Product Portfolio Case Study

Project: Backend Tool Validation & UI Enhancement

Timeline: May 2024 – Aug 2024

Role: Associate Product Management Intern

Team: 1 APM intern (me), 3 backend engineers, 2 UI/UX designers, 1 QA lead

Tools/Methods: Jira, Confluence, Stakeholder Interviews, Figma, SQL dashboards

Project Overview

- Company Mission: Veterinary Biological Research Institute ensures safe, reliable biological products through rigorous data-driven validation.

- Problem Statement: Legacy backend validation tools were error-prone and time-consuming, leading to 30% delays in remediation cycles and misalignment between engineers, designers, and stakeholders.

- Success Criteria: Improve data accuracy, reduce remediation time, and create a UI that supports both technical and non-technical users.

Discovery & Research

- Ideation Overview: Brainstormed with engineers and designers to map current workflows, pain points, and usability gaps.

- Stakeholders: Collaborated with backend engineers, UI/UX designers, QA lead, and senior PM.

- Scope: Conducted 6 stakeholder interviews, documented existing workflows, and reviewed 20+ support tickets to identify recurring validation errors.

Customer Definition

- Target Customer: Internal teams — data engineers, validation specialists, and QA staff.

- Persona 1 (Data Engineer): Goal: Automate validation checks. Frustration: False positives required manual review.

- Persona 2 (Validation Specialist): Goal: Quickly identify true errors. Frustration: UI was unintuitive for non-technical users.

- Segmentation: Prioritized validation specialists since they directly impacted remediation speed.

Problem Validation

- Pain Points: Manual validation slowed workflows; UI required technical expertise; lack of clear documentation caused misalignment.

- Prioritized Pain Point: Complexity of the UI, which slowed non-technical validation specialists and contributed to delays.

Solutioning

- Brainstormed Solutions: UI redesign, backend logic improvements, centralized documentation.

- Prioritization Method: RICE framework (Reach, Impact, Confidence, Effort).

- Final Solution: Simplify UI and create workflow documentation while supporting backend improvements.

MVP Development

- MVP: UI prototypes with simplified navigation and error categorization; Confluence documentation for workflows.

- Designs: Low-fidelity wireframes created in Figma.

- User Story Example: As a validation specialist, I want error categories grouped by severity so I can prioritize remediation efficiently.

- North Star Metric: Remediation time per cycle (goal: reduce by 30%).

Launch Strategy

- Initial Market: Validation specialists (pilot group of 5).

- Rollout Plan: Start with one validation team → expand across QA teams.

- Promotion: Internal demos, walkthrough sessions, documentation guides.

- Rollback Strategy: Revert to previous tool if adoption <50% within 2 sprints.

Results & Impact

- Quantitative Impact: Reduced remediation cycle time by 30%; improved data accuracy; 70% adoption within 2 sprints.

- Qualitative Feedback: UI was more intuitive; onboarding new hires took half the time.

- Iterations: Added customizable filters and dashboard metrics after pilot feedback.