SmartStore AI – Full Project Proposal (Detailed)

A. Project Title

SmartStore AI
An AI-powered multi-channel commerce automation platform for social sellers, chat-first businesses, and omnichannel retailers.

B. Summary

SmartStore AI is a modern SaaS/web-based platform designed to automate e-commerce operations from **product discovery** to **delivery confirmation** across **WhatsApp, Facebook, Instagram, websites, and marketplaces**. It centralizes communication, orders, customer data, marketing, logistics, and payments.

C. Functional Requirements (Full Breakdown)

1. 📲 Multi-Channel Chat Integration

- WhatsApp Business API support (via 360Dialog/Twilio)

- Messenger, Instagram DM & Facebook Comments

- Website chatbot widget

- Shared inbox with message tagging, assignment, and smart filters

- Message templates (Meta)

- Quick replies & buttons for automated flows

2. 🤖 AI Chatbot & Assistant (Local LLM)

- Product discovery and filtering

- FAQ and order status responses

- Form autofill based on chat context

- GPT4-style LLM integration (offline-capable)

- Chat confidence scoring & handover to agent

- Natural language purchase flow: "I want 2 red mugs under 2,000"

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3. 🛍️ Catalog & Inventory Management

- Product CRUD + variants (color, size, etc.)

- CSV bulk import/export

- Facebook/TikTok Shop sync

- Inventory sync across channels

- Stock alerts

- Inventory aging reports (slow movers)

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4. 🧾 Order Management System

- Unified dashboard for multi-channel orders

- Stages: Draft → Confirmed → Packed → Out for Delivery → Delivered → Completed

- Auto status updates from courier API

- Print-ready packing lists

- Batch pick & pack optimization

- Return & exchange processing (auto stock adjustment)

- Auto-cancel + restock feature

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5. 📦 Courier & Delivery Sync

- Push orders to courier APIs (PickMe, Aramex, etc.)

- Reverse API webhooks for delivery status updates

- Customer reschedule via chatbot/web

- Courier performance dashboard

- Delivery analytics (delivery time, failure rate, success %)

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6. 💬 Customer CRM

- Auto-create from chat or order

- Tags, purchase history, chat logs

- Smart segments (VIP, repeat buyers, cart abandoners)

- Merged duplicate profiles

- Loyalty points & redemption log

- Activity timeline (every chat/order/email event)

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7. 💸 Payment System

- COD and online payments

- Gateways: Stripe, PayPal, PayHere, WebxPay

- Auto reconciliation of payments → order status

- Send WhatsApp/email payment reminders

- Block COD abuse (blacklist per phone/IP)

- Multi-currency support

- Payment method analytics

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8. 📣 Marketing Automation

Feature	Details
Abandoned Cart Recovery	Triggered via WhatsApp/Email after X mins
Feedback Collection	Auto-request reviews post delivery
Promotional Campaigns	SMS/Email/WhatsApp broadcast by tags
Loyalty Program	Points system with expiry, redemption, customer view
Retargeting	Reach dormant customers with new offers

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9. 🔁 Order Processing Automation

Task	Automation
Status Transitions	Order status updated based on events (payment, delivery)
Packing Lists	Auto-generated PDFs grouped by delivery zones
Warehouse Batching	Group orders for efficient packing
Auto Cancel	Cancel unconfirmed orders and restock
Return & Exchange	Simplified workflow for RMA + stock sync

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10. 📊 Reports & Analytics

Report Type	Highlights
Sales Reports	Daily, Weekly, Monthly PDF downloads
Courier Reports	Delivery time, reschedule %, failed attempts
CRM Insights	Customer CLV, new vs returning, behavior trends
Inventory Aging	Dead stock report

Profit & Loss	Live expenses vs income
Expense Tracker	Track cost per courier, packaging, marketing, labor

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11. 🌐 Multi-Platform Sync

Sync Type	Platforms
Product & Stock	Website, Facebook, TikTok, Shopee (future-ready)
Price Updates	One update reflected across channels
Orders	Central dashboard for marketplace + chat orders

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12. 👥 Staff & User Management

Feature	Description
Role-Based Access	Admin, Manager, Staff, Packing Staff
Activity Logs	Logs of updates, deletions, status changes

| Staff Performance | Measure order handling time, sales count, errors |

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13. 🔐 Security & Data Protection

Feature	Benefit
Daily Auto Backups	Off-site and downloadable
Two-Factor Authentication	For Admin + billing accounts
Encrypted API Tokens	Scoped per integration
GDPR/Privacy Compliant	Data deletion, access logs, and consent tracking

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14. 🤖 Advanced AI & Automation (Optional Module)

Feature	Description
AI Stock Forecasting	Predict next month's inventory needs per item
AI Retargeting	Suggest customers likely to repurchase or churn

AI Price Optimizer	Suggest best-selling price per demand/stock
ChatGPT Plugin-Style Hooks	External plugin support for AI suggestions

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D. Technical Architecture

◆ **Tech Stack**

Layer	Tools
Frontend	React (Next.js) + TailwindCSS
Backend	Node.js (Express/NestJS) OR Django/FastAPI
Database	PostgreSQL or MongoDB
Hosting	Railway/Render/VPS
Storage	AWS S3 / Cloudflare R2
AI	Local LLM: Ollama / llama.cpp
Auth	JWT, bcrypt, OAuth (Google, Meta)
Deployment	Docker + GitHub Actions

Payment APIs	Stripe, PayHere, WebxPay, PayPal
Courier APIs	Custom adapters for PickMe, Aramex, local courier APIs

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E. Platform Modules Summary

Module	Description
1. Chat Center	Unified inbox, chatbot, response analytics
2. Product Catalog	Sync, manage, bulk upload, price control
3. Order Management	Full lifecycle from lead to delivery
4. CRM	Auto-generated profiles, segmentation
5. Courier Hub	API sync, reschedule, delivery tracking
6. Marketing	Campaign builder, abandoned cart flows
7. Loyalty Engine	Points-based customer retention
8. Analytics	Graphs, dashboards, reports export

9. Staff Portal	Roles, audit trails, performance
10. Subscription & Licensing	SaaS billing + lifetime licensing UI
11. AI Modules	Smart suggestions, forecasting, NLP
12. Sync Engine	Facebook/IG/TikTok/shop API adapter layer
13. Payment Tools	COD, payment links, reconciliation
14. Security & Backup	Backup manager, 2FA, token control

F. Licensing Model

Plan	Features
Starter (Free/Trial)	Manual orders, chat widget, basic CRM
Pro	WhatsApp & FB integration, catalog sync, courier tracking
Enterprise	AI chatbot, full automation, reports, team roles
Lifetime (One-time Payment)	Full features, self-hosted, no recurring fees

White-label (Agency)   Resell under own brand with subaccounts

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G. Strategic Benefits

- 🧠 **AI-powered commerce** (unique in emerging markets)

- 📱 **Chat-first workflows** for non-technical merchants

- 🚚 **Courier sync + rescheduling** = reduced order failure

- 📈 **Unified dashboard** for multi-channel growth

- 💸 **COD + gateway flexibility** to improve conversion

- 🛠️ **Modular & scalable**, API-first architecture