability not only to satisfy regulation, but to prove claims, reduce friction in procurement, and create service and resale value from better lifecycle data. In that environment, evidence governance and interoperability become more strategic than passport publishing alone.

Key Trends

1. **EU implementation is getting operational.** In April 2025 the Commission opened a public consultation on how DPP data should be stored and managed by service providers and whether those providers should face a certification scheme. In parallel, the Commission has confirmed that rollout work includes identifier rules, data carriers, access-right rules, a DPP registry, and a web portal.
2. **Product scope is becoming more predictable.** The Commission's 2025-2030 ESPR working plan prioritizes iron and steel, aluminium, textiles, furniture, tyres, detergents, paints, lubricants, chemicals, energy-related products, and ICT and other electronics.
3. **Batteries remain the lead implementation wedge.** The EU Batteries Regulation requires a battery passport for light means of transport batteries, industrial batteries above 2 kWh, and EV batteries from 18 February 2027, with different information-access levels for the public, authorities, and legitimate professional users.
4. **Interoperability is becoming the real battleground.** CEN/CLC JTC 24 is developing the horizontal DPP framework across identifiers, data carriers, access management, APIs, storage, and data reliability. GS1 is positioning its identifiers and web-enabled carriers as an implementation path aligned with ISO/IEC references in the ESPR. This increases the value of platforms that can normalize, map, and govern product data across systems.
5. **The market is moving from pilots into operational learning.** CIRPASS-2 is running 13 pilots across four value chains with 49 partners, while the Global Battery Alliance's second pilot wave spans 11 consortia representing more than 80 percent of global EV battery market share. These are no longer purely conceptual exercises.
6. **Australia is not waiting entirely on formal mandates.** Federal guidance already treats DPPs as useful traceability tools in procurement and recycled-content verification, while sector bodies such as Seamless and GS1 Australia are translating EU DPP requirements for local textile businesses. The December 2025 Circular Advantage report also argues that Australia should build a regulatory framework closer to the EU model.

Market Structure

Inference, based on the evidence base below: the DPP market is settling into a five-layer stack rather than a single winner-take-all platform market.

- **Policy:** Defines scope, obligations, access rights, and enforcement. The Commission is building registry, portal, identifier, and access-right rules, while Australian guidance is already using traceability concepts in procurement and recycled-content verification.
- **Standards:** Creates shared identifiers, carriers, semantics, and interoperability. CEN/CLC JTC 24 is shaping the horizontal framework, and GS1 is aligning DPP implementation with ISO/IEC-based identifiers and web-enabled carriers.
- **Implementation programs:** Tests real-world deployment across value chains. CIRPASS-2 is running 13 pilots across four sectors, and the Global Battery Alliance's second wave spans 11 battery passport pilot consortia.
- **Software and integration:** Connects ERP, PLM, supplier, and customer data into product-level records. Recent market proof points include Teijin's materials passports implemented with Circularise.
- **Assurance and market use:** Supports certification, procurement, claims, and surveillance. The Commission's 2025 consultation signals that trust, governance, and service-provider oversight are becoming their own market layer.

Where Aleverum™ Fits

Aleverum™'s position in the market The market does not need more passport pages alone. It needs product data that can be trusted across suppliers, claims, evidence, standards, procurement, and machine-readable exchange.

Aleverum™ is positioned as an enterprise product intelligence layer behind Digital Product Passports, not only a publishing tool. Its platform emphasis is evidence-backed product data across suppliers, certificates, lifecycle records, standards, and compliance workflows.

That positioning matches an emerging market gap. Many tools can expose product information through a code or page, but fewer are centered on evidence quality, interoperability, and procurement-grade trust. In practical terms, Aleverum™ appears aligned to organizations that need stronger product-data oversight across regulated or sustainability-sensitive product categories.

What this means If DPP adoption keeps moving toward tiered access, standards-based exchange, supplier evidence scrutiny, and auditability, then the value of strong evidence governance behind the label is likely to increase.

Risks

- **Data-readiness risk:** most firms still hold product, supplier, certification, repair, and end-of-life information in disconnected systems or spreadsheets.
- **Supplier-friction risk:** upstream partners may resist new disclosure and traceability requirements, especially where margins are thin or digital capability is low.
- **Governance risk:** access rights, business confidentiality, and commercially sensitive data are still active design questions, especially where multiple parties need to use the same passport.
- **Lock-in risk:** choosing a narrow vendor architecture before standards stabilize can create expensive rework later.

Claims and enforcement risk: richer product data can reduce greenwashing, but it also creates a clearer evidentiary trail for regulators and challengers when claims are weak or inconsistent.

Opportunities

- **Compliance leverage:** building reusable product-data infrastructure once can support multiple regulations, labels, and customer questionnaires.
- **Commercial differentiation:** verified information on recycled content, repairability, provenance, and end-of-life pathways can strengthen premium positioning and trust.
- **Circular business models:** DPPs can support repair, refurbishment, resale, take-back, and material recovery by making item-level information easier to find and use.
- **Procurement access:** traceable product information is becoming more relevant in public buying, supplier sustainability plans, and global customer tenders.
- **Supply-chain resilience:** better visibility into inputs and material flows can improve supplier management, substitution planning, and recycled-content sourcing.

Platform leverage: organizations that invest in evidence-backed product intelligence can reuse the same foundation across DPPs, procurement review, assurance workflows, and future AI-readable product-data exchange.

What Looks Overhyped vs Material

Overhyped right now	Actually material now
Treating QR labels as the strategy. The visible code is only the access point; the hard work is data quality, governance, and cross-party interoperability.	Waiting for every delegated act before acting. Data mapping, identifier design, supplier engagement, and pilot governance can start now.
Assuming the market will converge quickly on one software vendor. The evidence points to a layered ecosystem, not a single dominant stack.	The EU is moving from framework law to operating architecture through consultation, registry planning, access-right rules, and product prioritization.
Treating DPPs as a communications exercise rather than an operating model. Publishing without evidence governance creates rework and risk.	Batteries are creating the first hard deadline and practical model for other sectors, especially around access rights and commercially sensitive data. Australian exporters and suppliers can be affected before domestic mandates arrive, because EU buyers and global brands will pull DPP-ready data upstream.

Implications for Decision-Makers

1. **Treat DPP readiness as a data and operating-model program**, not a packaging or QR-code project.
2. **Start with the product families most exposed** to EU rules, customer sustainability claims, or procurement scrutiny.
3. **Design around interoperable identifiers and portable data structures** so the passport can survive standard changes and vendor changes.
4. **Pilot with one real supply chain and one real use case**, such as recycled-content proof, repair information, or export readiness, rather than building an abstract full-enterprise solution first.
5. **Separate consumer-facing transparency from regulator- and partner-facing access.** The battery model shows that tiered access is likely to matter across more categories over

time.

6. **For Australian firms, assume upstream data requests will arrive first.** Export exposure and customer mandates are the nearer trigger.
 7. **If selecting technology now, prioritize evidence quality, access controls, and standards-readiness** rather than front-end publishing features alone.
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Source-Backed Takeaways

The strongest durable signal is institutional build-out in Europe: consultation, working-plan prioritization, registry planning, and standards work are all advancing at the same time.

The strongest commercial signal is that batteries and high-impact product categories are moving from experimentation to execution, which will create templates other sectors can copy.

The strongest Australian signal is convergence rather than mandate: procurement guidance, recycled-content traceability work, sector education, and reform proposals all point in the same direction.

The biggest strategic mistake would be waiting for perfect regulatory certainty. The parts that matter most now are product data discipline, supply-chain coordination, and architecture choices that preserve interoperability.

For Aleverum™'s category position, the clearest market takeaway is that trust in product data is becoming its own layer of value.

Evidence Base

1. **Aleverum™**, homepage and platform positioning — <https://aleverum.com/>

2. **European Commission**, "Commission launches consultation on the Digital Product Passport," 9 Apr 2025 — https://single-market-economy.ec.europa.eu/news/commission-launches-consultation-digital-product-passport-2025-04-09_en

3. **European Commission**, "Implementing the Ecodesign for Sustainable Products Regulation" (DPP implementation page) — https://green-forum.ec.europa.eu/implementing-ecodesign-sustainable-products-regulation_en

4. **European Commission**, "2025–2030 Working Plan for the Ecodesign for Sustainable Products Regulation and Energy Labelling" — https://environment.ec.europa.eu/document/download/5f7ff5e2-ebe9-4bd4-a139-db881bd6398f_en

5. **EUR-Lex, Regulation (EU) 2023/1542**, Article 77 battery passport requirements — <https://eur-lex.europa.eu/eli/reg/2023/1542/oj?locale=en>
 6. **CIRPASS-2 official project site** — <https://cirpass2.eu/>
 7. **CEN-CLC/JTC 24 Business Plan** — <https://standards.cencenelec.eu/BPCEN/3342699.pdf>
 8. **GS1, "Does the ESPR refer to the GS1 standards?"** updated 18 Jun 2025 — <https://support.gs1.org/support/solutions/articles/43000758754-does-the-ecodesign-for-sustainable-products-regulation-espr-refer-to-the-gs1-standards->
 9. **Global Battery Alliance**, "Second wave of Battery Passport pilots," 20 Jun 2024 — <https://www.globalbattery.org/press-releases/gba-launches-second-wave-of-battery-passport-pilots/>
 10. **Circularise**, "Digital product passports drive material traceability and circularity in partnership with Teijin," 14 Apr 2025 — <https://www.circularise.com/press-releases/circularises-digital-product-passports-drive-material-traceability-and-circularity-in-partnership-with-teijin>
 11. **Seamless Australia**, "Digital Product Passports explained," 11 Sep 2025 — <https://www.seamlessaustralia.com/news/digital-product-passports-explained>
 12. **Australian Government DCCEEW**, "Supplier Environmental Sustainability Plan guidance" (Digital Product Passports section) — <https://www.dcceew.gov.au/sites/default/files/documents/guidance-environmental-sustainability-plan-tender-evaluation-products.pdf>
 13. **Australian Government DCCEEW**, "Step-by-step implementation guide for recycled content traceability" — <https://www.dcceew.gov.au/sites/default/files/documents/step-by-step-implementation-guide-for-recycled-content-traceability.pdf>
 14. **Australian Government DCCEEW**, "The Circular Advantage — Final Report," Dec 2025 — <https://www.dcceew.gov.au/sites/default/files/documents/circular-advantage-final-report-cemag.pdf>
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