

Transforming Manual Reporting into an Automated Power Platform Solution

1. Introduction

The DVLA ISG Scanning team relied on paper records, emails and spreadsheets to collect and report daily operational statistics. Information from three shifts was manually consolidated before being checked and prepared for wider reporting by 8:30am.

Existing Problem



Why it Mattered

- Reliance on paper-based and spreadsheet-driven processes.
- Repetitive manual data entry across multiple systems.
- High dependency on manual hand-offs and individual knowledge.
- Increased risk of data errors, inconsistencies.
- Delayed access to operational KPIs and Management Information.

Key Issue

Fragmented reporting process impacting data quality, reporting timeliness and management visibility.

2. Aim and Objectives

Aim

To design, develop and evaluate a secure automated statistics and KPI reporting solution.

Objectives

- Establish baseline and assess architecture options.
- Develop centralised automated KPI reporting solution.
- Evaluate prototype benefits.

Research Question

Can automation improve data quality, reporting timeliness, operational efficiency and self-service access?

3. Research Areas

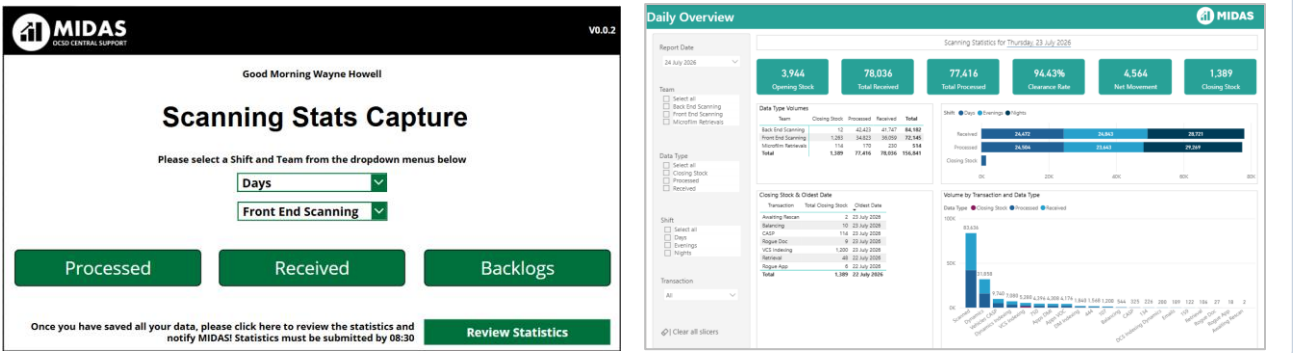
Each research area shaped a controlled decision that informed the Design.

Area	Design Takeaway
Spreadsheet Risk	Reduce manual handling and duplication
Data Quality	Improve accuracy through automated validation
Operational KPIs	Standardise KPI definitions and reporting
Self-Service BI	Provide controlled self-service dashboards
Automation	Implement secure, maintainable automation
Governance	Embed governance, security and traceability

4. Design and Implementation

The solution separated data capture, review, transfer, storage and reporting into controlled stages. Key design choices included structured three-shift Power Apps capture with validation and duplicate prevention, SharePoint as a staging layer before retaining human review, and automated transfer of approved data to Dataverse for centralised Power BI reporting. Power Platform was selected because it aligned with approved organisational technologies and integration requirements.

Solution Architecture

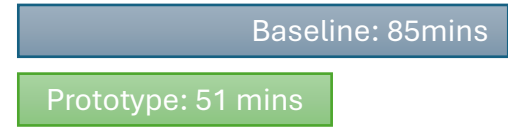


5. Evaluation



Evaluation covered five working days, 293 records and feedback from 20 stakeholders. The prototype reduced end-to-end reporting time from 85 to 51 minutes and manual hand-offs from four to one, while all evaluated records passed structural validation with no duplicates identified. Stakeholder feedback was predominantly positive, although a longer production pilot is required to confirm sustained benefits.

End-to-End Reporting Time



Key Evaluation Summary

Objectives were substantially achieved while retaining MIDAS governance. It showed that automation can improve data quality, reporting timeliness, operational efficiency and self-service access within ISG Scanning.