# 📊 Financial Reporting & Revenue Intelligence Module

## ✨ Module Purpose

The **Financial Reporting & Revenue Intelligence Module** empowers the SaaS Superadmin team with in-depth visibility into earnings, forecasts, cost centers, and module-specific financial insights. It supports **real-time tracking**, **compliance-friendly exports**, and **automated analytics** across all revenue streams, including:

* Subscriptions (monthly, annual, custom)
* One-time add-on purchases
* Refunds, coupon impact, VAT/GST collection
* Module-level profitability

## 🔐 Core Functionalities

### 1. 💳 Revenue Dashboard (Live View)

* Total MRR / ARR (Monthly/Annual Recurring Revenue)
* New revenue today / this week / this month
* Compare: Previous period vs current
* Revenue by:
  + Plan (Basic, Pro, Enterprise)
  + Region (Country/Zone)
  + Payment Provider (Stripe / Paddle / SSLCommerz)
  + Module type (Inbox AI / Blog Writer / Campaigns)

**Visuals:** - Line chart: Daily revenue trend - Pie: Module revenue contribution - Bar: Plan-wise active revenue

**Tables:** - revenue\_daily - module\_revenue\_share - plan\_revenue\_breakdown

### 2. 📉 Forecasting + Churn Analysis

* Revenue Forecast for next:
  + 7 days
  + 30 days
  + 12 months (based on renewal cycles)
* Predicted churned revenue (based on canceled + paused tenants)
* Growth slope (based on previous 3-month average)
* CAC vs LTV metrics (if connected to marketing engine)

**Tables:** - tenant\_renewal\_events - churn\_prediction - forecast\_model

### 3. 📦 Refund, Discount & Tax Audit

* Refund volume & refund rate
* Reasons: System error / customer complaint / gesture refund
* Coupon usage impact:
  + Top-used coupon codes
  + Revenue loss % per code
* VAT / GST collected per region (for tax filing)
* Export-ready reports:
  + Quarterly audit
  + Stripe/Paddle summaries

**Tables:** - refund\_logs - coupon\_effectiveness - tax\_collections

### 4. ✉️ Invoicing & Payment Logs

* PDF invoice links for all tenants (automated)
* Payment attempts + status
* Failed billing detection
* Retry logs
* Manual adjustments by staff (credit/debit/waive)

**Tables:** - invoice\_summary - payment\_attempts - admin\_adjustments

### 5. 📊 Module Profitability Dashboard

* Cost vs income per feature:
  + AI-generated replies (OpenAI cost vs usage)
  + Blog/SEO tasks
  + Video generation (image + frame cost)
* Brand usage vs cost incurred
* Profit margin per tenant
* Recommendation engine: flag unprofitable accounts

**Tables:** - module\_costs - tenant\_module\_margins - openai\_usage

## 🔨 Dev Notes

### Backend

* Sync revenue + usage daily
* Set up Stripe/Paddle webhooks for updates
* Scheduled job for forecast calculation

### Frontend

* Page: /admin/finance
* Tabs: Revenue | Forecast | Refunds | Tax | Profit
* Filters: Date range, region, plan, module
* Export buttons: XLS, CSV, PDF

### Alerts

* Revenue drop > 20% week-on-week
* Refund spike
* Module loss > threshold

## 🎉 Benefits

* True understanding of financial health
* Module-level insights for pricing strategy
* Compliance-ready tax + audit exports
* Helps marketing + CAC decisions
* Detects high-churn or high-risk tenants

## 🚀 To-Do

* Revenue daily sync job
* Build forecast model with ARIMA / ML
* Connect Stripe + Paddle summaries
* PDF generator for invoices
* Frontend graphs and visual
* Hook to subscription changes

✅ Will be stored as a separate linked file under “Admin Ops Suite” Ready to cross-link with Subscription Manager, Accounting Core, and Superadmin Panel.