Lubricant Dealer Platform — Scope of Work & Truth Source Document (Client Sign-Off)

0) Purpose of This Document

This document is the **single source of truth** for building the **Lubricant Dealer Platform**. It defines all modules, features, users, workflows, and integrations.
Any requirement not explicitly listed here is **out of scope** and will be handled via a **Change Request (CR)** with cost and timeline impact.

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1) What This Platform Is

The **Lubricant Dealer Platform** is a multi-tenant portal used by:

- **Dealers** to manage **multi-brand inventory** and respond to **B2C fulfilment assignments**
- **Brands** to monitor their dealer network, view **brand-only dealer inventory**, and access **AI-driven inventory projections**
- **Platform Admin** to onboard brands/dealers, manage mappings and zones, govern chat, and monitor operations

This platform is mapped to the **B2C Platform** for:

- Dealer stock visibility (for B2C routing decisions)
- Order assignment acceptance/decline and fulfilment status updates (ready/dispatched)

> Important: **Cancellation, return, and refund workflows are NOT handled in this Dealer Platform.** They are handled only in the B2C Platform.

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2) Users, Roles, Permissions (Explicit)

2.1 Platform Admin (Super Admin)

Can:

- Create/manage Brand entities and Brand Users
- Create/manage Dealer entities and Dealer Users
- Generate and distribute login credentials
- Map Dealers ↔ Brands
- Map Dealers ↔ Zones/Regions (India → State → City → Zone/PIN cluster)
- Control user activation/deactivation and access rules
- Configure inventory policies (thresholds, update reminders)
- Configure forecasting settings (horizon, refresh frequency, input signals)
- Manage/monitor brand group chats (membership, moderation)
- View global dashboards and audit logs
- Monitor B2C fulfilment routing performance (accept/decline + SLA)

Cannot (in this scope):

- Run dealer settlement/payouts
- Manage B2C cancellations/returns/refunds (outside this platform)

2.2 Dealer User

Can:

- Login and access dealer dashboard

- Manage inventory for multiple brands:
    - Stock-in / Stock-out / Adjustments
    - Minimum threshold alerts
- Participate in brand group chats (for brands they are mapped to)
- Receive B2C order assignments and:
    - Accept / Decline within SLA (reason mandatory)
    - Mark fulfilment progress: Ready / Dispatched
    - Enter dispatch details (invoice/awb/remarks)
    - Upload dispatch proof (if enabled)

Cannot:

- See other dealers' inventory except via chat/discussion (no inventory visibility of others)
- View brand-wide projections (brand-only feature)
- Handle cancellations/returns/refunds (not part of dealer platform)

2.3 Brand User

Can:

- Login and access brand dashboard
- View all dealers mapped to their brand
- View dealer inventory for **their brand only**
- Access analytics and trends (brand-level)
- Access AI forecasting and drilldowns:

    - India → State → City → Zone → Dealer
- Participate in brand group chats:
    - announcements, pinned messages, responses to dealer queries

Cannot:

- View dealer inventory for other brands
- Edit dealer mappings directly (only request; admin executes if you want that policy)
- Access global admin tools

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3) Authentication & Login (How Users Log In)

3.1 Admin-Created Credentials

- Admin creates user accounts for Brand Users and Dealer Users.
- Each user is tied to exactly one entity:
    - Dealer User → mapped to a specific Dealer
    - Brand User → mapped to a specific Brand

3.2 Login Methods (Included)

Recommended and included:

- **OTP-based login** for Dealer Users and Brand Users (mobile OTP)
- Admin login can be password + 2FA/OTP (implementation decision)

3.3 Security & Access Control

- Role-based permissions: Admin / Dealer / Brand

- Session timeout after inactivity (configurable)
- Account status: Active / Disabled
- Audit logs for critical actions (inventory edits, mapping changes, assignment accept/decline)

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4) Modules & Features Included (Full Detail)

A) Admin Portal Modules

Module A1 — Brand Management

- Create brand profile:
  - Brand name, logo, contact details (optional), address (optional)
- Create/manage brand users:
  - name, mobile, email (optional), role type (Viewer/Manager)
- Activate/deactivate brand users
- View brand-level summaries:
  - number of dealers mapped
  - inventory health indicators
  - forecast overview

Acceptance Criteria

- Brand user can only access assigned brand dashboard.

- Inactive users cannot log in.

Module A2 — Dealer Management

- Create dealer profile:
    - dealer name, contact person, mobile/email, address
    - operating regions/zones (one or many)
    - optional fields: GSTIN, PAN (if client needs)
- Create/manage dealer users:
    - dealer admin + optional staff users (if included)
- Activate/deactivate dealer users

Acceptance Criteria

- Dealer user can only access their own dealer dashboard and mapped brands.

Module A3 — Zone & Mapping Engine (Core)

Zone Hierarchy

- Country → State → City → Zone/PIN cluster

Mappings

- Map Dealer ↔ Brand (multi-brand)
- Map Dealer ↔ Zones (multi-zone)
- Optional mapping enhancements (if required):

    - dealer priority rank within a zone
    - dealer category authorization by brand (optional)

Acceptance Criteria

- A dealer can be mapped to multiple brands.
- Brand inventory views and chats reflect the mapping accurately.

Module A4 — Product Master & SKU Governance (Brand Catalog)

The platform will maintain a **brand-wise product master catalog** (recommended approach).

Admin/Brand catalog features:

- Brand SKU master data:
    - SKU/code, product name, pack size, category/subcategory (optional)
    - (Optional references) HSN/GST if required for analytics
- Dealer inventory must reference these SKUs (prevents duplicates)

Acceptance Criteria

- Dealer inventory can only be updated against valid SKUs for that brand.

Module A5 — Inventory Oversight (Admin Global View)

Admin can view cross-platform inventory:

- Dealer → Brand → SKU → Available stock

- Filters:
    - brand, product/SKU, state/city/zone, dealer
- Monitoring:
    - low stock items
    - dealers with no stock update for X days
    - abnormal stock adjustments (optional)

Acceptance Criteria

- Inventory view updates based on dealer stock changes and shows “last updated” timestamps.

Module A6 — Fulfilment Monitoring (B2C-linked)

Admin can monitor dealer responses for B2C assignments:

- Assigned / Pending acceptance / Accepted / Declined
- Dealer SLA monitoring dashboard
- Decline reason tracking
- Escalation list (pending beyond SLA)

Acceptance Criteria

- Every accept/decline event is logged with timestamp and user identity.

Module A7 — Chat Governance & Moderation

Admin controls:

- Brand-wise group creation (auto-created when brand is created)
- Member management: add/remove dealer users and brand users
- Moderation tools:
  - delete message (if needed)
  - mute/ban user (if needed)
- Announcement mode enable/disable (optional)

Acceptance Criteria

- Only mapped members can access the group chat of that brand.

Module A8 — Forecast Configuration & Controls

Admin config:

- Forecast horizon:
  - 3 / 6 / 12 months
- Refresh frequency:
  - daily/weekly/monthly
- Forecast input signals:
  - dealer stock history
  - stock-in and stock-out trends
  - dealer update frequency trends
  - optional: B2C order assignment signals (if connected)
- Drilldown regions enabled: India → State → City → Zone → Dealer

Acceptance Criteria

- Forecast refresh runs as per schedule and is visible to brand users.

B) Dealer Portal Modules

Module D1 — Dealer Dashboard Home

Dealer sees:

- Total SKUs stocked (brand-wise)
- Low stock alerts list
- “Pending fulfilment assignments” count (from B2C)
- Last stock update timestamp
- Brand switcher (to view brand-wise inventory)

Acceptance Criteria

- Dealer sees only their own data and brands mapped to them.

Module D2 — Multi-Brand Inventory Management

Dealer can manage inventory by:

- Selecting brand → viewing product list (SKU-wise)
- For each SKU:
    - available quantity

    - min threshold (if configured)
    - last updated timestamp

Stock movements:

- **Stock-In** (received goods)
- **Stock-Out** (issued/dispatch)
- **Adjustment** (damage/correction) — reason mandatory

Update methods:

- Manual UI updates
- CSV upload (optional but included if requested)
- API sync (optional if dealer has ERP; requires separate integration scope per ERP)

Acceptance Criteria

- Every inventory change creates a log entry (who/when/what/reason).
- Stock cannot go negative (system validation).

Module D3 — Alerts & Inventory Policies

Dealer receives:

- Low stock alerts when stock < threshold
- Reminders if dealer hasn't updated stock for X days (configurable)
- Optional critical alerts for high-demand SKUs (brand-configured)

Acceptance Criteria

- Alerts are visible in dashboard and can also be notified via email/SMS (if agreed).

Module D4 — B2C Fulfilment Assignments (No Returns/Refunds)

Dealer receives assignments from B2C:

- Order ID, brand, SKUs, quantities, delivery zone
- SLA countdown

Dealer actions:

- Accept / Decline (decline requires reason)
- After accept:
    - mark status: Ready
    - mark status: Dispatched
    - enter dispatch details (invoice no / AWB / remarks)
    - upload dispatch proof (optional but included)

Acceptance Criteria

- Dealer can only act on orders assigned to them.
- Status updates sync to B2C system.

Module D5 — Brand Group Chat Participation

Dealer can:

- chat inside each mapped brand group
- view announcements and pinned messages
- share text + attachments (optional; can include images/pdf if required)

Acceptance Criteria

- Dealer can access only brand groups they are mapped to.

C) Brand Portal Modules

Module B1 — Brand Dashboard Home

Brand sees:

- total mapped dealers
- active vs inactive dealers
- inventory health summary:
  - low stock hotspots
  - dealers not updating stock
- forecast summary card (next 3/6/12 months overview)

Module B2 — Dealer Directory (Brand View)

- List of all dealers mapped to brand
- Filters:

    - state/city/zone
    - last updated
    - low stock / no update flag
- Dealer detail view:
    - brand SKUs inventory snapshot
    - inventory trend for selected period

Acceptance Criteria

- Brand can see only their brand's dealer inventory and nothing else.

Module B3 — Inventory Analytics & Drilldowns

Reports & drilldowns:

- India → State → City → Zone → Dealer
  Views:
- SKU-wise stock distribution
- category-wise stock summary (if category master exists)
- low stock list by region
- stock update frequency by dealer

Exports:

- CSV export for inventory report (recommended)
- Optional Excel export (if required)

Module B4 — AI Forecast & Inventory Prediction Engine

Forecast features:

- Forecast horizon selection:
  - 3 / 6 / 12 months
- Drilldown:
  - India → State → City → Zone → Dealer
- Output types (AI-driven projections):
  - projected inventory depletion risk (where stock will run out)
  - projected demand trend by region (if signal exists)
  - recommended replenishment quantity (optional)
- Explainability:
  - show key drivers used (stock history, movement trends, update patterns, optional B2C signals)

Acceptance Criteria

- Forecast results are updated per schedule and filterable by region/SKU.
- Export of forecast summary (CSV) available.

Module B5 — Brand Group Chat (Brand Controls)

Brand can:

- participate in brand dealer group chats
- post announcements

- pin important messages/documents (optional)
- respond to dealer queries

Acceptance Criteria

- Only brand users of that brand can post announcements in their group.

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5) Data Logs & Audit Trails (Included)

Audit logs must capture:

- Admin mapping changes (dealer↔brand, dealer↔zone)
- Inventory changes:
  - stock-in, stock-out, adjustments, reasons
- B2C assignment actions:
  - accept/decline + reason
  - ready/dispatched updates
- User status changes (activate/deactivate)

Logs must be filterable by:

- dealer
- brand
- date range
- SKU
- order ID (for fulfilment events)

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6) Workflows (End-to-End)

Workflow 1 — Admin Onboards Brand and Dealer

1. Admin creates Brand entity
2. Admin creates Brand Users and shares credentials
3. Admin creates Dealer entity
4. Admin creates Dealer Users and shares credentials
5. Admin maps dealer ↔ brand(s)
6. Admin maps dealer ↔ zone(s)

Workflow 2 — Dealer Updates Inventory (Multi-brand)

1. Dealer logs in
2. Selects Brand
3. Updates stock via:
   - manual entry OR CSV upload
4. System records update + last updated timestamp
5. Low stock alerts triggered if threshold crossed

Workflow 3 — B2C Order Assignment to Dealer

1. B2C assigns order to a dealer (based on routing logic)
2. Dealer sees assignment in “Fulfilment Inbox”
3. Dealer Accepts or Declines (reason required)

4. If accepted, dealer updates Ready → Dispatched
5. Dispatch details and (optional) proof uploaded
6. Updates sync back to B2C order timeline

Workflow 4 — Brand Uses Forecasting

1. Brand logs in
2. Opens Forecast dashboard
3. Selects horizon (3/6/12 months)
4. Drills down India → State → City → Zone → Dealer
5. Downloads report (CSV) for planning

Workflow 5 — Brand-Dealer Group Chat

1. Admin enables brand group and adds members automatically based on mapping
2. Dealer posts query; brand replies
3. Brand posts announcement; all dealers receive it
4. Admin can moderate if required

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7) B2C Integration (Explicit Data Exchange)

Dealer Platform → B2C

- Dealer inventory snapshot (brand SKU-wise)

- Dealer availability status (active/inactive)
- Assignment response:
    - accept/decline + reason
- Fulfilment status updates:
    - ready/dispatched + dispatch info + optional proof link

B2C → Dealer Platform

- Order assignment request payload:
    - order ID, brand, SKUs, quantities, delivery zone, SLA

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8) Explicit Exclusions (Only Here)

Anything not listed above is excluded. Specifically excluded:

- Cancellation, return, refund handling (not part of Dealer Platform)
- Payments, settlements, payouts, commissions
- E-commerce checkout/cart/customer ordering
- Dealer onboarding self-registration (admin creates users only)
- Integration with dealer ERP systems unless separately scoped per ERP
- Advanced HR/attendance/CRM modules
- Mobile app (unless separately scoped)

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9) Change Control (Scope Protection)

Any new feature, dashboard, workflow, report, integration, or automation not described above requires:

1. Change Request document
2. cost/timeline impact assessment
3. written approval
4. additional billing

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10) Client Sign-Off Checklist

Client confirms:

- Dealer Platform covers inventory + fulfilment assignments only (no return/refund/cancellation)
- Dealers can manage multi-brand inventory via dashboard
- Brand portal can view brand-only dealer stock + AI forecasting drilldowns
- Brand-dealer group chat is included per brand
- Admin onboarding and mapping is included (dealers/brands/zones)
- B2C integration scope is limited to inventory + assignment + fulfilment status updates
- Exclusions are understood
- Change control applies