## Configurable Elements Analysis for Leave Management System

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Feature / Field / Column Name | Current Behavior | Possible Future Change | Recommendation to Make It Configurable | Priority |
| Leave Types | 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 |
| Leave Calendar | Jan–Dec calendar year | Fiscal year or custom calendar | Admin panel or JSON config | Medium |
| Monthly Leave Accrual | 1 CL and 1 PL on 1st of each month | Different accrual rates or dates | DB-driven rules with scheduler | High |
| Joining-Based Leave Allocation | Full day if joined before 15th, else 0.5 day | Custom rules based on probation/designation | Rule engine or JSON config | Medium |
| Carry-Forward Rules | CL expires, PL max 30 carried forward | Varying limits or expiry logic | DB-driven with rule-based config | High |
| Maternity/Paternity Leave Eligibility | Only for married employees | Gender-neutral or region-specific policies | Config table with eligibility flags | High |
| Leave Request Flow | Employee → Manager → HR | Additional levels or parallel approvals | Workflow engine or approval matrix | High |
| Comp Off Approval Flow | Employee → L1 → L2 → HR | Varies by department or region | Configurable hierarchy per leave type | High |
| Email Notifications | Fixed templates with CC to HR/Manager | Custom templates, channels, recipients | Template engine with admin-configurable rules | Medium |
| Holiday List | Static list per region | Dynamic or client-specific holidays | Admin UI to manage holidays | High |
| Leave Duration | Full Day / Half Day | Quarter-day, hourly leaves | Extend options via config table | Medium |
| Leave Balance Visibility | Shown during application | Role-based visibility | Role-based toggle in config | Low |
| Comp Off Eligibility | Based on hours worked on weekends/holidays | Different thresholds or eligible days | Rule engine with time tracking | Medium |
| Comp Off Expiry | 3 months from approval | Custom expiry durations | Configurable expiry logic in DB | High |
| Dashboard Widgets | Fixed widgets | Custom dashboards per role | Widget config via JSON or admin UI | Medium |
| Reports | Fixed filters and columns | Custom formats and exports | Report builder with field selection UI | Medium |
| Leave Balance Calculation | Accrual-based, year-wise | Prorated, tenure/designation-based | Rule engine with dynamic formula | High |
| Mandatory Fields in Application | All fields mandatory | Optional fields per leave type | Field-level config with validation rules | Medium |
| Bulk Actions (Approval) | Available for managers/admins | Role-based restrictions or audit logs | Role-based access control with audit trail | Medium |
| Team Calendar Overlap Check | 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