# 🎨 White-label Branding & Role-Based User System

## ✅ Module Overview

This module supports SaaS-level scalability by enabling full white-label support for agencies/resellers and enforcing fine-grained, secure access control through Role-Based Access Control (RBAC). This allows SaaS owners to let brands rebrand the entire panel, while also offering multiple user roles within each brand team (e.g., Admin, Editor, Analyst, Support).

## 🎯 Goals

* Empower resellers/agencies to offer the system under their own branding
* Give brand teams the ability to securely delegate tasks
* Control access to each feature per user

## 🧱 Core Features

### 1. **White-Label Support**

* **Custom Branding:**
  + Upload brand logo
  + Set primary/secondary color schemes
  + Custom favicon, app name, login page banner
  + Add custom domain (e.g., ai.brandname.com)
* **Custom Panel Content:**
  + Replace footer, terms of use, about us
  + Custom email sender name + logo in system emails
  + Hide “Powered by” or replace with agency name
* **Reseller Dashboard (Superadmin only):**
  + Manage brands onboarded under each reseller
  + Assign allowed modules, pricing plans
  + Access analytics per white-label portal

### 2. **Role-Based Access Control (RBAC)**

* **Roles:**
  + Superadmin: Master control of SaaS
  + Reseller: Manages white-label clients
  + Brand Admin: Manages own brand, invites team
  + Editor: Can write/edit content but not publish
  + Analyst: View-only access to analytics & reports
  + Support: Access inbox, campaign results only
* **Permission Matrix:**
  + Toggle per feature/module (e.g., Campaign Builder, Inbox AI, Blog Generator)
  + Control actions (Create, Edit, Delete, Publish, View)
* **Custom Roles:**
  + Allow brands to define custom roles (e.g., Marketing Intern)
* **Audit Logging:**
  + Track all actions by user, time, and module

## ⚙️ Technical Details

### Tables

* user\_roles
* role\_permissions
* reseller\_brands
* white\_label\_config
* audit\_log

### APIs

* POST /admin/assign-role
* GET /roles/permissions
* PATCH /white-label/settings
* GET /reseller/stats

### UI Panels

* **White-Label Setup (Superadmin)**
  + Domain, branding assets, module toggles
* **User & Role Manager (Brand Admin)**
  + Invite users, assign roles, revoke access
* **Permission Matrix Viewer**
  + Interactive table to configure feature-level access
* **Audit Log Viewer**
  + Filter by date, user, module, action

## 🔐 Security & Compliance

* JWT/Token-based access control per role
* Enforced at frontend + backend route levels
* GDPR & ISO-friendly audit trails

## 🧩 Integrations

* Applies across all modules: Inbox AI, Campaigns, Analytics, Blog, etc.
* Seamless integration with Reseller Panel, Customer Upload, Admin Dashboard

## 💡 Benefits

* Resellers can scale sales without exposing core SaaS brand
* Brands can delegate work safely to their team
* Encourages agency adoption and multi-team collaboration

✅ Ready to proceed with flowcharts, component wiring, or backend code prompts.