

Rayterton Product Lifecycle Management (PLM)

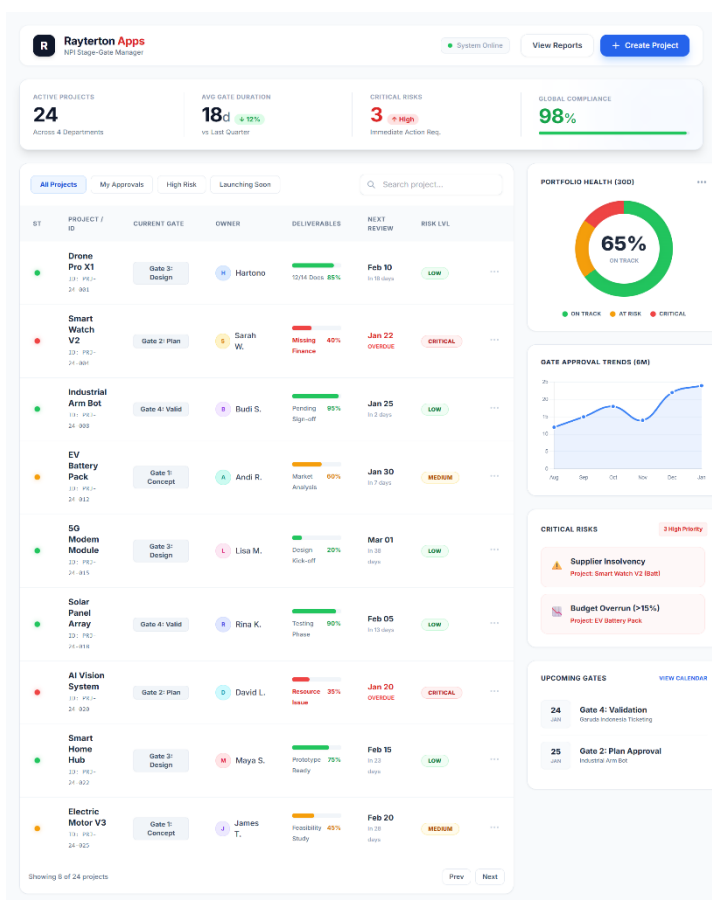
Orchestrate Your Entire Product Business: From Concept Definition to Manufacturing & Service. Empower your leadership with a real-time Executive Product Portfolio Dashboard. Manage your entire product lifecycle from NPI Stage-Gate and engineering data management to supplier collaboration and quality assurance on one platform.

Transform Your Product Operations at the Enterprise Level

Rayterton Product Lifecycle Management System is an all-in-one platform designed for **modern manufacturers** to **configure complex multi-level BOMs**, **synchronize engineering and supply chain data**, and **protect product margins** with **automated costing and compliance guardrails**. We combine **innovation and experience** to ensure your long-term digital transformation success.

Structured NPI Stage-Gate Management

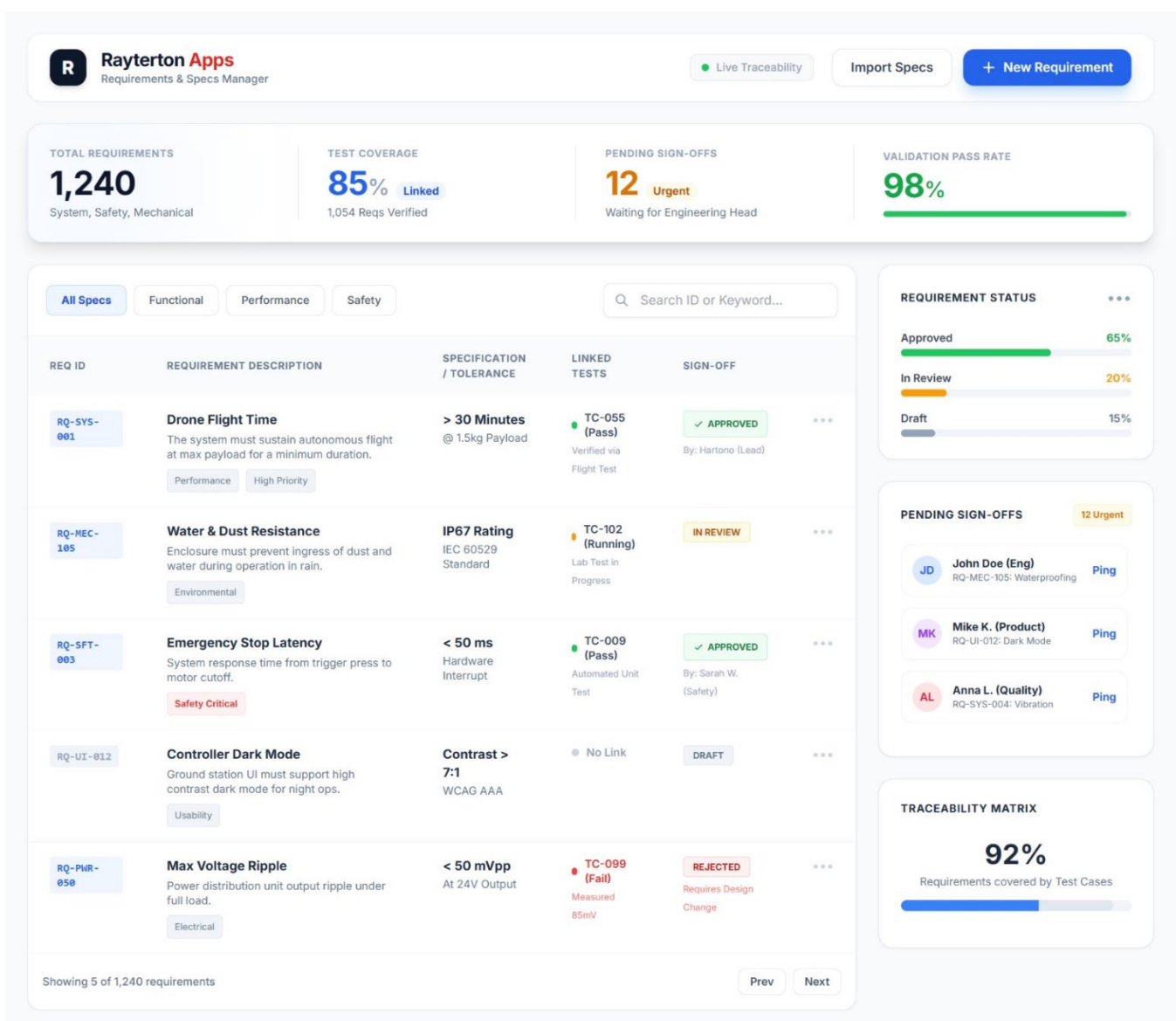
This module replaces disparate tracking methods with a unified system where market requirements are captured hierarchically and linked directly to detailed engineering specifications. It provides real-time visibility into program status and enforces strict governance by ensuring that critical deliverables, such as Gate Reviews and Risk Matrices, are fully validated before the project advances to the next phase, establishing a clear audit trail for every development decision.



Requirement And Specification Management

This module connects customer requirements directly to technical specifications through a multi-level hierarchy. By establishing end-to-end traceability, the system clearly defines project parameters and helps prevent scope deviation during the early development phases, ensuring alignment between market needs and engineering outputs.

The platform centralizes the approval process with digital sign-offs, replacing manual communication methods. It enforces strict version control to maintain a single source of truth, ensuring that all teams execute based on validated data and minimizing the risk of downstream design errors caused by outdated information.

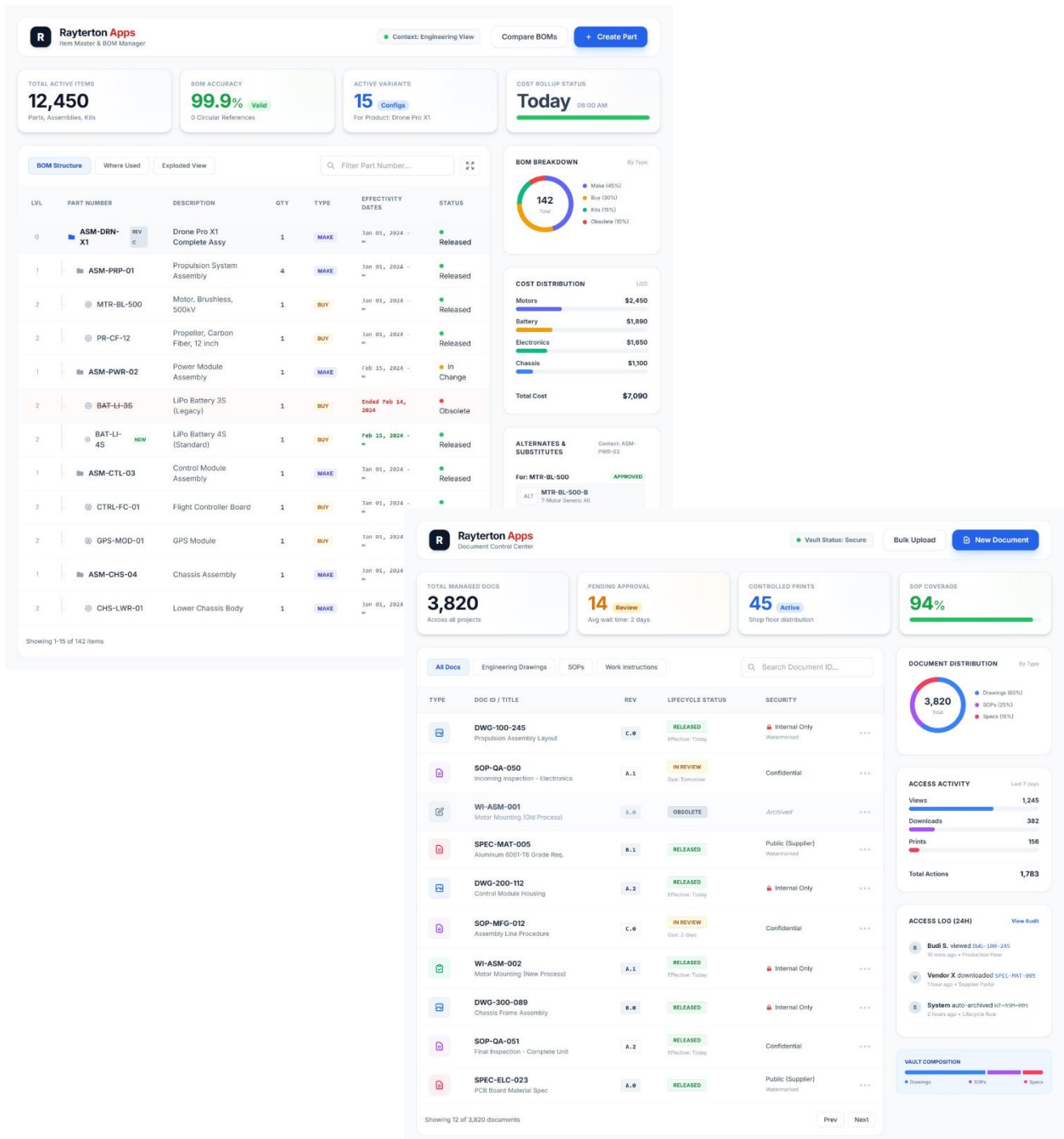


Engineering & Document Hub

Command Center seamlessly synchronizes **Multi-level BOMs** and **3D CAD data** in real-time, preventing revision conflicts with automated check-in/out controls. Secure your intellectual property with a centralized **Document Vault** that automatically watermarks drawings and strictly controls access rights across your organization.

The screenshot displays the Rayterton Apps CAD/PDM Integration Hub interface. At the top, it shows the Rayterton Apps logo and a status bar with 'Connector: SolidWorks 2025 Connected', 'Batch Import', and 'Check-In New' buttons. The dashboard features four key metrics: 8,450 Total CAD Files (Assemblies, Parts, Drawings), 42 Checked-Out (Active) files (Currently being edited), 100% Attribute Sync Health (Mass sync updated 2m ago), and 1.2TB Vault Storage. Below these metrics is a table of CAD files with columns for Preview, File Name / Description, Version, State / Lock, and Sync Status. The table lists files like 'ASM-DRN-X1.SLDASM', 'CHASSIS-LWR.SLDPRT', 'MOTOR-MOUNT.SLDPRT', 'CHASSIS-LWR-DWG.PDF', 'SCREW-M3x10.SLDPRT', 'BATTERY-PACK.SLDPRT', and 'ARM-LEFT.SLDASM'. To the right of the table is a sidebar with 'Integration Health' (SolidWorks, AutoCAD, Altium) and 'Recent CAD Activity' (Hartono checked in, Budi S. checked out, System auto-synced, Sarah W. failed to check in). At the bottom right, a 'Disk Usage' section shows 1.2 TB / 2.0 TB with a +50GB this week indicator.

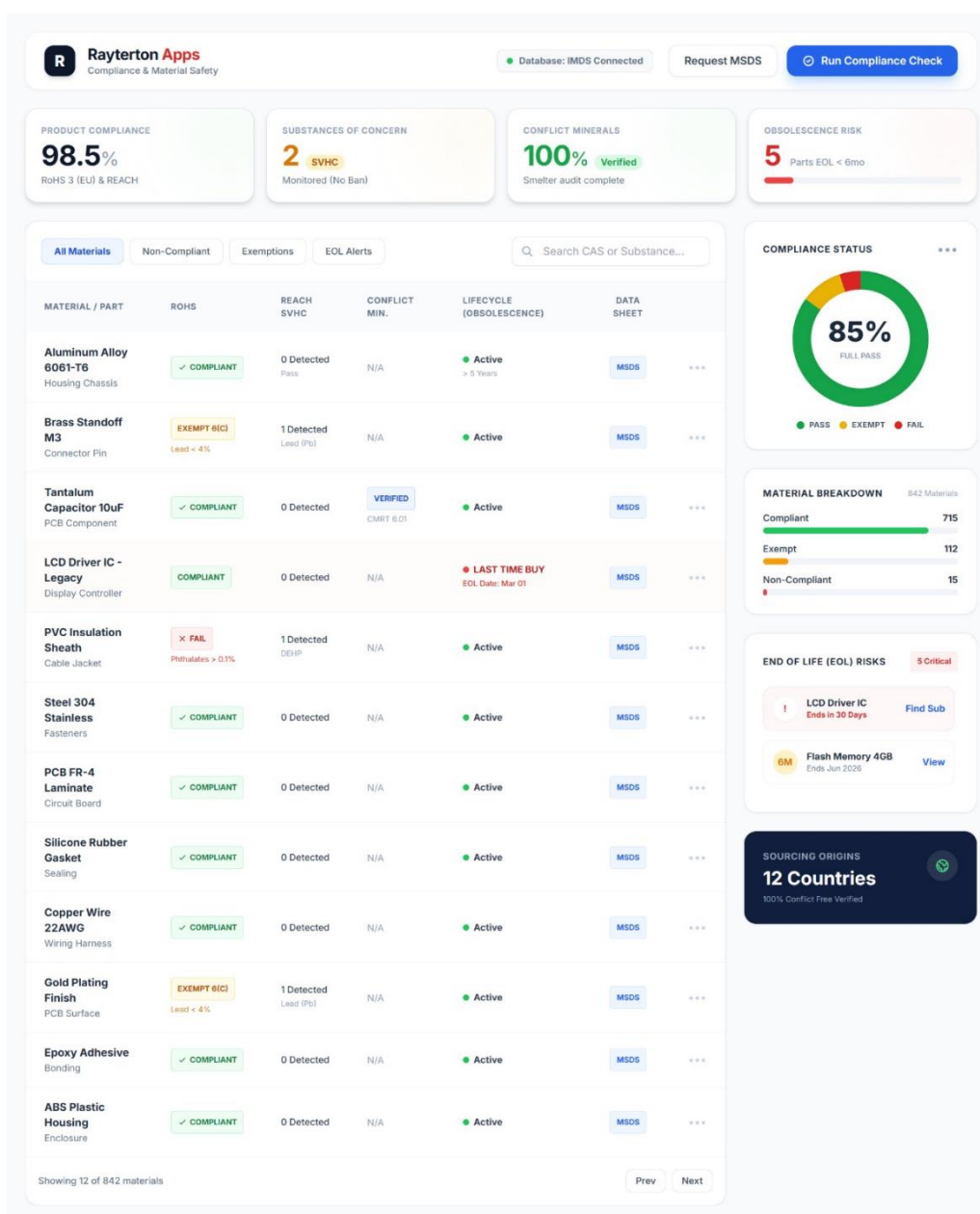
PREVIEW	FILE NAME / DESCRIPTION	VER	STATE / LOCK	SYNC STATUS
	ASM-DRN-X1.SLDASM Drone Main Assembly - Top Level	B.02	Checked Out Locked by You	Synced Attributes Updated
	CHASSIS-LWR.SLDPRT Lower Chassis Body - Carbon Fiber	A.05	RELEASED	Synced
	MOTOR-MOUNT.SLDPRT Alum. Motor Mount Bracket	C.01	Locked By: Budi S.	Pending Waiting for Check-in
	CHASSIS-LWR-DWG.PDF Manufacturing Drawing - View PDF	A.05	RELEASED	Synced
	SCREW-M3x10.SLDPRT Standard Fastener	A.01	AVAILABLE	Error Mass Prop Mismatch
	BATTERY-PACK.SLDPRT Li-Ion Battery Module	B.03	Checked Out By: Sarah W.	Pending Sync In progress
	ARM-LEFT.SLDASM Left Arm Assembly	A.02	RELEASED	Synced



fusing your Bill of Materials and technical documentation into a **single governed ecosystem**. This module allows you to structure complex product hierarchies where **every component is dynamically linked** to its latest specification documents. With automated revision control and secure watermarking, you ensure that every stakeholder from engineering to the shop floor executes based on one validated version of the truth, effectively **eliminating costly errors caused by outdated information**.

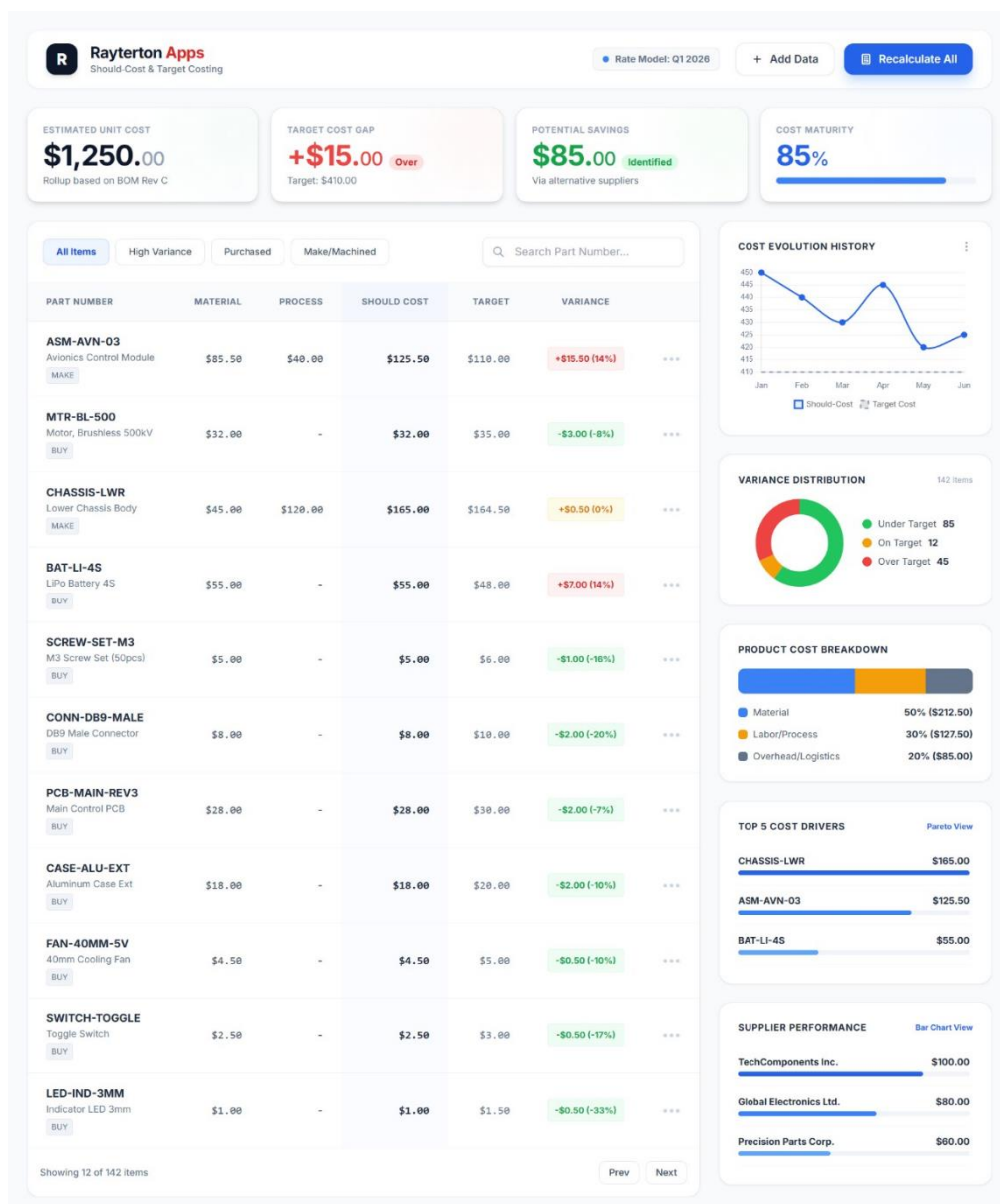
Compliance & Material Guardrails

Streamline your product changes with a structured engineering change workflow. This module enables your team to process Engineering Change Requests (ECR) and Orders (ECO) efficiently by assessing the financial and operational impact on existing inventory before approval. By coordinating workflows with manufacturing effective dates, you ensure revisions are implemented smoothly on the shop floor to minimize scrap and maintain production continuity.



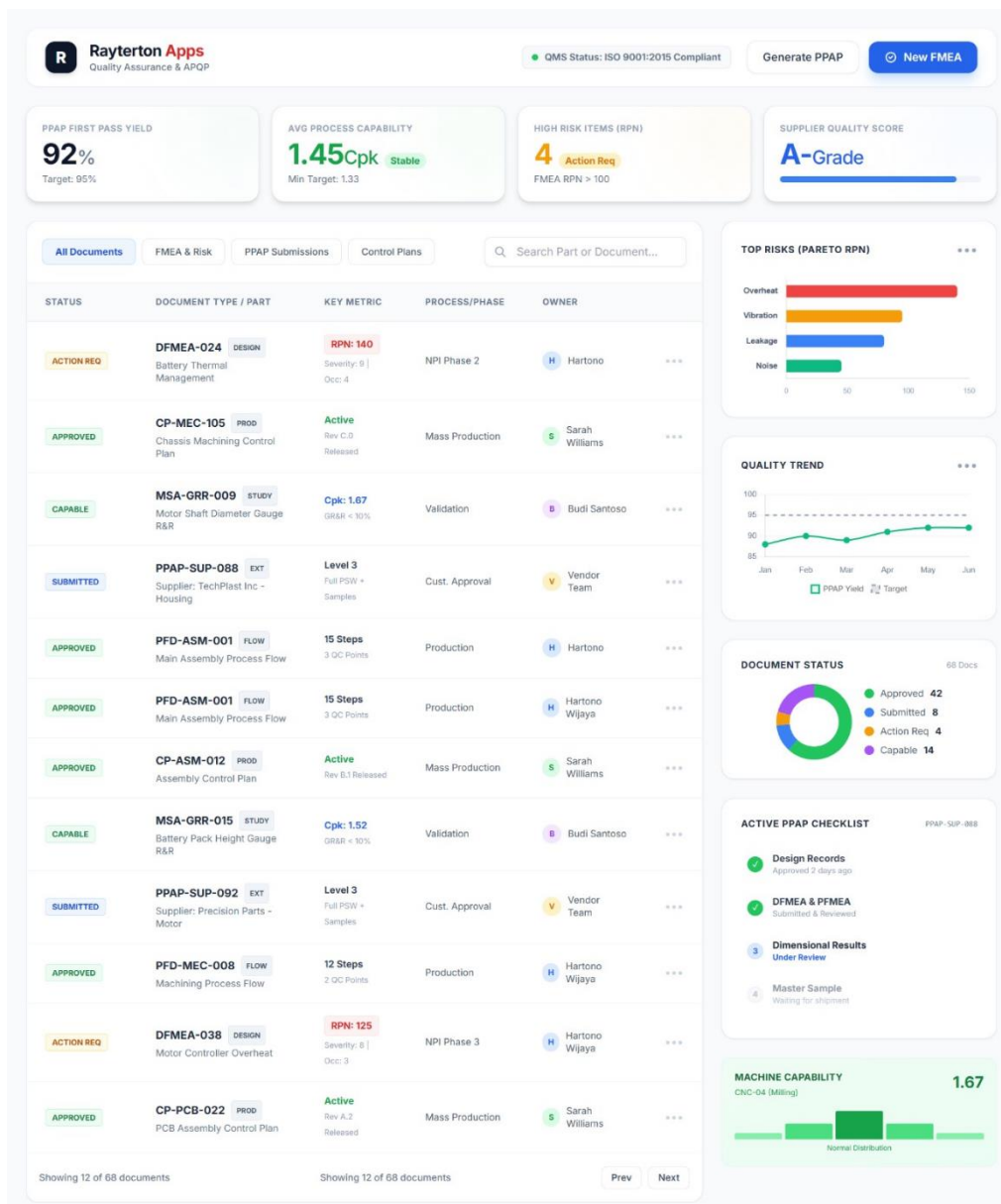
Should-Cost & Target Costing Engine

a financial control engine engineered to eliminate guesswork and protect profitability from the earliest stages of design. This module transforms your Bill of Materials into a dynamic financial dashboard by performing granular BOM rollups that aggregate material, labor, process, and overhead expenses instantly. By calculating the Estimated Unit Cost in real time, the system provides a clear, data-driven view of your financial health relative to your initial budget targets.



The platform empowers your engineering and procurement teams to identify cost drivers immediately through visual indicators that highlight positive and negative variances. With features like the **Cost Evolution History** and **detailed Product Cost Breakdown**.

Quality Planning and Validation

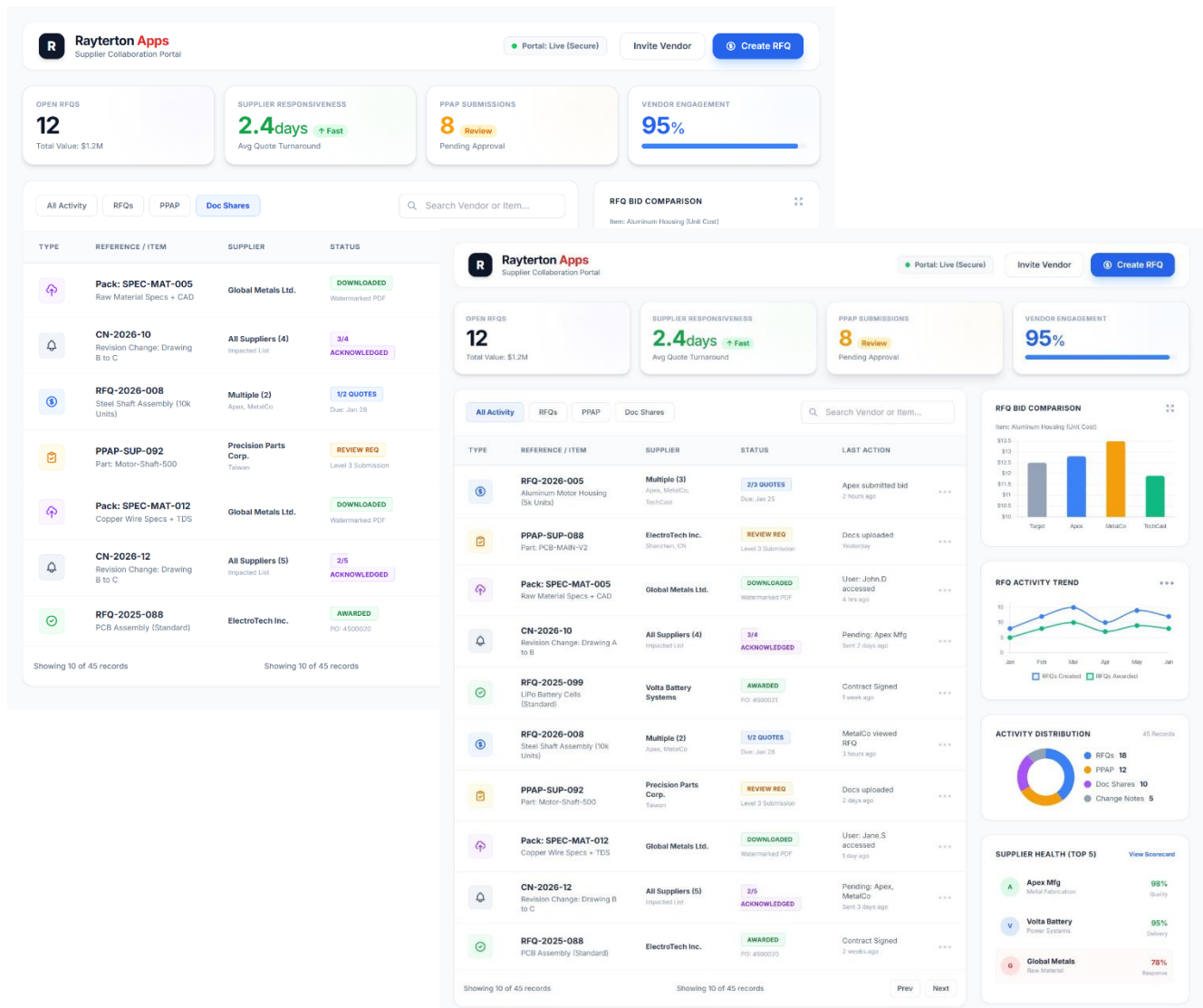


This module centralizes quality management to ensure ISO 9001 compliance throughout the product lifecycle. By integrating APQP tools directly into the workflow, it allows teams to manage live DFMEA and Control Plans while automatically flagging high-risk items through dynamic Risk Priority Number (RPN) tracking and Pareto analysis.

The system streamlines the Production Part Approval Process (PPAP) by monitoring submission statuses and validating process capability (Cpk) in real time. This provides a clear audit trail of manufacturing readiness, ensuring that both internal lines and external suppliers meet defined specifications before full-scale production begins.

Supplier Collaboration Workspace

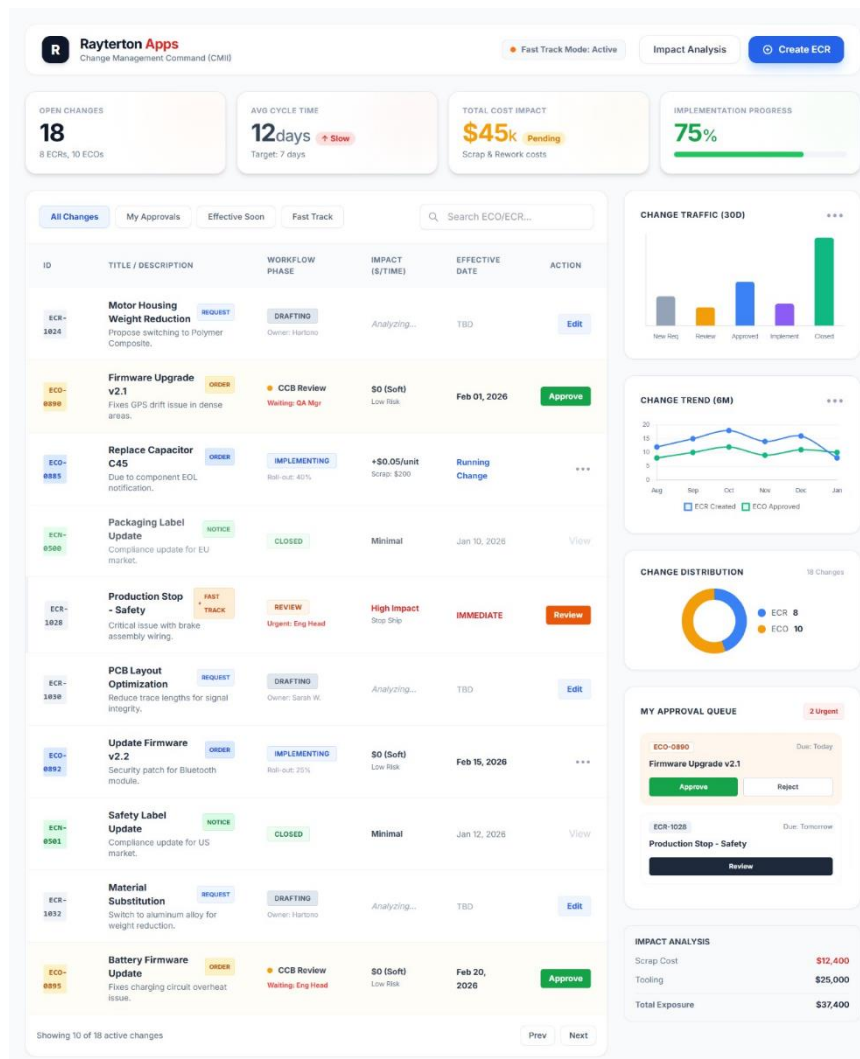
This ensures vendors always quote and manufacture based on the latest specifications, eliminating the risks of scattered emails and outdated files while significantly reducing administrative overhead and preventing costly production errors.



Consolidates all RFQs and commercial negotiations into a single audit-ready workspace for easy comparison. It allows you to track supplier schedules instantly to identify delays early, while securely sharing live technical data directly from your Item Master to ensure strict adherence to the correct revision at all times.

Change Management Console

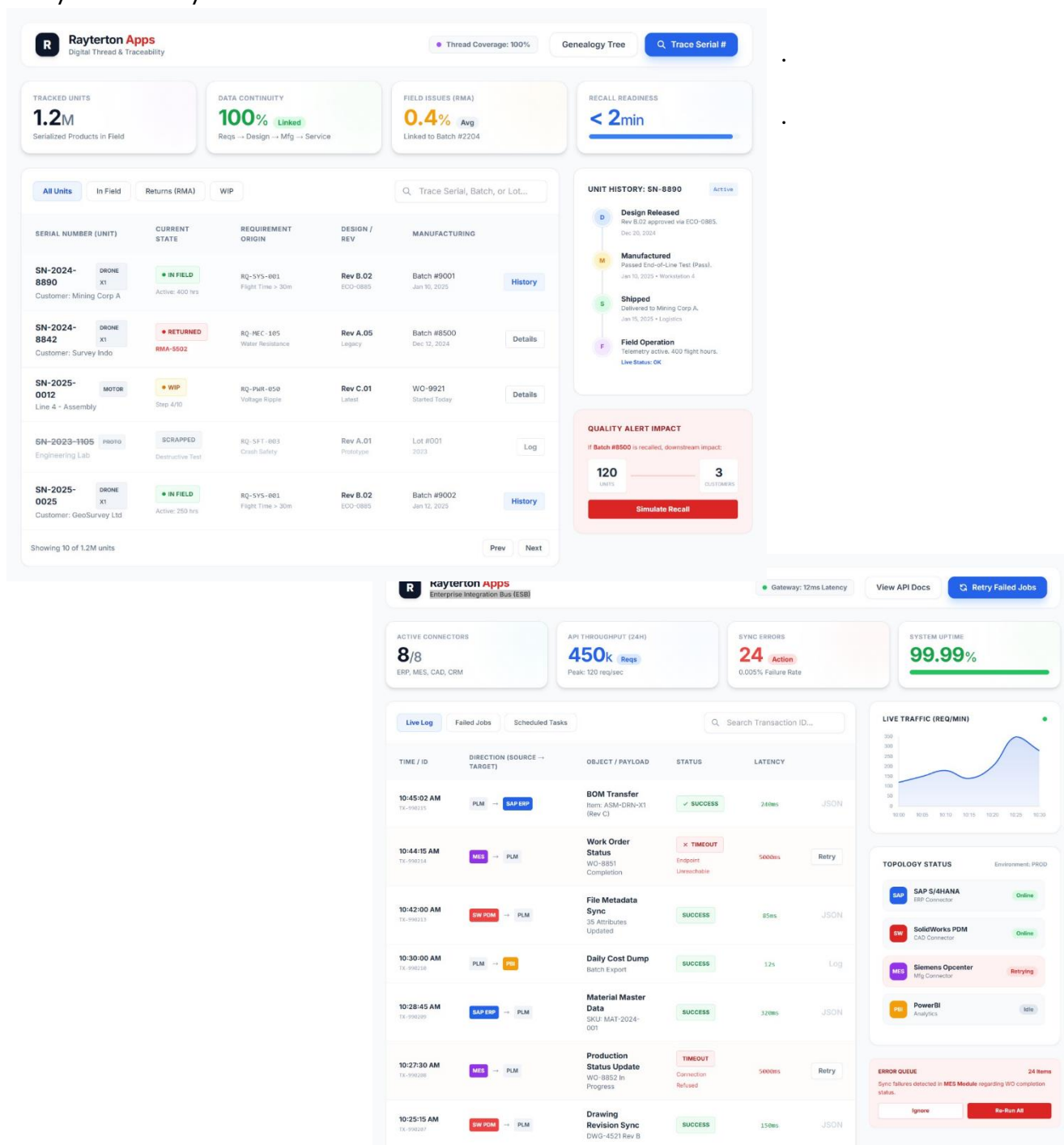
Enables teams to execute Engineering Change Requests (ECR) and Orders (ECO) systematically, ensuring that revisions are introduced to the shop floor in a controlled manner. By aligning approval workflows with manufacturing schedules, the system helps minimize scrap and prevents unplanned disruptions to production.



This platform calculates the potential financial and operational impact on existing inventory before a change is approved. It coordinates effective dates to match shop floor readiness, ensuring new revisions are implemented only when materials and resources are in place. This maintains a complete audit trail, providing full traceability and authorization history for every design modification.

Full Product Tracking and Synchronized Systems

The Digital Thread module provides a structured record of your product's history by tracing parts from initial requirements and design through to manufacturing, service, and returns. **Supported by the Integrations module which connects directly to your existing software stack**, this combination synchronizes engineering specifications and operational data across departments, eliminating the need for manual transfer while maintaining full lifecycle visibility.



Glossary

System & Lifecycle Management

- PLM (Product Lifecycle Management): An all-in-one platform to orchestrate the entire product business from concept definition to manufacturing and service.
- NPI (New Product Introduction): A structured management system (Stage-Gate) used to manage the product lifecycle from concept to launch.

Engineering & Product Data

- BOM (Bill of Materials): A complex, multi-level list of components used to synchronize engineering data and calculate costs.
- CAD (Computer-Aided Design): 3D design data that is synchronized in real-time with the BOM to prevent revision conflicts.
- ECR (Engineering Change Request): A formal request to modify a product design or process, assessed for financial and operational impact.
- ECO (Engineering Change Order): An order to execute a change after approval, coordinated with manufacturing schedules to minimize scrap.

Quality & Compliance

- APQP (Advanced Product Quality Planning): Quality tools integrated directly into the workflow to ensure compliance.
- DFMEA (Design Failure Mode and Effects Analysis): A method used to identify potential risks in the design phase.
- PPAP (Production Part Approval Process): A process to validate manufacturing readiness by monitoring submission statuses..

Supply Chain & Operations

- RFQ (Request for Quotation): Procurement documents consolidated in the supplier collaboration workspace for commercial negotiations.
- RMA (Return Merchandise Authorization): Used to track returned products and field issues (Visible in the "Digital Thread & Traceability" system view).

Ready to Transform Your Product Development at the Enterprise Level?

Share your NPI strategy, quality targets, and supply chain challenges with us today. We will configure the Rayterton PLM ecosystem to accelerate your time-to-market and automate the end-to-end lifecycle from initial requirement definition and design to mass production and service.

This platform is engineered for engineering leaders and executive teams who demand control, traceability, and scalable integration. Partner with us to institutionalize your product governance into a modern digital thread that is audit-ready, integration-ready, and fully prepared to scale across all your manufacturing sites and global suppliers.

Contact Us :**+62 812 9615 0369****marketing@rayterton.com****About Rayterton**

Established in 2003, Rayterton delivers comprehensive Best Fit Software Solutions, server and hardware products, and technology services to a wide range of industries and organizations. Our core expertise lies in Business Process Improvement (BPI), IT Infrastructure, and IT Management.

At Rayterton, we are committed to empowering our clients by enhancing their business operations through tailored IT and management solutions. We combine innovation, experience, and client collaboration to ensure long-term success and digital transformation.

Our Competitive Strengths**100% Risk Free****Best fit to
client
requirements****Easy to
customize****Software
ownership****No Change
Request (CR)
fees during
maintenance****For more information, visit rayterton.com**