



Smart ERP Platform with AI-Based Attendance & Integrated HR Modules

We developed and deployed a comprehensive ERP platform designed for seamless human resource and operations management. The system integrates AI-based attendance, location/WiFi-based restrictions, and dynamic workflow modules to bring full automation to HR, finance, and administration.

AI based attendance for employees



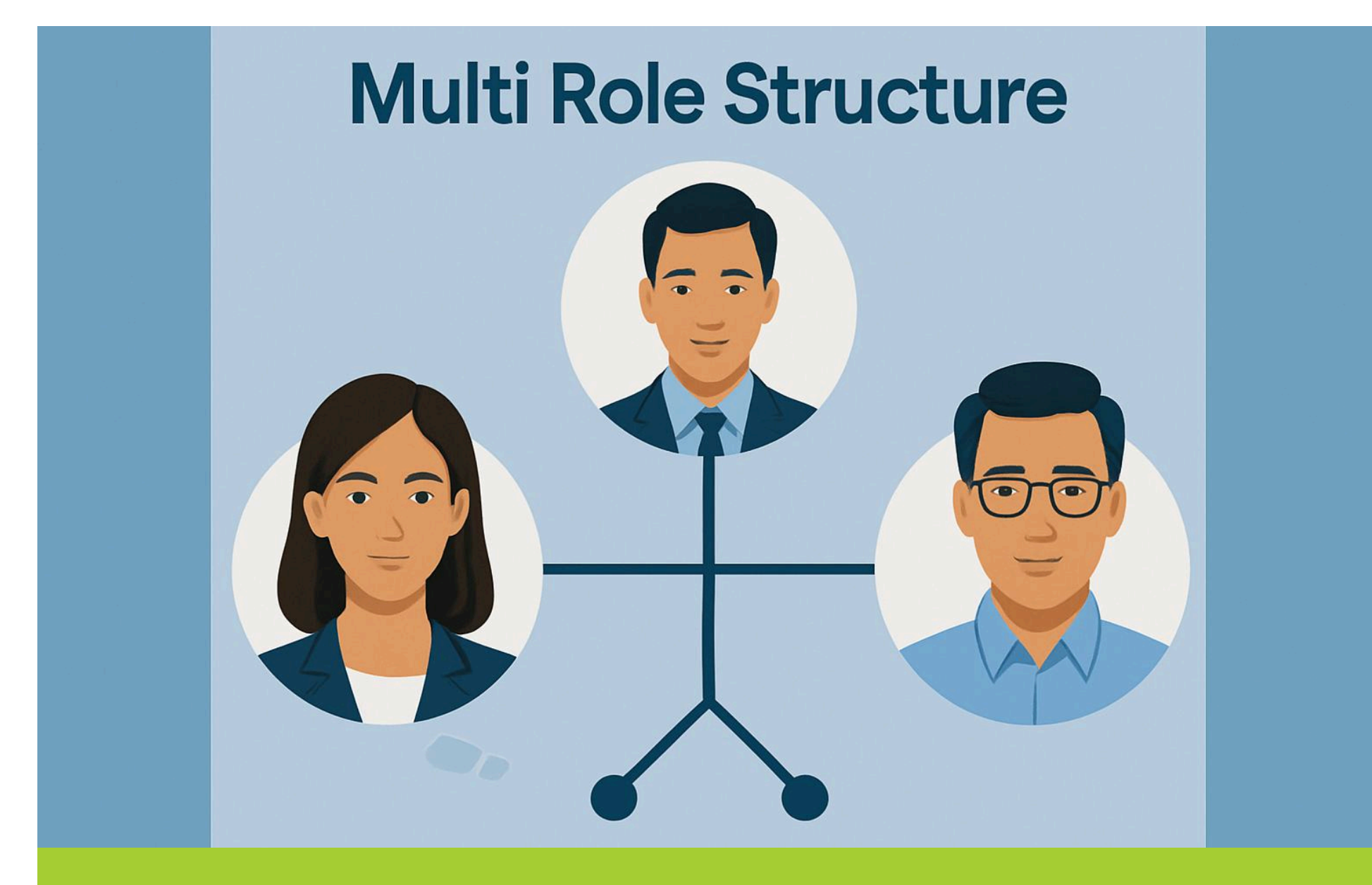
Leave management right from the ERP

Payout management and other employee management from portal



Easy to deploy solution for any organisation

Multi role structure for big organisation



Sales management for the sales team

Client Overview

Client	A mid-to-large enterprise aiming to centralize and automate HR, operations, and employee workflows
Use Case	Deployment of an all-in-one ERP system to manage attendance, payroll, leaves, and other organizational functions
Location	India
End Users	HR Team, Employees, Admins, IT, Accounts

Problem Statement

The organization was facing multiple inefficiencies due to disconnected tools and manual processes across departments:

- Fragmented employee data across systems
- Manual attendance and leave records causing errors
- Inconsistent payroll calculations
- No real-time visibility into workforce performance
- Lack of automation in holiday, and invoice management
- No restrictions on employee location or WiFi usage for attendance validation

The client needed a centralized ERP platform with intelligent automation, real-time visibility, and full compliance.

System Modules & Workflow

Dashboard	<ul style="list-style-type: none">• Unified view of attendance stats, active employees, pending leaves, and payroll summaries• Custom widgets based on user roles (HR, Admin, Manager)
Employee Management	<ul style="list-style-type: none">• Role-based employee onboarding & profile management• Department-wise employee hierarchy• Assign shift, locations, access level, and reporting managers
AI-Based Attendance Management	<ul style="list-style-type: none">• Facial recognition-based daily attendance with real-time validation• Geo-fencing and WiFi-based restrictions (attendance allowed only at authorized locations/networks)• Alerts for unknown faces, spoofing attempts, and off-site check-ins• Attendance analytics, late arrivals, and absentee reports• Option to download full attendance reports for any date range
Leave Management	<ul style="list-style-type: none">• Custom leave policies per role or department• Leave application, approval workflows, balance tracking• Integration with attendance to avoid mismatched entries
Payroll Management	<ul style="list-style-type: none">• Auto-sync with attendance and leave data• Salary calculations with allowances, deductions, taxes• Downloadable payslips and monthly payroll summaries• Full integration with HR and finance teams
Location & WiFi Restrictions	<ul style="list-style-type: none">• AI attendance only allowed if:<ul style="list-style-type: none">• User is connected to registered WiFi• User is physically present in geo-fenced areas• Fully configurable per employee or department
Holiday Calendar	<ul style="list-style-type: none">• Customizable organization-wide and region-specific holiday calendars• Optional syncing with leave and attendance
Invoicing Module	<ul style="list-style-type: none">• Auto-generate invoices based on project or task tracking• GST and multi-currency support• Invoice templates with branding• Payment status tracking (Paid, Partial, Overdue)

Tech Stack Overview

Frontend	React.js (Employee Panel + Admin Portal)
Backend	Node.js with Express.js
Database	MongoDB
AI Engine	Python-based face recognition
Location/WiFi Detection	Native Device APIs + Server Matching
Deployment	Cloud (Docker-based scalable architecture)

Core Features Delivered

- AI-powered facial recognition attendance
- WiFi + Geo-fence-based access restrictions
- Downloadable attendance reports with full filtering options
- Dynamic dashboards and analytics
- Fully automated leave and payroll systems
- Invoice generation with real-time tracking
- Asset lifecycle and audit tracking
- Role-based user access & security
- Intelligent calendar sync with holidays and leaves

Deployed Across Multiple Locations

This ERP platform has been successfully deployed in:

- Multi-branch corporates with 500+ employees
- Educational academies with admin/staff HR needs
- Industrial units with WiFi-controlled access gates
- Regional offices with custom holiday and shift rules
- Startups seeking scalable HR & operations tools

Its modular build allows quick deployment, role-specific workflows, and cloud-scale onboarding for new branches or teams.

Impact & Results

- Reduced HR processing time by over 80%
- Error-free payroll and leave approvals
- Accurate attendance with AI validation
- Eliminated proxy attendance & off-site check-ins
- Real-time visibility for decision-makers
- Ensured role-based compliance and data protection

