XERPIUM

Penerbangan

Enterprise Resource Planning

Solusi ERP lengkap untuk industri penerbangan

2000+
MODUL

AI
ASSISTANT

SaaS
/ ON PREMISE

Bahasa Indonesia Edition — brosur.xerpium.com

Ekosistem Manajemen Penerbangan

XERPIUM AVIATION adalah solusi ERP lengkap untuk maskapai & operator penerbangan — dari manajemen bandara, armada pesawat, penerbangan, booking, ticket, loyalty, crew, flight ops, fuel, catering, GHA, pre-flight, cargo AWB, MRO, hingga passenger portal.

Airport & Route

Airport — IATA/ICAO code, kota, negara, timezone, GPS, elevation, hub flag

Route — Origin → Destination, distance (NM), block time, tipe (domestic/international/regional/charter)

Constraint — Origin ≠ Destination, IATA 3 huruf, ICAO 4 huruf

Aircraft Type & Fleet

Aircraft Type — ICAO type, manufacturer, MTOW, MLW, max seats, range, cruise speed, fuel capacity, crew requirements

Fleet — Tail number (PK-XXX), type, operator, owner, status (active/maintenance/aog/stored/retired)

Airframe — Hours & cycles tracking, last flight date, next A/C-check dates

MRO Rollup — YTD cost, 30-day cost, hours, WO count — computed real-time

Seat Template — First/Business/Premium Economy/Economy — rows, seats/row, pitch, width, total seats

Crew & Loyalty

Crew Member — Role (Captain/FO/Cadet/Instructor/Cabin), base airport, license (ATPL/CPL/MPL), medical class & expiry, passport

Qualification — Type rating, line check, sim session, emergency, security, dangerous goods — validity tracking

Expiry Alert — Auto-scan medical/passport/qualification/A-check expiry — severity (info/warning/critical/expired)

Loyalty Tier — Silver/Gold/Platinum — min points, min spend, miles multiplier, benefits (lounge, baggage, boarding, upgrade)

Flight & Service Category

Flight Master — No GA201, airline IATA, tipe (passenger/cargo/charter/training), STD/STA, duration, international flag

Service Category — 10 tipe: Passenger, Cargo, Ancillary, Charter, MRO, Ground Handling, Fuel, Catering, Training, Loyalty

Account Mapping — Income/expense account per service type

MRO Program — A/B/C/D-check, AD/SB, LLP, corrosion, engine borescope

Booking & Ticket

PNR — Auto 3-8 char, flight, route, cabin, state (draft → confirmed → ticketed → checked_in → boarded → flown → cancelled/refunded)

E-Ticket — TKT number, passenger, cabin, fare, state, SSR, baggage

Refund Wizard — Amount, cancellation fee, method (original/credit/bank)

Check-in Wizard — Bulk check-in, seat assignment, passenger list

Seat & Loyalty

Seat Assignment — Row+letter, cabin class, exit row, extra legroom, occupied flag, UNIQUE per aircraft+flight

Loyalty Points — Accrual on flown, redemption, adjustment, expiry — ledger per partner

Miles Calculation — total_amount × tier.miles_multiplier → points

Tier Upgrade — Auto from cumulative points

Flight Schedule & Leg

Schedule — Flight date, STD/STA, origin/destination, state (scheduled → boarding → departed → arrived)

Flight Leg — Actual ops: ATD, ATA, block time, delay, OTP (≤15min = on time), load factor

Delay Codes — IATA delay codes: passenger, cargo, aircraft, weather, ATC, ops, security

Aircraft Sync — Departure → auto-update airframe hours & cycles

Crew Assignment

Per Leg — Captain, FO, Relief, Cabin Chief, Cabin Crew, Flight Engineer

Time Tracking — Report/release time, block time, flight time, rest time

Qualification Check — Auto-validate type rating for leg aircraft type

State — Assigned → Confirmed → Completed → Removed

Fuel, Catering & GHA

Fuel Uplift — Liters, density (kg/L), mass auto-computed, price/liter, total cost, supplier

Catering — Meal count, special meal, beverage, supplier, cost

Ground Handling — Full/self/partial service, pax count, baggage count, cost

Pre-Flight Check

Check Types — Preflight, hourly, transit, daily, weekly

9 Categories — Exterior, Engine, Cabin, Cockpit, Landing Gear, Fuel, Flight Controls, Safety Equipment, Cargo

Status — Pending, OK, Fail, N/A — pass rate computed

Sign-off — Required: inspector + date/time, blocks if fail

Standard Items — Template library, auto-load on check start

AWB (Air Waybill)

AWB — Prefix 3-digit + serial 8-digit, shipper, consignee, agent, origin/destination, leg

Weight — Pieces, gross weight, volume, chargeable weight (max of weight vs vol×167)

Special Handling — General, Perishable, Valuable, Hazardous, DGR, Human Remains, Vulnerable

Workflow — Draft → Booked → Accepted → Loaded → Arrived → Delivered

ULD & Load Sheet

ULD — Type (AKE/AKH/AKN/AAP/AMA/PLA/P1P/DQP), max weight, tare, max volume, fill %, overweight alert

Load Sheet — Total pax, baggage, cargo, mail weight; ZFW, TOW, LW — MTOW compliance check

States — Draft → Finalized → Dispatched

Work Order & Tasks

Work Order — WO number, aircraft, program (A/B/C/D-check, AD, SB, LLP), type (routine/non-routine/aog/inspection/modification), priority

Estimates — Estimated hours & cost vs actual

Tasks — Task card, estimated/actual man-hours, mechanic, state (pending/done/blocked)

CRS — Certificate of Release to Service, sign-off by, date

States — Open → In Progress → Pending Parts → Inspection → Released → Closed

Components & Spare Parts

Component — Part number, serial number, aircraft, position, life limit (hours/cycles), remaining life, overhaul due

Spare Requirement — Product, qty required/available/to-order, supplier, auto-PO creation (cron)

Purchase Auto — Cron auto-create purchase orders from requirements

States — Draft → Requested → Ordered → Received

Compliance & Tooling

AD/SB Compliance — Reference, type (AD/SB/mod/inspection), due date, recurring, state (open/complied/N/A)

Tooling — Tool number, type (hand/power/torque/test/special), calibration due, status, location

Recurring — Auto-reset to open after compliance date

22 Dashboard KPI

Revenue & AR — Total revenue, outstanding AR, invoices bulan ini

Flight Ops — OTP %, total legs, average delay, fleet size

Booking — Total bookings, passengers, open POs

MRO — Open work orders, MRO purchases, pre-flight status

Cargo — Active AWBs, spare parts pending, spare parts cost

8 AI Tools

lookup_flight — Cari flight by number/IATA/tail

pax_itinerary — Cari itinerary penumpang by PNR

awb_track — Track AWB kargo real-time

wo_status — Cek status work order MRO

otp_digest — OTP report per periode

crew_roster_summary — Roster crew per role

uld_availability — Ketersediaan ULD per airport

parts_lookup — Cari komponen by part/serial number

Aviation ↔ Accounting

COA khusus penerbangan Indonesia, PPN 11%

Revenue: tiket, kargo, MRO, catering, fuel

Balance Sheet, P&L, Trial Balance

Aviation ↔ Inventory

Spare part MRO, fuel stock, catering stock

Lot/expiry tracking, component life limit

Aviation ↔ Sales

Booking → Sale Order otomatis

PNR, cabin class, travel date

Customer portal

Aviation ↔ Purchase

PO untuk fuel, catering, GHA, spare part MRO

Auto-PO dari spare requirement

Aviation ↔ HR

Crew data dari hr.employee

Qualification, medical, passport expiry

Aviation ↔ AI

8 AI tools: flight, pnr, awb, wo, otp, crew, uld, parts

Natural language query

Aviation ↔ Dashboard

22 KPI widgets, SQL sources

OTP, revenue, MRO, cargo metrics

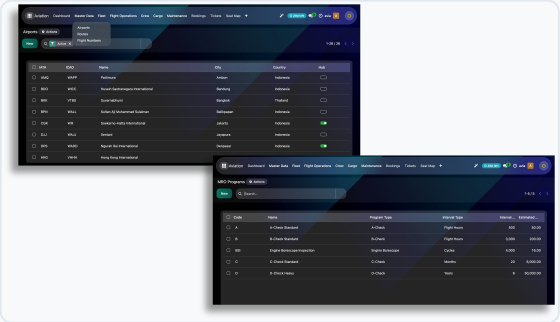
Aviation ↔ Portal

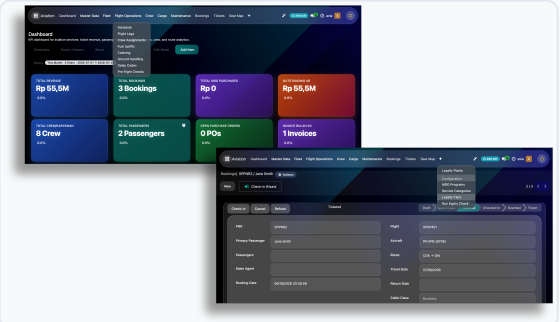
Passenger: booking, ticket, loyalty

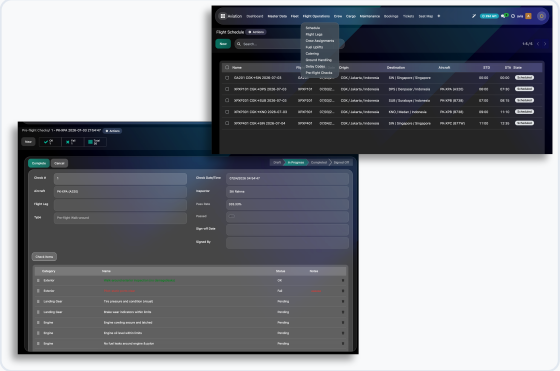
Cargo: AWB tracking

Self-service

Galeri & Video Demo







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