

Business model	Manufacturer of office furniture and hospital equipment
Website	Public corporate website with dynamic CMS, product catalogue, enquiries and grievances
ERP scope	Sales, purchasing, manufacturing, inventory, GST, accounts, receivables, payables and profitability
Stock locations	Multiple warehouses / branches
Compliance integrations	E-invoice and e-way bill integration, subject to legal applicability and authorized API access
Hosting	Undecided; managed VPS or cloud recommended for production ERP
Technology baseline	Laravel + PHP + MySQL, responsive browser-based application

Prepared as the baseline for requirements approval, development, testing, deployment and operational handover.

Document Contents

If the contents list is not populated automatically, open the document in Word and choose Update Field.

1. Executive Summary

This specification defines an integrated corporate website and manufacturing ERP for a company producing office furniture and hospital equipment. The solution combines a public-facing website with a secure internal business application.

- Public website: company profile, About Us, product catalogue, manufacturing facilities, projects, downloads, enquiries, grievance registration and contact information.
- Private ERP: sales, quotations, tax invoices, purchases, supplier bills, manufacturing, BOM, warehouse inventory, GST reports, e-invoice/e-way bill workflows, accounts, receivables, payables and profitability.
- Dynamic administration: authorized users can update website content, product data, invoice templates, tax configuration, document numbering, reports, approval workflows and user access without code changes for routine configuration.
- Financial integrity: posted transactions are protected; corrections use approved reversal, credit-note, debit-note or amendment workflows with an audit trail.

The system must be implemented as a production-grade accounting and inventory application, not as a collection of spreadsheets. Financial postings, stock movements, statutory documents and management reports must be traceable to source transactions.

2. Objectives and Scope

- Provide a professional, mobile-responsive corporate website.
- Maintain a centralized product and material master for furniture, hospital equipment, raw materials, work in progress and finished goods.
- Manage multi-warehouse inventory and full production planning using bills of materials (BOMs), routing, work orders, actual consumption and production costing.
- Manage the order-to-cash process: enquiry, quotation, sales order, dispatch, GST invoice, receipt and collection follow-up.
- Manage the procure-to-pay process: requisition, supplier quotation, purchase order, GRN, supplier bill, payment and supplier reconciliation.
- Maintain double-entry accounting and financial statements.
- Generate GST registers, return-preparation reports, purchase ITC reconciliation and e-invoice/e-way bill status reports.
- Provide product-wise, order-wise, customer-wise and period-wise profitability analysis.
- Provide role-based access, maker-checker approval, audit logs, backups and recovery procedures.

Out of scope unless separately approved: bank payment execution, e-commerce checkout, payroll, biometric attendance, advanced CAD integration, machine IoT, and third-party procurement portals.

3. Recommended Technology and Hosting

Recommended baseline: Laravel (supported version), PHP, MySQL, responsive web UI, secure file storage, background jobs/queue workers, scheduled tasks and email delivery. The system should use a modular architecture with documented APIs and database

migrations.

Option	Suitability	Recommendation
Shared/business web hosting	Corporate website or limited prototype, if runtime, scheduler and queue requirements are supported	Not preferred for full production ERP without validation
Managed VPS	Control over runtime, background jobs, database, monitoring and backup configuration	Preferred starting point
Cloud infrastructure	Managed database, scaling, monitoring and advanced recovery	Suitable for larger operations or future growth

- Select server capacity after estimating concurrent users, monthly transactions, report workloads, attachment storage and integration volume.
- Use separate development, test/UAT and production environments.
- Keep production secrets and personal/financial data out of development environments.
- Use HTTPS/TLS, private database access, protected file storage, monitoring and off-server backups.
- Confirm hosting supports the selected PHP version, extensions, database version, cron/scheduler, queue workers, SMTP and restoration procedures.

Production recommendation: a compatible managed VPS or cloud environment. A hosting package must be technically verified rather than assumed to support all ERP background services.

4. Overall Architecture

- Public website and CMS: published pages, product catalogue, contact forms, enquiries, grievances and approved downloads.
- Private ERP portal: authenticated employee interface for sales, purchase, production, inventory, accounts and reports.
- Shared application services: company settings, product master, customer/supplier master, document numbering, tax rules, approval engine and audit trail.
- Relational database: transactional records, ledgers, stock movements, master data and configuration.
- Integration layer: authorized GST IRP/e-invoice and e-way bill services, email, imports/exports and monitoring.
- Background processing: scheduled jobs, queued notifications, reports, backup checks and integration retries.

The public website must not expose internal purchase rates, stock costs, customer credit limits, invoices, GST return records, employee records or profitability data. Public product data must be selectively published from approved product records.

5. Public Website and CMS Modules

Module	Functional requirements
Home page	Hero banner, company highlights, featured products, quality/capability statements, project highlights and enquiry links.
About Us / Company profile	History, vision, mission, management, factory and registered addresses, capacity, quality policy and downloadable profile PDF.
Product catalogue	Categories, product codes, photographs, dimensions, material, finish, specifications, warranty, accessories, brochures and enquiry button.
Manufacturing facilities	Factory images, machinery, production processes, capacity and quality assurance.
Projects / clients	Completed projects, approved customer references, installations and case studies.
Enquiry management	Product selection, quantity, contact details, attachments, reference number, assignment and follow-up status.
Grievance management	Complaint number, category, description, attachments, priority, assignment, escalation, resolution and closure.
Downloads	Catalogues, certificates, brochures, policies and company profile.
Contact / careers / news	Addresses, map, phone, email, vacancies, announcements and company updates.
SEO and legal	Page title, description, canonical URL, sitemap, privacy notice, website terms and grievance policy.

The CMS must support page editing, menu control, media library, preview, publication status, scheduled publication, SEO metadata and role-based publishing approval. Routine content changes should not require code deployment.

6. ERP Module Requirements

6.1 Sales and customer management

- Customer master with legal name, GSTIN, PAN where needed, billing/shipping addresses, state code, payment terms and credit limit.
- Enquiry, quotation, revisions, approval, sales order and delivery planning.
- Delivery challan, dispatch, proof of delivery and partial dispatches.
- GST invoice, credit note, debit note, sales return and cancellation/reversal tracking.
- Customer receipts, advances, invoice allocation, statement of account and overdue alerts.
- Customer-specific pricing and authorized discounts.
- Invoice PDF, print layout, email dispatch and document history.

6.2 Purchase and supplier management

- Purchase requisition based on production demand, reorder levels or authorized user request.
- Supplier quotation, comparative statement, approval and purchase order.
- Goods receipt note (GRN), inspection, accepted/rejected quantities and warehouse allocation.
- Supplier tax bill entry with invoice date/number, GSTIN, HSN/SAC, taxable value, tax breakup and supporting attachment.
- Purchase returns, supplier credit/debit notes, payment scheduling and supplier ledger.
- Purchase-order/GRN/invoice matching, duplicate supplier invoice checks and price variance reporting.
- Import from approved Excel/CSV templates with validation and error reports.

6.3 Full manufacturing management

- Version-controlled BOMs, effective dates, multi-level components and alternate materials.
- Production routing, work centres, job cards and production order status.
- Material requirement planning (MRP), reservations and shortage calculation.
- Material issue, actual consumption, scrap, wastage, rework and rejection.
- Labour, machine time, subcontracting and overhead allocation where applicable.
- Work-in-progress valuation, quality inspection and finished-goods receipt.
- Standard versus actual cost variance, production yield and traceability.
- Example products: office desks, workstations, chairs, conference tables, cabinets, hospital beds, bedside lockers and medical trolleys.

6.4 Inventory and multiple warehouses

- Raw materials, consumables, WIP, finished goods, spares and accessories.
- Multiple factories, central stores, branch warehouses and dispatch locations.
- GRN, material issue, transfer, production receipt, dispatch, sales return and purchase return.
- Inter-warehouse transfers, in-transit stock, reservation and available-to-promise quantities.
- Minimum stock, reorder levels, stocktake, approved adjustments and stock valuation.
- Batch/serial tracking where required, slow/non-moving stock and negative-stock exceptions.
- Consistent configured valuation policy, such as FIFO or weighted average, reviewed by the accountant.

6.5 Accounts and finance

- Chart of accounts, general ledger, journal entries, trial balance and financial-year controls.
- Accounts receivable, accounts payable, customer/vendor control accounts and ageing.
- Cashbook, bank accounts, bank statement import and reconciliation.
- Expenses, advances, fixed assets, depreciation and disposal where in scope.
- Profit and loss, balance sheet, cash-flow reporting and budget-versus-actual analysis.
- Double-entry posting rules and source-document drill-down.

7. GST Tax Invoicing and Compliance

7.1 Invoice template

The invoice generator must support the applicable GST particulars, including supplier legal name/address/GSTIN, unique invoice number and date, recipient details, HSN/SAC, item description, quantity/unit, taxable value, applicable tax rate and amount, place of supply where applicable, delivery address, reverse-charge declaration where applicable, total amount and other required fields.

- Company logo, registered address, factory/dispatch address, bank details, payment terms and authorized signature block.
- Line-level discounts, freight, transport, packing, installation and other configured charges.
- CGST/SGST or IGST, and cess where applicable.
- Amount in words, rounding adjustment, invoice status and document references.
- IRN, acknowledgement details and signed QR code where applicable after successful e-invoice registration.
- E-way bill number, validity, transporter and vehicle information where applicable.

7.2 Tax calculation rules

- Use effective-dated, approved HSN/SAC and tax configuration; do not hard-code one rate for every item.
- Determine supply type and tax treatment from transaction facts and applicable rules.
- Calculate eligible discounts and freight/other charges under applicable GST valuation rules.
- Keep commercial deductions, retention, TDS/TCS, credit notes and tax adjustments as separate types.
- Persist transaction-time tax rates, descriptions, recipient details and calculation snapshots.
- Use approved rounding rules and reconcile invoice totals with ledger postings.

7.3 GST reports

Report	Purpose
Sales GST register	Invoice-wise taxable value, tax, credit/debit notes and supply classification.
GSTR-1 preparation	Outward-supply summaries and relevant invoice-level classifications.
GSTR-3B summary	Tax liability and eligible ITC preparation/reconciliation.
Purchase / input tax register	Supplier bills, tax components, eligibility and missing data.
GSTR-2B reconciliation	Match imported portal data against purchase bills; flag missing, duplicate and mismatched records.
HSN summary	Classification-wise taxable value and tax summary.
E-invoice register	IRN status, acknowledgement, errors and retry status.
E-way bill register	Document link, bill number, validity, transport updates and exception status.

The system prepares reports and stores reconciliation evidence; it must not claim that a return has been filed unless filing is confirmed through an authorized workflow. GST rates, ITC eligibility, reporting formats and statutory applicability must be validated by the company's tax professional against current rules.

8. E-Invoice and E-Way Bill Integrations

8.1 E-invoice workflow

- Validate the approved sales invoice and determine whether e-invoicing is legally applicable.
- Prepare the compliant payload using the current authorized schema.
- Submit to the authorized IRP service using secured credentials.
- Store the response, IRN, acknowledgement number/date, signed QR details and status.
- Make the final invoice representation available to authorized users.
- Handle rejections, timeouts, duplicate requests, credential failures and permitted cancellation workflows.

8.2 E-way bill workflow

- Determine whether the goods movement requires an e-way bill.
- Validate consignor, consignee, origin, destination, goods value, document and transport data.
- Submit through the authorized service and store the e-way bill number, validity and response.
- Link the record to dispatch and delivery documents.
- Support permitted vehicle updates, extensions, cancellation and exception handling.
- Prevent a failed or timed-out request from being displayed as successful.

Integration is subject to legal applicability, access approval, provider availability and current API specifications. Use an approved sandbox/test environment where available. Protect credentials, apply duplicate protection/idempotency and log all requests and responses without unnecessarily exposing secrets.

9. Accounting Workflows and Posting Rules

Business event	Illustrative accounting effect
Sales invoice	Debit customer receivable; credit sales revenue and applicable GST liability.
Sales dispatch	Reduce inventory and recognize cost of goods sold under the selected policy.
Inventory purchase	Debit inventory or goods-receipt clearing and appropriate eligible tax accounts; credit supplier payable.
Expense bill	Debit expense and eligible tax accounts; credit supplier payable.
Customer receipt	Debit bank/cash; credit customer receivable.
Supplier payment	Debit supplier payable; credit bank/cash.
Raw material issue	Transfer cost from raw-material inventory to WIP.
Finished-goods receipt	Transfer accumulated production cost from WIP to finished-goods inventory.
Return / credit note	Post the appropriate revenue, tax, receivable, inventory and cost adjustments.
Production variance	Post approved material, labour or overhead variance to configured accounts.

- Each journal must balance: total debits equal total credits.
- Subledgers must reconcile to control accounts.
- Posted journals and stock movements cannot be deleted by ordinary users.
- Corrections use linked reversals, credit/debit notes or approved adjustments.
- Financial periods support locking and controlled backdating exceptions.
- Manual journals to tax or inventory control accounts require special permissions.
- Inventory valuation, goods-receipt clearing and ITC treatment must follow the company's approved accounting policy.

10. Receivables, Payables and Cash Management

Accounts receivable

- Invoice-wise outstanding and customer statements.
- Receipt, advance and invoice allocation.
- Ageing buckets: current, 1–30, 31–60, 61–90 and over 90 days.
- Credit limit, overdue and collection follow-up alerts.
- Unallocated receipts and customer credit balances.

Accounts payable

- Supplier invoice due dates and payment schedules.
- PO/GRN/invoice matching and discrepancy workflow.
- Partial payments, supplier advances and allocation.
- Supplier statement reconciliation and payable ageing.
- Cash-flow forecasts and upcoming payment commitments.

Bank and cash

- Cashbook, bank master and bank statement import.
- Matched/unmatched transaction handling and bank reconciliation.
- Payment reference, bank advice and approval records.
- Maker-checker controls for payments.

Recording a payment in ERP does not itself transfer funds. Actual bank payment execution is a separate integration and requires explicit scope, authorization and testing.

11. Costing and Profitability

- Calculate material, labour, machine and allocated production overhead costs.
- Track WIP, finished-goods cost, approved scrap and production variances.
- Compare standard/planned cost with actual consumption and production output.
- Calculate product gross margin, customer profitability and order-level profitability.
- Include attributable freight, installation, subcontracting and other approved costs where relevant.
- Provide break-even, budget-versus-actual and contribution analysis.

Report	Core analysis
Product margin	Net sales less cost of goods sold.
Order profitability	Revenue less attributable materials, labour, overhead, freight and other assigned costs.
Production variance	Actual production cost compared with planned/standard cost.
Customer profitability	Net revenue less attributable product and approved allocated costs.
Warehouse valuation	Quantity, unit cost and value by item/location.
Cash-flow forecast	Expected receipts, supplier payments and planned expenditure.
Financial statements	Trial balance, profit and loss, balance sheet and cash flow.

Cost allocation methods must be documented and consistent. Management must be able to drill from reported totals to source invoices, journals, production orders and stock movements.

12. Database Schema Specification

Use a relational schema with primary/foreign keys, unique constraints, indexes and transactional posting. Use decimal numeric types for money and quantities, never binary floating-point for accounting. Include `company_id` on company-owned records and `branch_id` where relevant.

12.1 Master data

Table	Key fields / purpose
companies	id, legal_name, trade_name, PAN, default_currency
company_branches	id, company_id, branch_code, address_id, GSTIN
addresses	id, address_type, line1, city, state_code, pincode, country_code
financial_years	id, company_id, start_date, end_date, status
users	id, name, email, password_hash, is_active
roles / permissions	role definitions, permission keys and role-permission mappings
items	id, SKU, name, item_type, UOM, HSN/SAC mapping
item_variants	id, item_id, variant_code, attributes
item_categories	id, parent_id, name, category_type
hsn_sac_codes	id, code, description, effective dates
tax_rates / tax_rules	tax type, rate, supply rule, effective dates
customers / suppliers	codes, legal names, GSTIN, addresses, credit/payment terms
warehouses	id, branch_id, warehouse_code, name, warehouse_type

12.2 Sales and receivables

Table	Key fields / purpose
sales_quotations / lines	customer, number, dates, item, quantity, rate, discount, tax code
sales_orders / lines	customer, order number, status, item, quantity, rate, delivery date
delivery_challans / lines	customer, warehouse, item, quantity, source order reference
sales_invoices / lines	invoice number/date, customer, place of supply, item, HSN/SAC, taxable value, tax code
invoice_charges	invoice, charge type, amount and tax treatment
invoice_adjustments	invoice, adjustment type, amount, reason and approval status

Table	Key fields / purpose
sales_credit_notes	original invoice, credit note number and reason
customer_receipts	customer, receipt number/date, amount and bank reference
receipt_allocations	receipt, invoice and allocated amount

12.3 Purchase and payables

Table	Key fields / purpose
purchase_requisitions / lines	request number, requester, item, quantity and required date
supplier_quotations	supplier, quotation reference and validity
purchase_orders / lines	supplier, PO number/date, item, quantity, rate and tax code
goods_receipts / lines	GRN, warehouse, received/accepted/rejected quantities
supplier_bills / lines	supplier invoice reference/date, due date, taxable value and tax code
supplier_payments	supplier, payment number/date and amount
payment_allocations	payment, supplier bill and allocated amount
purchase_returns	supplier, original bill and reason

12.4 Manufacturing and stock

Table	Key fields / purpose
boms / bom_lines	product, version, effective date, component, quantity per unit and scrap allowance
production_routings	product, version and operations sequence
work_centres	code, capacity and overhead rate
production_orders	production number, item, planned quantity and status
production_material_issues / lines	production order, warehouse, component, actual quantity and cost
production_operations	production order, work centre and operation status
production_receipts	production order, warehouse, accepted and rejected quantity
stock_movements	item, warehouse, movement type, quantity in/out and source reference
stock_reservations	item, warehouse, source document and reserved quantity
stock_counts / lines	warehouse, count date, system quantity and counted quantity
stock_valuations	item, warehouse, date, quantity, unit cost and value
quality_inspections	source document, inspection result and notes

12.5 Accounting and GST

Table	Key fields / purpose
chart_of_accounts	account code, name, type and parent account
journal_entries / lines	journal number, posting date, source, account, debit, credit and dimensions
bank_accounts / transactions	bank reference, date, amount and reconciliation status
bank_reconciliations	account, period, status and reconciliation details
expenses	expense type, supplier, amount and tax code
gst_return_periods	company, period, return type and status
gst_return_lines	period, source, taxable value and tax amount
gst_reconciliations	period, source, status and difference
gst_2b_imports / lines	import batch, supplier GSTIN, invoice number, taxable value and tax
einvoice_records	invoice, IRP reference, IRN, acknowledgement and status
eway_bill_records	source document, e-way bill number, validity and status

Table	Key fields / purpose
tax_payments	period, payment reference, amount and date

12.6 System and CMS tables

- CMS pages, menus, banners, media and SEO metadata.
- Enquiries, grievances, assignments, messages and resolution history.
- Approval requests, workflow transitions and notifications.
- Attachment metadata, integration logs, scheduled-job status and audit events.
- Configuration history, report definitions and import/export batch records.

Posted stock movements and journal lines must be append-only for normal users. Any derived stock balance or dashboard summary must be reconcilable to the source ledger. Add indexes for document numbers, dates, customer/supplier IDs, item/warehouse combinations and reporting filters.

13. Roles, Permissions and Approval Workflows

Role	Typical access
Super Administrator	System settings, roles and authorized access across modules; critical actions logged.
Website Content Manager	CMS pages, media, public product details and announcements.
Sales Executive	Enquiries, customers, quotations, sales orders and permitted documents.
Purchase Officer	Requisitions, supplier quotations, purchase orders and supplier bills.
Store / Inventory Officer	GRNs, stock transfers, material issue, physical counts and dispatch records.
Accounts Executive	Receipts, payments, journals and permitted tax invoices.
GST / Tax Officer	GST registers, reconciliation and return preparation.
Finance Manager	Financial review, payment approvals, period close and profitability.
Auditor / Management	Read-only reports and authorized audit history.

- Separate permissions for view, create, edit draft, approve, post, cancel, reverse, export and administer.
- Use maker-checker controls where the same person should not create and approve a transaction.
- Approval thresholds and escalation should be configurable by document type and amount.
- Critical configuration changes should be logged and may require re-authentication or a second approver.
- Restrict access by company, branch, warehouse and module as appropriate.

14. Security, Privacy, Backup and Recovery

Security controls

- Individual user accounts and strong password hashing.
- Multi-factor authentication for administrators and finance approvers.
- Role/branch authorization enforced on the server, not only hidden in the UI.
- HTTPS/TLS, secure cookies, session expiry, CSRF protection and login rate limits.
- Input validation and protection against SQL injection, XSS and unsafe file uploads.
- Encrypted secrets, restricted database access, least-privilege service accounts and monitored logs.
- Audit log for login events, permissions, configuration changes, approvals, postings and reversals.
- Privacy notices, data retention and access controls appropriate to personal and financial data.

Proposed recovery baseline

Control	Initial target
Database backup	Automated daily backup plus more frequent recovery points where supported
File backup	Separate backup of invoices, attachments and uploaded documents
Backup isolation	Protected off-server destination or separate storage account

Control	Initial target
Encryption	At rest and in transit
RPO	Target no more than 4 hours of data loss
RTO	Target restoration within 8 hours
Restore testing	Quarterly documented restoration test

These are proposed service targets, not guaranteed performance. Validate them against the hosting plan and test restoration before production launch. A backup is not verified until restoration succeeds.

15. Deployment and Operations

- Use supported Laravel/PHP and MySQL versions with required extensions and dependency management.
- Point the web server document root to Laravel's public directory.
- Use secure environment configuration; never expose .env, source code, database dumps or private storage.
- Configure queue workers, scheduler, email delivery, private document storage and monitoring.
- Use version control, reviewed migrations, deployment approvals and a tested rollback procedure.
- Maintain separate development, QA/UAT and production environments.
- Monitor uptime, error rates, failed jobs, database capacity, backup status and integration failures.
- Document patching, incident response, access revocation and disaster recovery.

16. Reports and Dashboards

Area	Reports
Sales	Sales register, monthly sales, customer ledger, returns, order status, product margins.
Purchases	Purchase register, open POs, supplier bills, price variance, GRN discrepancies and supplier ageing.
Inventory	Warehouse-wise stock, stock ledger, valuation, reorder, slow/non-moving, negative stock and stocktake variances.
Manufacturing	Production plan, material requirement, actual consumption, WIP, rejection, output, BOM variance and production cost.
GST	Sales/purchase tax registers, GSTR-1 preparation, GSTR-3B summary, GSTR-2B reconciliation, HSN, e-invoice and e-way bill registers.
Finance	Trial balance, general ledger, P&L, balance sheet, cash flow, bank reconciliation, AR/AP ageing and budget variance.
Governance	Pending approvals, overdue grievances, failed integrations, audit exceptions and user activity.

Reports should support date range, financial year, branch, warehouse, item, customer, supplier and status filters as relevant. Exports must respect the user's permissions. Dashboards must show the reporting period and refresh timestamp, and distinguish draft, posted, cancelled and reversed transactions.

17. Implementation Roadmap

Phase	Indicative schedule	Deliverables
1. Requirements/design	Weeks 1–2	Approved workflows, roles, data mappings, invoice/report designs and architecture.
2. Website/CMS	Weeks 3–5	Responsive site, catalogue, enquiries, grievances and dynamic admin.
3. Sales/purchase/stock	Weeks 6–9	Order-to-cash, procure-to-pay, GRN, warehouse ledger and returns.
4. Manufacturing/accounts	Weeks 10–13	BOM, production, costing, GL, AR/AP, cash/bank and GST calculation.
5. Integrations/reports	Weeks 14–16	Authorized e-invoice/e-way bill integration, reconciliation and management dashboards.
6. UAT/go-live	Weeks 17–20	Migration, security/performance testing, training, sign-off and production launch.

The timeline is indicative and assumes a dedicated development team, timely business decisions and access to statutory integration services. Final scheduling depends on transaction volume, legacy data quality, integration access and required customizations.

18. Testing and Acceptance Criteria

Test category	Required scenarios	Acceptance criteria
Functional	Sales, purchase, production, returns and payments	Approved workflows complete correctly.
Accounting	Journals, receipts, payments and period closing	Balanced journals and reconciled subledgers.
Inventory	Receipts, issues, transfers, returns and valuation	Stock ledger reconciles to physical and valuation balances.
Manufacturing	BOM, consumption, scrap, completion and cost	Quantities and costs reconcile.
GST	Intra/inter-state, freight, discounts and credit notes	Calculations match approved tax test cases.
E-invoice	Accepted/rejected/timed-out/duplicate submissions	Correct status and safe retry behaviour.
E-way bill	Creation, updates, cancellation and expiry	Correct status, validity and source-document linkage.
Security	Unauthorized access, privilege escalation and file access	Unauthorized actions are blocked.
Performance	Concurrent users, bulk imports and reports	Agreed response-time and throughput targets met.
Recovery	Database and document restoration	Recovery meets approved RPO/RTO.
Migration	Opening stock, AR/AP and trial balance	Reconciles to signed-off source records.
UAT	Realistic scenarios for each department	Formal business-owner sign-off.

Mandatory end-to-end test scenarios

- Manufacture and sell 50 desks: sales order, BOM/MRP, shortage purchase, GRN, production issue, labour/overhead, finished-goods receipt, dispatch, GST invoice, applicable e-documents, COGS and receipt.
- Purchase and reconcile supplier GST: PO, GRN, supplier bill, duplicate check, accounting/ITC posting, GSTR-2B import, mismatch handling and reconciliation.
- Invoice with freight and discount: validate tax treatment, calculate invoice, print GST particulars, post accounting, record partial receipt and reconcile reports.

19. Data Migration and Cutover

- Company registrations, branches, warehouses and financial years.
- Product/material master, variants, units, HSN/SAC mappings and approved BOMs.
- Customers, suppliers, addresses, payment terms and credit limits.
- Opening stock by item and warehouse, including batch/serial details where relevant and approved valuation.
- Open customer invoices and receivables; open supplier bills and payables.
- Chart of accounts, opening general ledger, bank balances and fixed assets where in scope.
- Open sales/purchase/production orders, GRNs and current-year statutory reconciliation data.
- Clean and approve source data; map fields to the target schema.
- Import master data and validate duplicates and required fields.
- Load opening stock and verify quantities and values.
- Load open customer/supplier invoices and map balances to subledgers.
- Load GL opening balances without duplicating subledger postings.
- Reconcile stock valuation to inventory control accounts; reconcile AR/AP to control accounts.
- Reconcile trial balance and GST data; obtain finance and management sign-off.
- Freeze source transactions at cutover, execute final delta migration and verify post-cutover totals.

Do not recreate historical invoices as new taxable transactions simply to populate the new ERP. Migrate historical documents with source references and appropriate opening-balance treatment, following the retention policy.

20. Project Deliverables and Governance

- Approved functional requirements specification and process maps.

- Technical architecture, database ERD, schema, migrations and API documentation.
- Public website, CMS and enquiry/grievance workflows.
- ERP modules for sales, purchase, manufacturing, inventory, GST and accounts.
- GST invoice templates and reports, plus authorized e-invoice/e-way bill integrations.
- Security design, role-permission matrix, audit logs and backup/recovery guide.
- Migration templates, test cases, UAT results and reconciliation sign-offs.
- Version-controlled source code, dependency manifest, environment template and deployment instructions.
- Admin/user manuals, staff training, support process, warranty and handover.

Role	Responsibility
Management sponsor	Scope, budget, priority and final business approval.
Finance owner	Chart of accounts, accounting policy, invoice design and reconciliation.
GST/tax adviser	Tax configuration, statutory reports and integration applicability.
Production owner	BOM, routing, quality and production costing.
Warehouse owner	Locations, movements, valuation and stocktake.
IT administrator	Hosting, user access, deployment, backup and security.
Development team	Implementation, testing, documentation and release support.

Use formal change control for new modules or major workflow changes after approval, including assessment of cost, timeline, test impact and accounting implications.

21. Final Recommendation

Implement a Laravel + MySQL manufacturing ERP hosted on a compatible managed VPS or cloud server, with a separate public website experience and secured private ERP portal. Build the database and accounting architecture as one integrated system from the beginning.

Prioritize financial posting, inventory valuation, production costing, GST treatment, statutory API integration and opening-balance migration. Require end-to-end testing and formal finance, tax, production and management sign-off before go-live.

The immediate next design deliverables are a database ER diagram, Laravel project structure, migration files, role-permission matrix, screen-by-screen UI specification, API contracts and approved UAT test cases.

Appendix A — Core Non-Functional Requirements

- Performance: define response-time targets and test realistic concurrent users and report workloads.
- Availability: select a service level appropriate to the business and monitor uptime and background jobs.
- Scalability: support additional branches, warehouses, products, users and transaction volumes.
- Maintainability: version-controlled code, migrations, documented configuration and repeatable deployments.
- Auditability: trace every posted financial and stock transaction to its source and authorized user.
- Interoperability: versioned API contracts and controlled imports/exports.
- Recovery: off-server backups and tested restoration against approved RPO/RTO.

Appendix B — Approval Sign-off

Approval role	Name / signature	Date
Management sponsor		
Finance owner		
GST / tax adviser		
Production owner		
Warehouse owner		
IT administrator		

Document status: Final proposed specification — subject to company-specific review and approval.

BenCart Tailoring & Hostinger Deployment Addendum

1. Project Identity and Business Context

This version tailors the prior manufacturing website and ERP specification to the supplied BenCart business-card details and the requested Hostinger AI-assisted approach. The card describes BenCart as an authorised vendor and uses the slogan “products made by MSME artisans of Bengal for you.” Confirm the legal identity of the manufacturing company, BenCart’s relationship to it, and permission to publish these details before launch.

Field	Details transcribed from supplied card
Brand / label	BenCart — confirm ownership and authorised use
Slogan	Products made by MSME artisans of Bengal for you
Registered office shown	2/154 Dum Dum Road, Kolkata 700074
Email shown	bencart2021@gmail.com
Website shown	www.bencart.in
Helpline shown	+91 99032 72771
GSTIN shown	19BBQPR2732G2Z8

Verification note: the contact and GST details above are transcribed from the supplied image and are not independently verified. Confirm legal name, GST registration status, address, phone, email, domain control and brand permissions before publication.

2. Recommended Hostinger Architecture

Use Hostinger AI tools to accelerate public website design and content creation. Do not assume an AI website builder alone can provide a complete manufacturing ERP with accounting controls, production costing, audit trails and statutory integrations.

Layer	Proposed address	Implementation
Public website	www.bencart.in	Hostinger AI Website Builder can be used for initial design, public pages, product catalogue and enquiries if its current feature set fits the requirements.
ERP application	erp.bencart.in	Separate custom Laravel/PHP application with MySQL or MariaDB, preferably on a Hostinger VPS or a plan verified to support all required Laravel runtime and operations.
Admin	Protected /admin path or admin.bencart.in	Role-based CMS and ERP administration, MFA and restricted access. Avoid unnecessary duplicate admin surfaces.
Database	Private database	No public database access; least-privilege accounts, encrypted backups and restricted network access.
Email	Verified domain mailbox	Configure SPF, DKIM and DMARC; use authenticated SMTP or a transactional email service.

Before buying hosting, verify current plan limits for PHP version, SSH, Composer, cron/scheduler, queue workers, memory/CPU, database capacity, SSL, staging, backup/restore, firewall and monitoring. Hostinger plans change; confirm features with Hostinger directly. If shared hosting cannot meet required runtime or control needs, use VPS.

3. Appropriate Use of Hostinger AI

AI-assisted tasks

- Generate the first visual draft of the homepage, company profile, category pages, product catalogue and contact/enquiry pages.
- Draft responsive layouts, SEO titles/descriptions, FAQs and product copy for human review.
- Create wireframes, sample data and non-sensitive public content.
- Accelerate routine page creation and public content management.

Custom development and testing required

- Double-entry accounting, period locks, journal reversals, approvals and financial audit trails.
- Manufacturing BOM/versioning, routings, production orders, material issue, WIP, QC, scrap and actual costing.
- Multi-warehouse inventory, stock valuation, transfers and controlled adjustments.

- GST calculations, GSTR working/reconciliation, e-invoice IRN/QR and e-way bill API workflows.
- Purchase approvals, sales order-to-cash, AR/AP ageing, bank reconciliation and profitability reporting.
- Role permissions, maker-checker controls, backups, restore testing, security testing and deployment automation.

4. Public Website Scope

- Homepage with brand story, product families, featured products, MSME/artisan narrative and clear enquiry actions.
- About/company profile, sourcing and manufacturing model, quality policy, facilities and references only where verified.
- Product catalogue: category, SKU, images, specifications, materials, dimensions, brochures, availability and enquiry request.
- Customisation/bulk quotation requests, dealer/vendor enquiries and protected contact forms.
- News, announcements, downloads, privacy policy, terms, shipping/returns policy where applicable and grievance/contact details.
- Admin-managed pages, products, categories, banners, FAQs, downloads and enquiry status.
- Mobile responsiveness, accessible content, metadata/SEO, spam protection, performance optimisation and analytics-consent handling where applicable.

5. Integrated ERP Modules

Module	Minimum scope
Organisation & security	Company/branch/warehouse setup, financial years, users, roles, permissions, MFA, maker-checker and audit logs.
Masters	Products, units, HSN/SAC, versioned GST rates, customers, suppliers, BOMs, routings, warehouses, price lists and payment terms.
Sales	Enquiry, quotation, sales order, delivery, GST invoice, credit/debit note, receipts and customer ageing.
Purchases	Requisition, approvals, RFQ/vendor comparison, PO, GRN, QC, supplier invoice, debit note and payment.
Inventory	Multi-location stock, transfers, reservations, issue/return, approved adjustments, stock ledger, valuation and physical verification.
Manufacturing	BOM/version control, routing/work centres, planning, work orders, material consumption, WIP, output, scrap, QC and variance costing.
Finance	Chart of accounts, journals, GL, cash/bank, AR/AP, cost centres, bank reconciliation, trial balance, P&L and balance sheet.
GST & integrations	Tax invoice, HSN/tax reports, GSTR preparation/reconciliation, IRN/QR and e-way bill status, errors and exportable records.
Analytics	Sales/margin, product/customer profitability, production efficiency, stock ageing, reorder alerts, overdue balances and cash flow.

6. Key Workflows

Enquiry to cash: Website lead → qualification → quotation → approved sales order → stock/production allocation → dispatch → tax invoice → IRN/e-way bill if applicable → receipt allocation → ageing and profitability.

Procure to pay: Requisition → approval → RFQ/vendor selection → PO → receipt/QC → supplier bill and three-way match → accounting posting → payment approval → bank reconciliation.

Plan to manufacture: Demand → material check → production order → issue materials → report operations → QC → finished-goods receipt → scrap/WIP/variance costing → stock/accounting postings.

GST invoice: Validate GSTIN/address/place of supply and item HSN/tax setup → calculate tax → validate document → authorised API submission → store acknowledgement/IRN/QR and errors → reconcile status.

Month-end close: Complete pending documents → reconcile stock/WIP, bank, AR/AP and GST → review exceptions → authorised period lock → financial statements.

7. Core Database Schema

Use relational tables with primary/foreign keys, unique constraints, status fields, timestamps and audit history. Use fixed-precision DECIMAL for money, never floating-point.

Domain	Suggested core tables
Identity	companies, branches, warehouses, users, roles, permissions, user_roles, role_permissions, sessions, audit_logs

Domain	Suggested core tables
Masters	items, item_categories, units, hsn_codes, tax_rates, customers, suppliers, addresses, price_lists, cost_centres
Sales	leads, enquiries, quotations, quotation_lines, sales_orders, sales_order_lines, deliveries, invoices, invoice_lines, credit_notes, receipts, receipt_allocations
Purchases	purchase_requisitions, requisition_lines, rfqs, supplier_quotations, purchase_orders, purchase_order_lines, goods_receipts, receipt_lines, supplier_bills, bill_lines, payments
Inventory	stock_locations, stock_ledger, stock_transfers, transfer_lines, reservations, stock_counts, stock_adjustments, serial_batches
Manufacturing	boms, bom_versions, bom_lines, routings, routing_operations, work_centres, production_orders, material_issues, operation_logs, qc_inspections, production_receipts, scrap_records, wip_valuations
Accounting	accounts, journal_entries, journal_lines, fiscal_periods, bank_accounts, bank_transactions, bank_reconciliations, cost_allocations
GST/integrations	gst_returns, gst_reconciliations, e_invoice_requests/responses, eway_bill_requests/responses, integration_jobs, integration_errors
Website	cms_pages, banners, product_publications, downloads, web_enquiries, attachments, newsletter_subscriptions, consent_records

8. Security and Privacy

- Separate public website from ERP and private database; never expose ledgers, invoices, customer data or supplier prices publicly.
- HTTPS/SSL, secure cookies, CSRF protection, output escaping, input validation, rate limits, anti-bot controls and dependency patching.
- Role-based least privilege, MFA for administrators/finance, session expiry and strong authentication.
- Maker-checker approval for payments, journals, stock adjustments, supplier creation, tax-master changes and period closure.
- Append-only audit events for logins, approvals, edits/voids, tax submissions and integration status changes.
- Keep API secrets out of source code; encrypt backups and sensitive configuration.
- Daily database/file backups at minimum, off-server copies, documented retention and tested restoration.
- Use staging, signed-off releases, monitoring and rollback; protect test data.

9. GST, E-Invoice and E-Way Bill

Treat tax rules as configurable and versioned business logic. Confirm applicability thresholds, invoice fields, time limits, cancellation rules, HSN/SAC, place-of-supply logic and current API/provider requirements with the company's GST adviser before go-live. Use an authorised integration route. Store acknowledgements, IRN, QR details, e-way bill numbers, timestamps and retry/error logs under access control. A website builder should not be assumed to provide compliant statutory functionality.

10. Hostinger Deployment Plan

- Confirm legal entity, BenCart relationship, domain control and contact/GST details approved for publication.
- Select a hosting plan only after checking Laravel/PHP, SSH/Composer, database, queues/scheduler, storage, resource limits, backup, staging and security.
- Create separate development/staging and production environments; isolate secrets and production data.
- Use Hostinger AI for public design/content, then review every claim, product specification, policy and form manually.
- Develop the ERP in version-controlled Laravel; define migrations, seed data, automated tests, release procedure and rollback.
- Configure DNS for www.bencart.in and erp.bencart.in only after domain control is confirmed; enable SSL and HTTPS redirects.
- Set up private database access, least-privilege accounts, scheduled jobs, queues, email, monitoring and encrypted backups.
- Test e-invoice/e-way bill integrations in sandbox/test mode, including rejection, timeout, duplicate and retry cases.
- Migrate approved masters/opening balances only after reconciliation; perform UAT with sales, purchase, stores, production and accounts.
- Roll out in phases, train users and document support escalation, restore procedures, incident response and monthly reconciliations.

11. Delivery Phases

Phase	Deliverables
1. Discovery	Confirm legal entity, products, processes, GST cases, users, approvals, reports and migration sources.
2. Website	Brand/design, pages, catalogue, CMS, enquiries, SEO and mobile testing.
3. Core ERP	Masters, sales, purchase, inventory, approvals, roles, audit logs and standard reports.
4. Manufacturing & finance	BOM/routing, production, QC, WIP/costing, GL, AR/AP, bank reconciliation and financial statements.
5. GST integrations	Tax validation, invoice workflow, e-invoice/e-way bill provider integration and reconciliation.
6. UAT and rollout	Data migration, security review, training, parallel run, go-live approval and post-launch support.

12. Acceptance Criteria

- Authorised admin can update public pages, products, categories, banners and enquiry status without code changes.
- Public users can browse approved products and submit enquiries without access to private ERP data.
- Sales, purchase, inventory, manufacturing and finance documents are traceable and audited.
- Stock, BOM consumption, finished output, WIP and production variances reconcile to approved rules.
- Journal entries balance and financial reports reconcile to ledgers.
- GST workflows pass adviser-approved test cases and integration errors are recoverable/auditable.
- Permissions can be restricted by role, branch, warehouse and approval limit where required.
- Backup restoration, security checks, performance checks and UAT are documented and signed off.

13. Decisions Required Before Development

- Confirm exact legal company name and whether BenCart is an owned brand, authorised sales brand or separate entity.
- Confirm domain ownership and whether the existing www.bencart.in site will be replaced, redesigned or integrated.
- Confirm product categories, make-to-order versus stock production, BOM/routing depth, quality gates and costing method.
- Confirm GST registrations, e-invoice applicability, e-way bill use cases, integration provider and adviser-approved invoice format.
- Confirm opening stock/balances, customer/supplier migration sources and history required.
- Confirm users, branches, warehouses, concurrent users, budget, support and target launch date.
- Confirm Hostinger AI Builder is for the public site; the recommended ERP is a custom Laravel application.

14. Official Hosting References

Hostinger AI Website Builder: <https://www.hostinger.com/ai-builder>

Hostinger Laravel VPS hosting: <https://www.hostinger.com/in/vps/laravel-hosting>

Verify current features, plan limits and support commitments directly with Hostinger before purchase.

Disclaimer: this is a functional/technical planning document, not legal, tax or cybersecurity certification. Obtain professional GST/accounting and security review before production use.