

## Configurable Elements Analysis for Leave Management System

Feature / Field / Column Name	Current Behavior	Possible Future Change	Recommendation to Make It Configurable	Priority
<b>Leave Types</b>	Fixed types per region (India: CL, PL, etc.; USA: PTO, etc.)	Clients may have custom leave types	Store in DB with admin UI to manage types	High
<b>Leave Calendar</b>	Jan-Dec calendar year	Fiscal year or custom calendar	Admin panel or JSON config	Medium
<b>Monthly Leave Accrual</b>	1 CL and 1 PL on 1st of each month	Different accrual rates or dates	DB-driven rules with scheduler	High
<b>Joining-Based Leave Allocation</b>	Full day if joined before 15th, else 0.5 day	Custom rules based on probation/designation	Rule engine or JSON config	Medium
<b>Carry-Forward Rules</b>	CL expires, PL max 30 carried forward	Varying limits or expiry logic	DB-driven with rule-based config	High
<b>Maternity/Paternity Leave Eligibility</b>	Only for married employees	Gender-neutral or region-specific policies	Config table with eligibility flags	High
<b>Leave Request Flow</b>	Employee → Manager → HR	Additional levels or parallel approvals	Workflow engine or approval matrix	High
<b>Comp Off Approval Flow</b>	Employee → L1 → L2 → HR	Varies by department or region	Configurable hierarchy per leave type	High
<b>Email Notifications</b>	Fixed templates with CC to HR/Manager	Custom templates, channels, recipients	Template engine with admin-configurable rules	Medium
<b>Holiday List</b>	Static list per region	Dynamic or client-specific holidays	Admin UI to manage holidays	High
<b>Leave Duration</b>	Full Day / Half Day	Quarter-day, hourly leaves	Extend options via config table	Medium
<b>Leave Balance Visibility</b>	Shown during application	Role-based visibility	Role-based toggle in config	Low
<b>Comp Off Eligibility</b>	Based on hours worked on weekends/holidays	Different thresholds or eligible days	Rule engine with time tracking	Medium

<b>Comp Off Expiry</b>	3 months from approval	Custom expiry durations	Configurable expiry logic in DB	High
<b>Dashboard Widgets</b>	Fixed widgets	Custom dashboards per role	Widget config via JSON or admin UI	Medium
<b>Reports</b>	Fixed filters and columns	Custom formats and exports	Report builder with field selection UI	Medium
<b>Leave Balance Calculation</b>	Accrual-based, year-wise	Prorated, tenure/designation-based	Rule engine with dynamic formula	High
<b>Mandatory Fields in Application</b>	All fields mandatory	Optional fields per leave type	Field-level config with validation rules	Medium
<b>Bulk Actions (Approval)</b>	Available for managers/admins	Role-based restrictions or audit logs	Role-based access control with audit trail	Medium
<b>Team Calendar Overlap Check</b>	Shows overlapping leaves	Integration with external calendars	Toggle for overlap check, calendar sync config	Low

## Summary: Key Areas to Design as Configurable

To ensure flexibility and scalability across clients, the following areas should be configurable from the start:

1. Leave Types and Policies
2. Accrual and Carry-Forward Rules
3. Approval Workflows
4. Holiday Calendars
5. Eligibility Rules (e.g., Maternity/Paternity)
6. Notification Templates and Channels
7. Comp Off Rules and Expiry
8. Dashboard and Reporting
9. Field Validations and Visibility
10. Leave Duration Granularity