



Implementation Partner



Telangana AI Rising Grand Challenge

AI-Driven Anomaly & Mistake Detection in Real-Time for the Registration & Stamps Department

Introduction

The Department of Registration and Stamps processes thousands of property registration documents daily. The department needs to ensure, in a systemic tech enabled way, that there are no errors / discrepancies in the registration process.

Challenges Identified

- 1. Opportunity to Enhance Timeliness of Irregularity Detection**
There is an opportunity to enhance detection mechanisms to strengthen oversight.
- 2. Alignment between Pre-Registration and Final Documentation**
Structured data is effectively captured during the pre-registration phase through the webform. However, differences may occasionally arise when compared to the final submitted documents. Introducing real-time validation can help ensure greater consistency across stages.
- 3. Streamlining Validation of Property Details**
Cross-verification of the pre-registered location with final documents is a valuable integrity check. The process can be optimized through automation for improved efficiency.

Proposed Technological Solutions

- 1. OCR-Based Discrepancy Detection**
 - **Document Scanning & OCR:** Implement an advanced OCR engine to scan final draft registration documents before the final screening.
 - **Real-Time Comparison:** Automatically compare extracted details with pre-registration (indexation) webform data.

- **Discrepancy Alerts:** Flag mismatches in key fields (e.g., party names, property details, transaction amount) for the Sub-Registrar Officer (SRO) to address promptly.

2. Market Value Validation Using Location

- **Location-Based Verification:** Utilize location from pre-registration to confirm the correct block, ward, and locality.
- **Circle Rate Cross-Check:** Automatically compare the declared market value in the draft registration document against the official circle rate.
- **Automated Flagging:** Raise high-priority alerts for discrepancies in declared vs. official market values to prevent revenue losses.

3. Automated Audit Report Generation

- **Post-Registration Summaries:** AI-driven audit reports will be generated immediately after registration, summarizing flagged discrepancies for auditor review.