# 📁 Data & Usage Reports

## 📊 Module Overview

The **Data & Usage Reports** module provides deep insights into tenant-level platform engagement, feature usage, quota consumption, and user behaviors. This is essential for: - Internal decision-making - Customer success support - Feature adoption analysis - Plan adjustment and quota recommendations

It is tightly integrated with subscription, module usage, AI generation counts, campaign activities, inbox interactions, and more.

## 🔍 Core Data Categories

### 1. 👥 Tenant Activity Overview

* Number of team members, roles, and login patterns
* Active vs dormant brands
* Last login timestamp
* Country, plan type, time zone

**Tables:** tenants, users, logins

### 2. ✍️ AI Feature Usage

* Blogs generated
* Captions/posts created
* Reels/shorts scripts suggested
* FAQ/SEO content generated
* Per feature, per tenant, per period (daily/monthly)

**Tables:** ai\_logs, usage\_counters, quota\_consumption

### 3. 📈 Campaign Module Usage

* Number of campaigns launched
* Auto vs manual mode
* Number of participants
* Redemption rate on reward shop
* UGC import frequency

**Tables:** campaigns, ugc\_stats, rewards\_redemptions

### 4. 💬 Messaging & Inbox Stats

* AI replies served
* Human handoffs
* Missed/unread queries
* Response time averages
* Replied via: FB/IG/WhatsApp breakdown

**Tables:** inbox\_messages, ai\_responses, handoff\_logs

### 5. 📦 Product & Shop Interactions

* Product search queries via Smart Search
* Bundle creations
* Checkout redirects via campaigns
* Affiliate clicks (if enabled)

**Tables:** search\_logs, product\_events, affiliate\_events

### 6. 📉 Quota Burn Reports

* Total usage vs limits
* Overuse flagged events
* AI API cost (per tenant, per engine)
* Recommendations for upgrade

**Tables:** quota\_logs, tenant\_recommendations, costs

### 7. 💵 Billing & Financial Trends

* Invoices generated (count/total)
* Failed payments, retries
* Manual invoicing count
* Avg lifetime revenue per tenant

**Tables:** invoices, payment\_failures, lifetime\_value

## 📁 Report Types & Access

### A. Admin-Wide Dashboards

* Multi-tenant overview
* Filters: Plan, country, quota usage, recent activity
* Daily/Weekly/Monthly snapshots

### B. Tenant-Level Reports

* Accessible to brand admins
* Export options (CSV, PDF)
* Triggers for email summaries
* Graphs: quota usage, AI feature trends, campaign adoption

### C. Alerts & Flags

* Quota warning triggers auto-email
* Monthly digest to brand: “Your Top AI Wins”
* Feature usage anomaly detection (e.g. sudden drop in AI use)

## 🛠️ Backend Architecture

* Scheduled cron jobs for weekly usage rollups
* Materialized views for fast report fetching
* Redis caching for frequent admin queries
* API endpoints:
  + /admin/reports/usage
  + /tenant/report/overview
  + /admin/reports/financial

## 🎛️ Superadmin Panel Integration

* Admin page: /admin/reports
* Subtabs:
  + Usage Summary
  + Quota Alerts
  + Top Brands
  + Feature Adoption
  + AI API Cost Analysis

Exportable, searchable, sortable interface.

## 🔐 Access Control

* Superadmin: Full access
* Brand Admins: Only their brand-level views
* Support Staff: Read-only by permission

## ✅ To-Do List for Dev Team

* Build all reporting queries & rollup logic
* Create API endpoints
* Link to Superadmin dashboard
* Schedule usage cron tasks
* Integrate export & alert system

## 🚀 Next Module: Support & Ticketing System for Brands → SaaS Admin