



Microsoft Power Platform

Asset Management App – Streamlining Organisational Asset Lifecycle

Developed by Solomon Okpuno | Microsoft Power Apps + Power Automate

October 2025 v1.0



Executive Summary

- ⟳ Digitally transforms asset requests, approvals, and allocations
- ⟳ Automates manual tracking through Power Automate and Dataverse
- ✓ Enhances compliance with audit trails and policy validation
- 🕒 Improves visibility for managers and IT admins

Before vs After

Manual Process



- ✗ Paper-based forms
- ✗ Email approvals
- ✗ Spreadsheets
- ✗ Limited visibility

Automated Process



- ✓ Digital forms
- ✓ Automated workflows
- ✓ Centralized data
- ✓ Real-time tracking

Business Context & Problem Statement

Delays and Lost Equipment

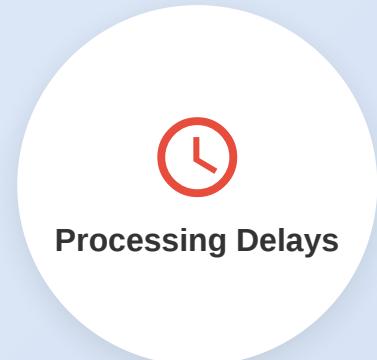
Manual asset tracking processes created bottlenecks and increased risk of misplacing valuable assets

Lack of Accountability

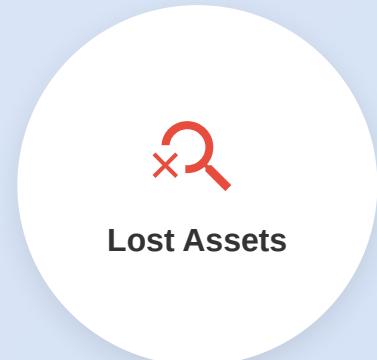
No clear ownership or responsibility tracking for assigned assets across the organization

Limited Audit Visibility

Insufficient tracking mechanisms and policy enforcement created compliance risks



Processing Delays



Lost Assets



Compliance Risks

Introducing the Asset Management App

A Model-Driven App using Microsoft Dataverse as the data backbone



Dataverse Tables

- Assets
- Allocations
- Employees
- Approvals



Power Automate Flows

- Approval Flow
- Outside Policy Flow
- Update Asset on Allocation



Business Rules

- Conditional Field Visibility
- Validation Logic
- Automated Notifications



Power Apps

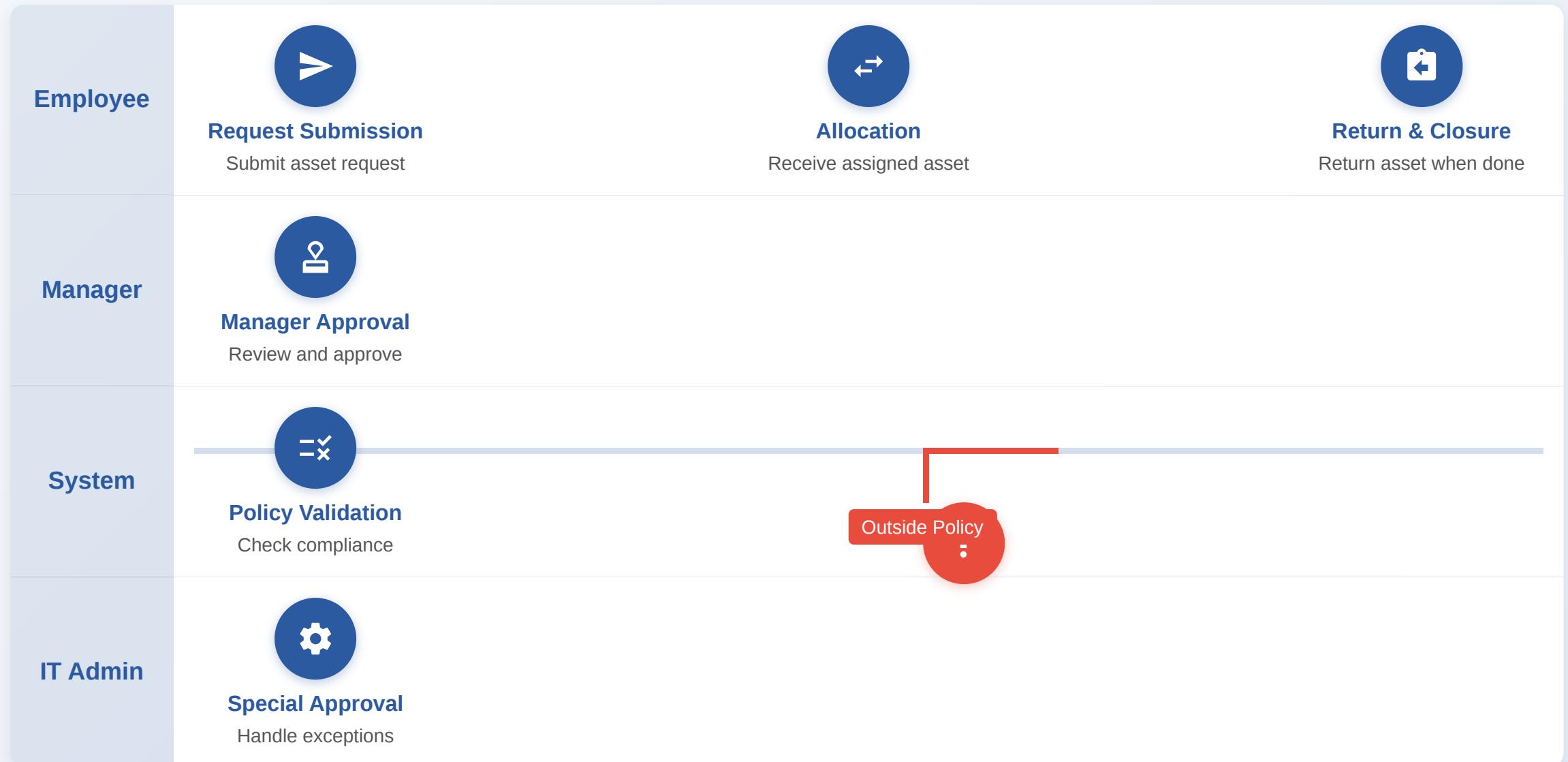


Power Automate



Dataverse

Workflow & Process Logic



■ Standard Process Flow

■ Exception/Conditional Flow

Key Features & Automations



Automated Approvals

Streamline approval workflows with Power Automate, reducing manual intervention and processing time



Approval Flow Mockup



Policy Validation

Business rules automatically validate requests against organizational policies before approval



Validation Rule Mockup



Real-time Notifications

Instant alerts in Teams and Email keep stakeholders informed throughout the asset lifecycle



Teams Notification Mockup



Dynamic Dashboards

Role-based views provide relevant insights and data visualization for different user types



Dashboard Mockup



Audit Logging

Complete audit trail in Dataverse tracks all asset transactions for compliance and reporting



Audit Log Mockup

Benefits & Impact

⌚ Before Automation



2 days

Average approval time



Partial

Asset traceability



85%

System uptime



65%

User satisfaction



92%

Process Efficiency Improvement

✨ After Implementation



<24 hours

Average approval time

↘ 92% faster



100%

Asset traceability

↗ Complete



99%

System uptime

↗ +14%



90%+

User satisfaction

↗ +25%



75%

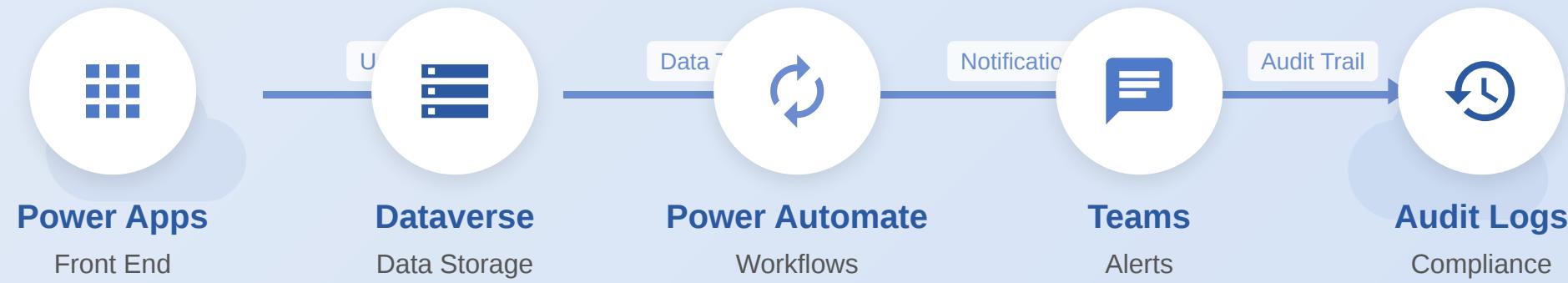
Cost Reduction in Asset Management



80%

Reduction in IT Support Tickets

Technical Architecture



Integrated solution architecture leveraging Microsoft Power Platform components for end-to-end asset lifecycle management

Governance & Security



Dataverse Role-Based Access

- 👤 **Employee:** View and request assets
- 👥 **Manager:** Approve requests and monitor team assets
- 🛡️ **Admin:** Full system access and configuration



Data Integrity & Compliance

- ⌚ Complete audit trail for all asset transactions
- ☒ Automated policy validation and enforcement
- ☒ Compliance with organizational and regulatory standards



Environment Security

- ↔️ **Development:** Isolated testing environment
- ⌚ **UAT:** User acceptance testing with validation
- ⌚ **Production:** Secure deployment with monitoring



Backup & Restore Strategy

- ⌚ Automated daily backups of all Dataverse data
- ⌚ Point-in-time recovery capability for critical assets
- ☑ Regular disaster recovery testing and validation

Lessons Learned & Future Enhancements



Power BI Integration

Advanced trend analysis and predictive asset lifecycle reporting



Barcode Scanning

Physical asset verification with mobile device integration



AI Copilot Integration

Predictive maintenance and automated asset recommendations



Mobile-First Experience

Enhanced responsive design for field technicians and remote workers



Next Steps

1

Power BI Dashboard Integration

Q4 2025



2

Mobile App Enhancement

Q1 2026



3

Barcode Scanning Implementation

Q2 2026



4

AI Copilot Integration

Q3 2026



UAT and Success Metrics



UAT Plan Summary

- ✓ **10 test cases** executed successfully
- ⌚ All **major defects** resolved
- ⌚ UAT completed **on schedule**

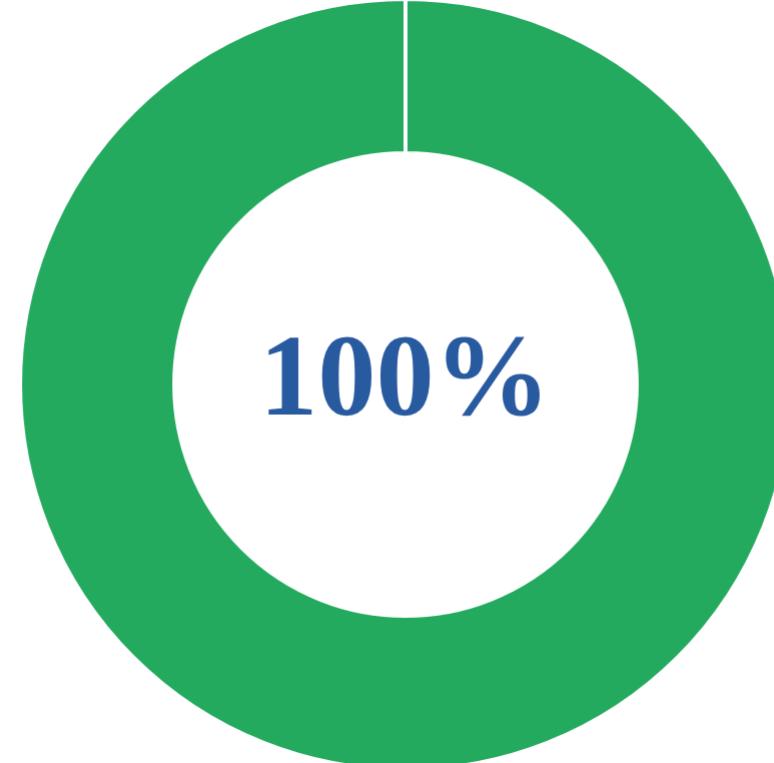


Final Sign-Off

IT Admin and Department Manager



Test Coverage & Pass Rate



Passed (100%)

Failed (0%)



Microsoft Power Platform

The Asset Management App demonstrates how low-code automation can modernise asset lifecycle management while enforcing accountability, speed, and data transparency.

Power BI
Business analytics

Power Apps
Application development

Power Automate
Process automation

Power Virtual Agents
Intelligent virtual agents

Power Pages
External facing web



Power Platform



Microsoft

Power FX

AI Builder

Dataverse

Developed by Solomon Okpuno | October 2025 | Powered by Microsoft Dataverse and Power Automate