FilFlo × Anveshan — Product Requirements Document (PRD)

1. Document Control

Item	Detail
Version	v0.2 (Draft)
Date	5 Jun 2025
Author	Shubham Vyas & Kuldeep Parewa
Reviewers	Anveshan Ops, Finance & Tech Leads; FilFlo Engineering
Stakeholders	Anveshan Founders, Warehouse & Supply-Chain Heads; FilFlo Founders

2. Executive Summary

Anveshan will sunset its in-house Inventory Management System (IMS) and adopt **FilFlo**, an AI-native Fulfilment OS, to unify inventory, production, order orchestration, logistics and finance across all channels. The phase-1 rollout targets an **aggressive 4-week window (7 June – 7 July 2025)**, with FilFlo running **in parallel** to the existing IMS to ensure zero disruption while we migrate core warehouse operations. Success is measured by ≥ 98 % inventory accuracy, 100 % order-fill, and a 30 % reduction in working capital tied up in FG stock.

3. Context & Background

- **Current Pain** — Stock-outs, manual GRNs, spreadsheet fragmentation, ageing inventory and reconciliation delays lead to missed SLAs and cash-flow drag (see existing IMS PRD)

- **FilFlo Advantage** — Single system of record with QR-based traceability, workflow automation and an agentic AI layer that predicts demand and auto-triggers actions (auto-PO, stock re-routing)

- **Deployment Goal** — Replace legacy IMS modules **one functional cluster at a time**, retaining Google-Sheets workflows where helpful, and layer predictive intelligence once the data foundation is stable.

---

4. Objectives & Success Metrics

Objective	KPI (Exit)	Baseline	Target
Inventory accuracy	System vs physical ≥ 98 %	92 %	98 %
Order-fill rate	% lines shipped complete	85 %	100 %
Dispatch errors	Mis-picks / 1 000 lines	0	≤ 0
Working capital in FG	INR (Cr)	4.91	↓ 30 %
PO error rate	% POs amended	4 %	< 0.5 %
AI-recommendation adoption	% accepted	–	≥ 80 %

---

5. Stakeholders & User Personas

Persona	Goals	Key Tasks
Founder / CXO	Growth, cash efficiency	Dashboards, alerts, approvals
Finance	Accurate payables & ledgers	Vendor GRN, invoicing, reconciliation
Warehouse Ops	Fast, error-free moves	Scan-based inwards/outwards, QC, cycle-counts
Production Planner	Optimise batch runs	Auto-PO raw material, production WIP tracking
Dispatch / Logistics	SLA adherence	Pick-pack-ship, label print, courier API integration
Analyst / Growth	Demand insights	NLQ reports, cohort analysis

6. Transition Scope & Phasing

We split the **4-week Phase-1** into two waves while both systems run in unison:

Wave-A (1 – 14 Jun) — Dispatch & Inventory Go-Live

- **Dispatch workflows**

Functionality	Status in FilFlo	Build Notes
B2B PO creation & approval	**Existing** – Storage › Procurement PO screens	Minor UI tweak to tag customer PO # Generate Amazon FNSKU and EAN code stickers via FilFlo
Case-packing & QR box labelling	**To build**	Extend Generate QR to case-level; auto pack-ID
Gatepass generation	**To build**	REST endpoint + printable PDF
B2C order ingestion (Amazon, Flipkart, Shopify, Cred, Smytten)	**Existing** via Unicommerce + native Shopify	New connectors for Cred & Smytten
Scan → pack → manifest workflow	**Existing** – Picklist, Outward, Manifest APIs	Add bulk manifest export

-
Inventory workflows

Functionality	Status in FilFlo	Build Notes
Inward from production via PO	**Existing** – Production PO inward	–
Inward of 3rd-party goods	**Existing** – Storage › Inward Products	–
Location-wise put-away & bin mapping	**To build**	Introduce `/storage/bin` endpoints
Picklist generation (FIFO)	**Existing** – Create Picklist	–

Ageing analytics	**Existing** – Stock Analysis	Enhance heat-map widget
Outward scanning	**Existing** – Outward Products	–
Cycle count scheduling & variance capture	**To build**	New cycle-count module

Wave-B (15 – 30 Jun) — Inward, Storage, Quality

- Storage replenishment, QC (AQL sampling), lot-level traceability.

- Begin **RTO** capture (inwards & disposition) by **24 Jun**; close pending gaps by **30 Jun**.

Deferred (Post-June)

Finance, Reporting (NLQ) and CRM ticketing modules will be activated once operational data is stabilised (ETA + 4 weeks).

7. Functional Requirements. Functional Requirements

7.1 Master Data

- **FR-1**: Admin can bulk-upload SKUs, materials and suppliers via CSV & UI form.

- **FR-2**: Versioned rate-cards with effective-date logic.

- **FR-3**: BOM import; AI validation of missing components.

7.2 Storage & Procurement

- **FR-4**: Raise Procurement PO from AI suggestion or manual.

- **FR-5**: QR-scan inward with QC status (pass/hold/reject).

- **FR-6**: Auto-update vendor payable ledger on GRN.

7.3 Production

- **FR-7**: Convert raw → WIP → FG; capture yield variance.

- **FR-8**: Trigger batch when FG dips below reorder-point.

7.4 Inventory & Dispatch

- **FR-9**: Generate pick-list by FIFO & channel priority.

- **FR-10**: Support combo/bundle SKUs; virtual inventory logic.

- **FR-11**: One-click dispatch label + manifest (Shiprocket, NimbusPost APIs).

7.5 Finance & Reporting

- **FR-12**: GST-ready invoicing; auto e-way bill.

- **FR-13**: NLQ: "Show ageing >90 days by warehouse".

7.6 AI Layer

- **FR-14**: Daily demand forecast @ SKU•warehouse level (MAPE <15 %).

- **FR-15**: Auto-generate PO suggestions with confidence score; require approval.

(Detailed user-stories & acceptance criteria in Appendix-A.)

---

8. Non-Functional Requirements

Category	Requirement
Performance	<300 ms p95 API; supports 50 concurrent scanners
Availability	≥ 99.5 % uptime SLA
Security	SOC-2 L1 controls; field-level RBAC
Compliance	GST, FSSAI traceability, ISO-22000 lot linkage

Scalability	10× SKU growth & multi-DC ready	
UX	Responsive (≥ 1280 px) + keyboard-optimized scanner screens	

---

9. Integration & Migration Plan

1. **Data Cut-over** — Export current IMS tables; transform → FilFlo schema; validate counts.

2. **Channel APIs** — Shopify, Unicommerce, Zepto, ONDC.

3. **Courier APIs** — Shiprocket, Dunzo, Bluedart.

4. **Finance** — Tally prime export (CSV) Phase 1.

5. **Testing** — Parallel run for 14 days in shadow-mode.

---

10. Roll-out Timeline (Phase-1, 4 Weeks)

Week	Dates	Milestones
0	1–3 Jun	Silent observation, data export, dual-run rehearsal
1	4–7 Jun	Master data migrated; Dispatch & Inventory sandbox live
2	8–14 Jun	**Wave-A** go-live (Dispatch + Inventory) parallel run
3	15–23 Jun	**Wave-B** go-live (Inward, Storage, Quality)
4	24–30 Jun	RTO workflows live; cut-over sign-off; decommission legacy IMS Dispatch/Inventory screens

11. Risks & Mitigations. Risks & Mitigations

Risk	Likelihood	Impact	Mitigation
Data mismatch during cut-over	Med	High	3-cycle physical count, reconciliation script
Change-management fatigue	High	Med	Role-based training, sandbox mode
Courier API downtime	Low	High	Offline label buffer, retry queue

12. Glossary

- **GRN** — Goods Receipt Note
- **FG** — Finished Goods
- **WIP** — Work in Progress
- **NLQ** — Natural-Language Query

13. Appendices

A. Mapping: Old IMS → FilFlo Modules

Legacy IMS Section	FilFlo Module	Notes
Storage Level, Procurement PO	Storage & Procurement	Same flow; QR replaces manual IDs
Production Level	Production	Adds yield analytics
Product Inventory Level	Inventory	Combos supported
Reports (Party ledger, Invoices)	Finance & Reporting	NLQ dashboards
Stock Analysis	Analytics	Real-time, AI insights

B. Reference Docs

- Existing IMS PRD (Anveshan) v1.2

- FilFlo product UI & folder structure

- FilFlo platform capability JSON

End of Document