



# AWESOME CHAPS IT STUDIO LLP

**Client:** SAI PRINITNG WORKFLOW

## **Problem Statement:**

To design, develop, and deploy a modern, scalable, and intuitive ERP system tailored for the daily operations of a printing press. The system will streamline inventory, production, order processing, reporting, and administrative workflows in a single web-based platform.

## **Key Features & Modules:**

### **1. Core Navigation Tabs:**

- MASTERS
- ADMIN
- REPORTS
- PROCESSES
- PROFILE

### **2. Module Breakdown:**

#### **MASTER**

- |                   |               |                 |               |
|-------------------|---------------|-----------------|---------------|
| • Box Packaging   | • HSN Code    | • Manufacturing | • Tax Master  |
| • Company         | • Item Master | Company         | • Unit of     |
| • Customer Master | • Item Type   | • Material      | Measurement   |
| • Employee        | • Location    | • Paper Group   | • Manual Work |
| • Grade           | • Machine     | • Salesman      | Order         |

#### **ADMIN**

- |                     |                                  |
|---------------------|----------------------------------|
| • Create User       | • Regenerate Invoice             |
| • Approve Workorder | • Invoice with Workorder         |
| • New Invoice       | • Edit Invoice without Workorder |
| • Edit Invoice      |                                  |

## REPORTS

- Stock Summary
- Reel Details
- Stock View
- Work Order Details
- Master Reports
- Machine Utilization
- Consumptions
- Consumption Summary
- Item Usage Details

## PROCESSES

- Goods Receipts
- Word Order (WO)
- Trading WO
- Process WO
- Combined WO
- Regenerate WO
- Production Entry
- Search Reels
- Packing Slips
- Reels Rejection
- Delivery Challan
- Delivery Challan without WO
- Regenerate Delivery Challan
- Production Entry Labels & Reports

## PROFILE

- Name
- Department
- Role
- Access Levels
- Password & Security

## 3. Project Team

Roles	Responsibility
UI/UX Designer/ Frontend	Wireframes, Design System, Layout for ERP Tabs, Clean UX for Production Modules, UI Development
Full-Stack Dev	Architecture, API & Database, UI Integration, Feature Implementation
QA & DevOps	Testing (Functional, Regression), Staging & Production Deployments on Vercel/Server

## 4. Tech Stack

Layer	Technology
Frontend	Next.js (React)
Backend	Node.js + Express
Database	MongoDB / Postgresql
Hosting	Vercel/AWS
Authentication	Role-based auth via JWT or Supabase Auth

## 5. Timeline - 4 Months (16 Weeks)

Phase	Weeks	Activities/Milestone
1. Discovery & Planning	Week 1—2	Stakeholder interviews - Requirements finalization - Database & module mapping
2. UI/UX Design	Week 3—4	Wireframes for 5 Tabs - Design system (colors, typography, components) - Figma prototypes
3. Backend & DB Setup	Week 5—6	MongoDB schema setup - Node.js API framework - Role-based auth scaffolding
4. Masters Module Dev	Week 7—8	All Masters screens (Company, Item Master, Machine etc.) - Form validation & CRUD APIs
5. Admin + Profile Module	Week 9—10	Create/Edit/Regenerate Invoices - Workorder Approval - User creation & access control
6. Process Flows	Week 11—12	Goods Receipts, WO types, Production Entry - Delivery Challans, Packing Slips
7. Reports & Analytics	Week 13—14	Stock Summary, Reel Reports, Item Usage - Download/export options - Print views
8. QA, UAT & Deployment	Week 15—16	Full regression testing - Role & access control QA - Vercel deployment - Admin training

## 6. Deliverables

- Fully Responsive ERP Web Application
- Admin Dashboard with Masters & Approvals
- All Reports & Print-friendly Invoices/Slips
- Deployment on Vercel (Staging + Production)
- Source Code & Documentation (via Git)

## 7. Project Costing

Approx. ~ **Rs. 8,00,000\***

\* Please check Project Assumptions

### Costing summary + justifications

The system includes 40+ interconnected modules across 6 major tabs:

- **Masters:** 18+ static data modules (Item Master, Paper Group, HSN, etc.)
- **Admin:** Invoice lifecycle with and without Work Order logic
- **Reports:** 10+ analytics views (Machine utilization, Stock, Consumption)
- **Processes:** Complex operational flows like WO variations, production entry, delivery, and rejection
- **Profile & Access:** Department-role-based authentication & restrictions

Each module involves form design, validations, API endpoints, database schema, role-based access, and UI testing—**totaling over 400+ hours of engineering work.**

### Modern Tech Stack (Future-Proof & Scalable)

- Next.js — modern SSR-ready frontend for speed & SEO
- Node.js — scalable, asynchronous backend with Express
- MongoDB Atlas — flexible, cloud-hosted NoSQL DB, perfect for dynamic master-data structures
- Vercel — zero-downtime deployment, edge-caching, CI/CD-ready platform

### Complex & Custom Business Logic & Printing Integration

- Involves complex flows like:
- Workorder regeneration
- Reel tracking and rejection logic
- Label generation
- Tax-calculated invoicing based on HSN, UOM, etc.

Deeply tailored to a printing press' daily operations.

## 6. Project Assumptions

- 1. Hosting & Deployment:** All third-party hosting costs (e.g., MongoDB Atlas, Vercel Pro/Business plan, SSL certificates, domain) will be borne by the client at actuals.
- 2. Third-Party Integrations:** Any third-party services (SMS gateway, email SMTP, cloud storage, printing SDKs, etc.) required now or in future will be procured and managed by the client.
- 3. Change Requests (CRs):** Scope changes, additional modules, or new features requested after finalizing the current scope will be treated as separate work orders and billed additionally.
- 4. Payment Terms:** Payments will be released milestone-wise, aligned with the development phases. A detailed milestone plan will be shared post-approval.
- 5. Role Matrix & Workflow Design:** Role hierarchies, access rights, and user workflows will be finalized and approved before development starts.
- 6. Print Format Design:** Templates for invoices, labels, slips, challans, etc. will be shared or signed off by the client before development.
- 7. Browser & Device Support:** The ERP will be optimized for modern desktop browsers (Chrome, Firefox, Edge). Mobile app support is not included unless specifically requested.
- 8. Data Entry & Migration:** Initial master data population or legacy data import will be done by the client. Guidance and templates will be provided by the team.