



# Single Window System (SWS)

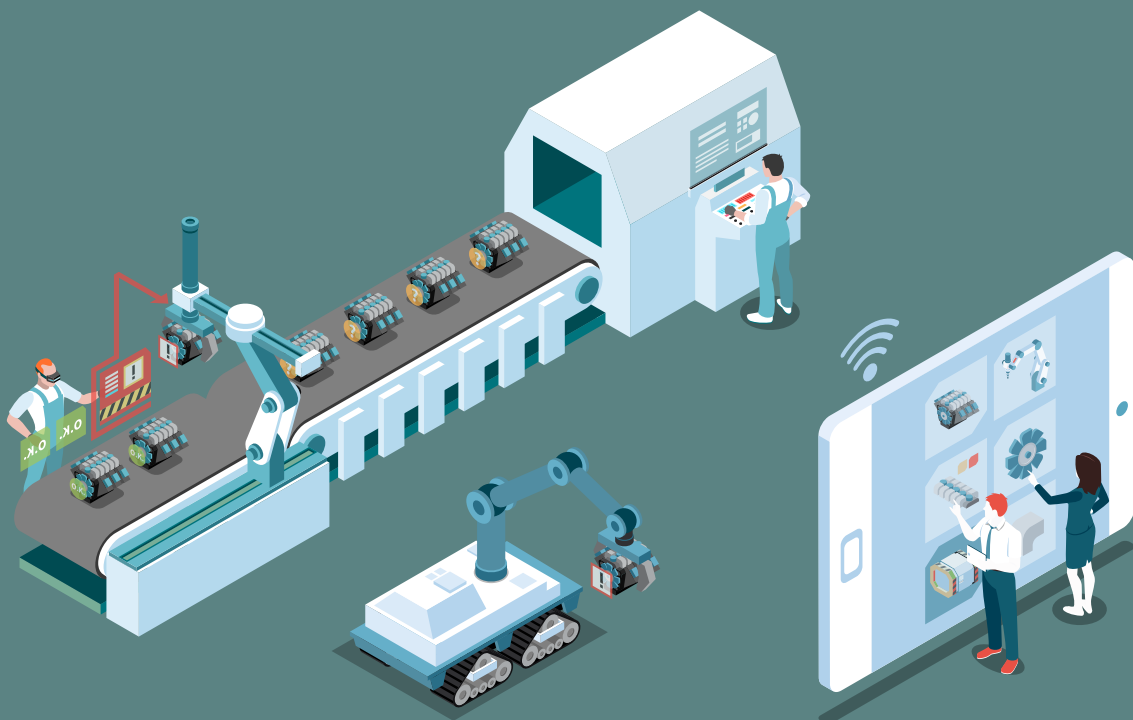
A Case Study on a unified platform that streamlines industrial approvals, inspections, and post-establishment services to enhance Ease of Doing Business in Chhattisgarh.

CSM Technologies

Govt. of Chhattisgarh

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**Designed to simplify investor engagement and improve departmental coordination, the system brings key industrial services onto a single digital interface. Through modular workflows, mobile-based inspections, and dashboard-based monitoring, SWS ensures faster, transparent, and accountable service delivery.**



# Introduction

Chhattisgarh, with its rich mineral resources and strategic geographic location, is positioning itself as an emerging industrial hub in central India. As the state intensifies efforts to attract investments across sectors such as manufacturing, energy, logistics, and agro-processing, it is critical to provide a seamless and transparent experience for investors and entrepreneurs.

As of FY 2024–25, industry contributes approximately 48% of the state's GSDP, exceeding the national average and underscoring the central role of manufacturing, mining, and infrastructure sectors in Chhattisgarh's economy.

To support investor engagement and streamline business operations, the Department of Commerce & Industries, in partnership with the Chhattisgarh Infotech Promotion Society (CHiPS), implemented a Single Window System (SWS). This digital platform acts as a central access point for services provided by regulatory departments including Industries, Boilers, Labour, Energy (CSPDCL), Pollution Control Board, and the State Treasury.

Investors can now apply for registrations, clearances, and incentives via a unified portal, eliminating multiple physical visits and repetitive document submissions. This ensures transparency, process accuracy, status tracking, and faster processing times—integral to enhancing Ease of Doing Business and reinforcing Chhattisgarh's investor-friendly governance framework.



# Challenges

Before the implementation of the Single Window System, industrial service delivery in Chhattisgarh was managed through department-specific processes that operated independently. While each department had its own internal mechanisms for approvals and compliance, the absence of a unified system made it difficult for investors to engage with the government in a streamlined and coordinated manner.



## Fragmented workflows across departments

Investors had to engage each department separately with unique forms and timelines, causing duplication, inconsistent documentation, and frequent delays in approval cycles.



## Manual boiler approval and inspection processes

Boiler-related services involved physical submissions without digital tracking, leading to unclear timelines, coordination issues, and limited transparency in registration and inspection.



## Unstructured production inspection scheduling

Inspections were scheduled manually without a centralized system, resulting in miscommunication, reporting delays, and inconsistent inspection standards.



## Repetitive documentation for incentives and subsidies

Investors had to re-enter data already submitted in earlier stages, as the system lacked document reuse or auto-fill features, increasing time and effort.



## Disjointed grievance and status tracking mechanisms

Grievances were handled independently by departments without a unified system, making escalation, tracking, and communication difficult for investors.

These issues stemmed not from a lack of effort, but from the absence of a unified digital infrastructure to connect departments, remove redundancy, and streamline investor engagement. The need was for an integrated system to consolidate services and enable coordinated, lifecycle-wide support for industries.

## Solution

To streamline investor engagement and ensure coordinated service delivery, the Government of Chhattisgarh, through the Department of Commerce & Industries and CHiPS, implemented the Single Window System (SWS)-a centralized platform that brings together all industrial services under one digital interface.

**Developed by CSM Technologies, the system consolidates services like Udyam Aakanksha registration, production certification, inspections, subsidies, and grievance redressal through integrated, rule-based workflows. These workflows align with departmental service levels, ensuring structured approvals, validation logic, and auto-escalation in case of delays.**

Application progress can be tracked through user dashboards that reflect current processing status. Departments access MIS reports for pendency monitoring and decision-making.

Field-level enforcement is digitized through a mobile inspection app supporting GPS-tagged photos and report submissions.

Auto-populated forms reduce redundancy by pulling validated data from prior approvals. Secure access is governed through structured user permissions, audit trails, and form versioning to ensure traceability and regulatory compliance.

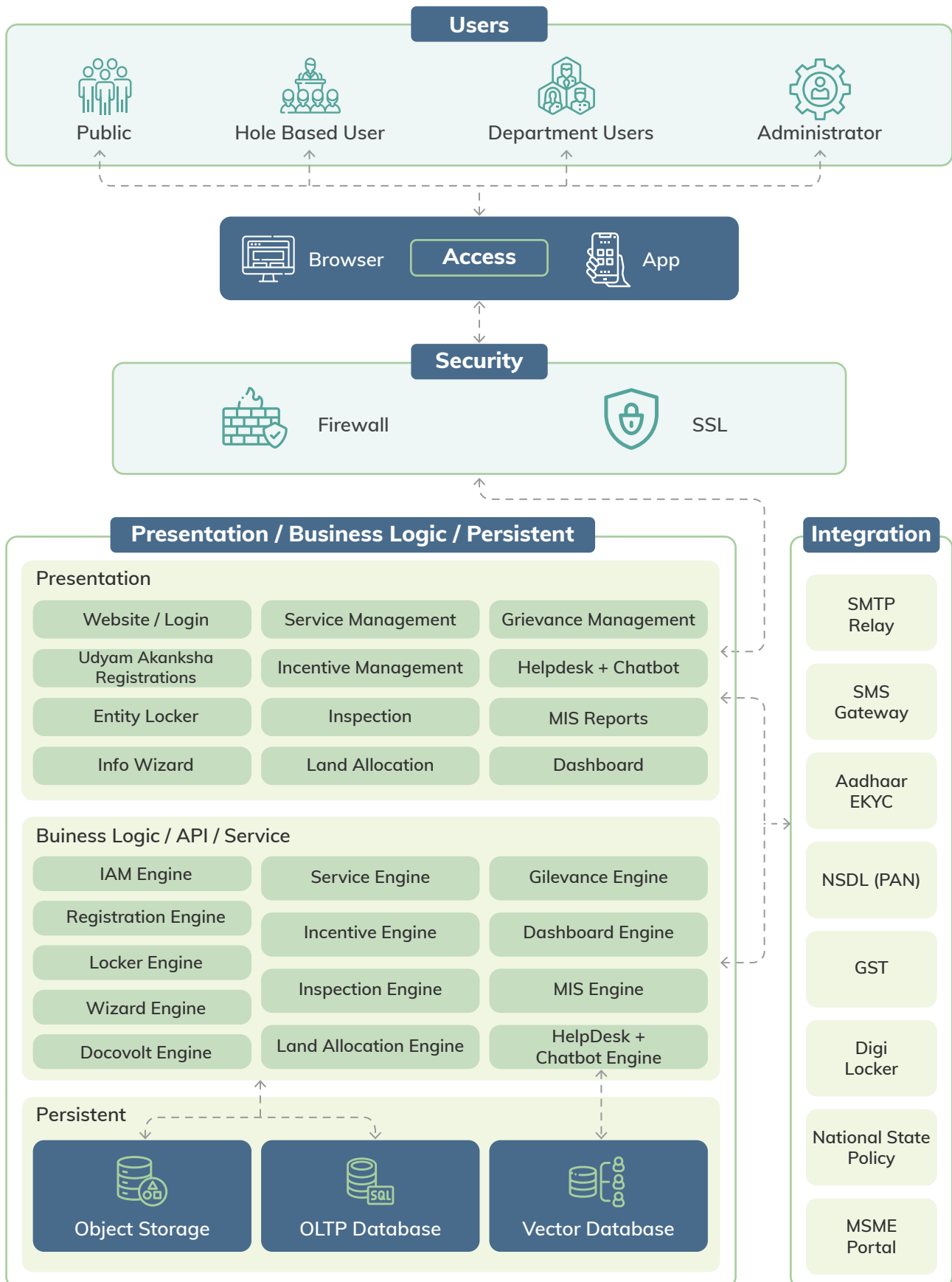
The platform is hosted on Oracle Cloud Infrastructure, compliant with MeitY guidelines, and supported by high availability and disaster recovery protocols. It leverages a scalable, modular backend with optimized data storage using both structured and unstructured repositories-ensuring performance, flexibility, and maintainability.

Key integrations with government systems further streamline processes:

- **Bhuyan API (Revenue Department)** for land validation
- **CSPDCL** for electricity connection verification
- **State Treasury Gateway** for secure online payments
- **Aadhaar eSign, PAN, GSTIN, and MCA APIs** for identity authentication and compliance

By bringing these capabilities together, the SWS platform helps Chhattisgarh deliver a transparent, accountable, and investor-friendly service ecosystem-improving departmental coordination and enabling end-to-end lifecycle management for industrial stakeholders.

# Solution Architecture



# Key Features

The Single Window System includes supporting components that strengthen its usability and governance value:

<b>Unified Investor Dashboard</b>	Centralized interface where investors can view application status, service timelines, approvals, and departmental notifications.
<b>Entity Vault</b>	A reusable document repository that supports upload-once-use-across-services, with classification tags and role-based access for streamlined documentation.
<b>Info Wizard &amp; AI Chatbot</b>	Interactive guidance tools that help users identify required approvals based on project inputs and resolve queries via natural language prompts.
<b>Multilingual Interface</b>	Portal access and services available in both Hindi and English to ensure broader usability across investor segments.
<b>Helpdesk &amp; Ticketing Support</b>	Offers structured issue resolution with ticket generation, escalation tracking, and interdepartmental coordination. OTP-based login ensures secure access for both investors and officials.
<b>Administrative Control Panel</b>	Enables granular role-based access management at user and department levels, allowing configuration of approvals, privileges, and workflows. Built-in two-factor authentication enhances access security and user validation.
<b>Service Management Console</b>	Enables departments to define forms, set SLA timelines, activate/deactivate services, and customize service logic.
<b>MIS Dashboard &amp; Mobile Inspection App</b>	Dashboards offer department-level performance reports and summaries; mobile app enables field officers to capture geo-tagged data and submit digital inspection reports.

These components enhance user experience, reinforce governance oversight, and support digital transparency across services.



# Modular Architecture & Functional Coverage

The Single Window System has been architected as a modular platform, enabling seamless configuration, independent scaling, and cross-departmental service delivery. Each module caters to specific investor touchpoints or departmental functions. Major modules include:



## Udyam Aakanksha (Registration & Amendment)

Captures intent to invest and allows modification of project details such as capacity or timelines. Generates a unique Project ID for tracking.



## Invitation to Invest (SIPB)

Handles high-value proposals requiring approval from the State Investment Promotion Board (SIPB), as defined under state investment procedures.



## Production Certificate (Apply, Amend, Inspect)

Supports application, modification, and inspection for production commencement through digital workflows and mobile-enabled field verification.



## Expansion / Diversification Acknowledgement

Generates digitally signed acknowledgment certificates for unit modifications like capacity increase or infrastructure updates.



## Boiler Services & Inspection

Covers boiler registration, renewal, and inspection under the Boiler Act with mobile reporting and geotagged evidence submission.



## Incentive & Subsidy Application

Enables structured claims for fiscal incentives with auto-fetching of prior approval data for faster processing.



## Grievance Redressal & Appeal

Facilitates formal grievance submission and appeal filing with tracking IDs, fee integration, and escalation mechanisms.



## CSR Reporting

Captures industry CSR contributions aligned with district-level priorities and supports oversight by departments.



# Best Practices & Benefits

The Single Window System (SWS) for Chhattisgarh incorporates industry-aligned digital governance principles, ensuring scalable service delivery while improving investor experience. Each design decision contributes directly to measurable outcomes for government efficiency and business enablement.



## Department-Agnostic Architecture

Enables seamless onboarding of new services without disrupting existing workflows.

- Ensures system scalability and adaptability to policy changes.



## SLA-Driven Automation

Routes applications based on pre-defined timelines and escalation rules.

- Improves service predictability and accountability.



## Field-to-Portal Inspection Capability

Captures inspection data using mobile devices with geo-tagging and real-time uploads.

- Reduces verification delays and enhances compliance integrity.



## Secure, API-Based Validation

Integrates with land, power, and identity systems for real-time data authentication.

- Improves data accuracy and reduces manual verification effort.



## Process Audibility via Role-Based Access

Uses defined user hierarchies and digital signatures to trace service actions.

- Enhances institutional transparency and audit-readiness.



## User-Centric Features

Features like Entity Vault, bilingual interface, and status dashboards simplify user interactions.

- Minimizes manual effort and boosts investor confidence.

Together, these best practices position SWS Chhattisgarh as a scalable, investor-friendly governance model-delivering faster approvals, simplified compliance, and improved institutional coordination across the industrial ecosystem.

## Impact & Conclusion

The Single Window System has consolidated industrial services onto a unified digital platform, eliminating departmental silos and standardizing service delivery workflows. By digitizing approvals, inspections, and grievance redressal, the system has enhanced operational efficiency, improved interdepartmental coordination, and strengthened transparency across the industrial ecosystem.

- **Over 70 services** from key departments have been integrated on a single interface.
- **Nearly 680 users** have registered on the portal.
- **Around 580 Udyam Aakanksha registrations** and **over 50 SIPB** proposals have been processed.
- **More than 100 helpdesk queries** and **14 incentive applications** have been handled digitally.
- Turnaround time has reduced due to auto-routing, digital submissions, and rule-based workflows.
- Mobile-based inspections with GPS-tagged uploads have accelerated field verification and compliance checks.
- Document and data reuse has minimized redundancy across linked approvals.
- CSR activity tracking has aligned private sector contributions with district-level development goals.
- Real-time status alerts via SMS/email have reduced follow-ups and enhanced process visibility.

The platform has contributed to Chhattisgarh's Ease of Doing Business performance and serves as a scalable, replicable model for other states. With modular architecture and integration readiness, SWS is positioned to expand into a full-spectrum industrial facilitation system.



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### **CSM Technologies (HQ)**

E/56, Infocity, Chandrasekharpur  
Bhubaneswar, Odisha - 751024  
Tel: +91-674-6635 903  
Email: [info@csm.tech](mailto:info@csm.tech)  
Website: [www.csm.tech](http://www.csm.tech)

### **CSM Technologies**

903, 9th Floor, Bhikaji Bhawan,  
Bhikaji Cama Place,  
New Delhi - 110066  
Tel: +91-9314772527  
Email: [delhi@csm.tech](mailto:delhi@csm.tech)

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### **Additional Locations**

#### **CSM Technologies Inc.**

15310 Amberly Drive Suite,  
60 Tampa FL, 33647,  
USA

+1 (509) 408-2507  
[unitedstates@csm.tech](mailto:unitedstates@csm.tech)

#### **CSM Tech Corp.**

200 Bay St,  
North Tower Suite 1200,  
Greater Toronto Area,  
M5J 2J2, Canada

+1 647-267-3819  
[canada@csm.tech](mailto:canada@csm.tech)

#### **CSM Tech Limited**

3rd Floor, Office Suite No.2,  
Western Heights, Karuna  
Road, Nairobi, Kenya

+254-713512751  
[kenya@csm.tech](mailto:kenya@csm.tech)






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