



DETAILED SOLUTION PROFILE

WAREHOUSE MANAGEMENT SOLUTION

Full operational control from receiving dock to delivery, inventory valuation and management reporting.

ERP-integrated / Multi-warehouse / Barcode-ready / Configurable

A warehouse should operate as one connected system.

RKieH Solutions designs and implements warehouse management environments that connect stock movement, purchasing, sales, accounting and frontline execution. The solution is shaped around the real operating model - warehouse layout, product types, order volume, traceability requirements, people and controls - rather than forcing the operation into a generic template.

INBOUND CONTROL Expected receipts, purchase-order matching, partial receipts, backorders, quality checks and receiving exceptions.	STORAGE CONTROL Warehouses, zones, aisles, shelves, bins, packages, putaway rules and internal movements.
INVENTORY CONTROL On-hand, available, reserved and forecasted stock; counts, adjustments, scrap and movement history.	REPLENISHMENT Minimum/maximum policies, demand forecasting, lead-time planning and inter-warehouse resupply.
FULFILLMENT Reservation, piece, batch, wave and cluster picking; one-, two- or three-step delivery flows.	PACKING AND DISPATCH Packages, labels, multi-package shipments, shipping handoff, backorders and delivery validation.
TRACEABILITY Barcodes, locations, packages, lots, serial numbers, expiration dates and end-to-end history.	FINANCIAL INTEGRATION Inventory valuation, landed costs, purchase receipts, customer deliveries and accounting impact.

SCOPE PRINCIPLE The final design may combine standard Odoo capabilities, configuration, approved third-party integrations and custom development. Availability depends on the selected edition, modules, deployment model, hardware and agreed solution blueprint.
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One flow from demand planning to stock accountability.

The warehouse module is designed as a controlled lifecycle. Each transaction should have a source, an operator, a location, a quantity, a status and a financial or customer consequence where applicable.

WAREHOUSE LIFECYCLE

01 PLAN	02 PURCHASE	03 RECEIVE	04 INSPECT	05 PUT AWAY	06 STORE
07 REPLENISH	08 PICK	09 PACK	10 DISPATCH	11 RETURN	12 COUNT

CONNECTED OPERATING MODULES

MODULE	WAREHOUSE CONNECTION	OPERATIONAL RESULT
Purchasing	Purchase orders create expected receipts and supplier-linked inbound work.	Receiving teams know what is due, what arrived and what remains open.
Sales	Confirmed demand can reserve stock and generate delivery operations.	Commercial commitments are connected to physical availability.
Accounting	Validated movements can feed valuation, cost of goods and landed-cost allocation.	Finance sees the value and impact of warehouse activity.
POS / channels	Store and channel transactions share product and stock information.	Fewer disconnected stock balances across branches and channels.
Apps / integrations	Mobile workflows, scanners, carriers, scales or partner systems connect through approved interfaces.	Operators work in the right interface without duplicating data.

CONTROL Every movement follows an operation type, location and validation path.	VISIBILITY Teams share the same product, stock and transaction records.	TRACEABILITY Movement history connects source documents, operators and tracked units.	SCALABILITY The same model can expand to more warehouses, locations, users and workflows.
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Model the physical operation before configuring the software.

LOCATION HIERARCHY

01 COMPANY	02 WAREHOUSE	03 ZONE	04 AISLE	05 SHELF	06 BIN
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The hierarchy can be simplified for a small operation or expanded for complex facilities. Locations can represent receiving docks, quality areas, storage, picking faces, packing zones, output areas, returns, quarantine, scrap, transit and customer/vendor locations.

CORE MASTER DATA

DATA OBJECT	WHAT IS DEFINED
Products	SKU, description, category, unit of measure, weight, volume, costing, tracking method and storage behavior.
Barcodes	Product, location, package, lot, serial and operational command codes; internal or GS1-based standards where applicable.
Packaging	Cases, cartons, pallets and sales/purchase pack sizes; package dimensions and weights where required.
Warehouses and locations	Hierarchy, operation types, routes, replenishment sources and responsible teams.
Vendors and customers	Lead times, delivery addresses, commercial terms and source documents.
Lots / serials / dates	Batch or unique-unit identity, receipt history, expiration, best-before, removal and alert dates where enabled.

ADVANCED STRUCTURE OPTIONS - Multiple warehouses and companies - Central warehouse feeding branches - Transit and cross-dock locations - Consignment or owner-tracked stock - Storage categories and capacity limits	NAMING AND CONTROL STANDARDS - Warehouse and location coding - SKU and barcode governance - Units and packaging conversions - Controlled creation of master data - Change approval and data ownership
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Know what is arriving, what was accepted and where it went.

INBOUND WORKFLOW

01 EXPECTED RECEIPT	02 ARRIVAL	03 SCAN AND COUNT	04 TRACK LOT / SERIAL
05 INSPECT	06 RESOLVE VARIANCE	07 PUT AWAY	08 VALIDATE

CAPABILITY	DETAILED CONTROL
Expected receipts	Purchase orders create inbound work with expected products, quantities, dates and supplier references.
Partial receipt	Accept what arrived, keep the balance open as a backorder, or close the remaining demand according to policy.
Discrepancy handling	Record overage, shortage, substitution, damage or rejection through an approved exception path.
Barcode receiving	Scan product and location codes; capture packages, lots, serials and quantities using compatible devices.
Quality control	Where enabled, trigger instructions, pass/fail checks, measurements or photo evidence before stock is released.
Three-step receipt	For stricter control, route goods through input, quality and stock rather than directly to storage.
Cross-docking	Where the operating model requires it, route selected inbound goods toward outbound demand without long-term storage.

RECEIVING RESULT
The purchase team sees received quantities, the warehouse sees stock status and destination, and finance can match the receipt to vendor billing and landed-cost processes.

Place every item intentionally and keep its location visible.

PUTAWAY LOGIC

PRODUCT RULES Route a specific product to a designated location or storage zone.	CATEGORY RULES Apply storage behavior to groups of related products.
PACKAGE RULES Direct pallets, cartons or reusable containers according to package type.	CAPACITY RULES Use storage categories to limit locations by item count, weight or package capacity where configured.

STORAGE AND MOVEMENT CONTROLS

CONTROL AREA	WHAT THE WAREHOUSE CAN MANAGE
Multi-location stock	On-hand and available quantities by warehouse, zone, shelf, bin, package, lot or serial number.
Internal transfers	Location-to-location and warehouse-to-warehouse moves with source, destination, operator and status.
Move entire packages	Relocate a pallet or package and update the location of all contained items when enabled.
Removal strategy	Reserve stock by FIFO, FEFO, closest location or least packages according to product and warehouse policy.
Quarantine and returns	Separate nonconforming, returned, expired or damaged stock from sellable inventory.
Transit stock	Track goods moving between facilities without treating them as available at either endpoint.
Historical location view	Review where inventory is stored now and, where supported, where it was stored on a prior date.

DESIGN DECISION More locations create more control but also more scans and validations. RKieh balances traceability with operator speed so the system reflects the real level of warehouse discipline.
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Make physical stock and system stock agree.

ON HAND Quantity physically recorded in the selected location.	AVAILABLE Stock that is present and not reserved for another demand.	RESERVED Quantity allocated to confirmed transfers or orders.	FORECASTED Projected availability after expected receipts and planned demand.
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COUNTING AND ADJUSTMENT PROCESS

01 SCHEDULE COUNT	02 ASSIGN USER	03 COUNT BY LOCATION	04 REVIEW VARIANCE
05 RECORD REASON	06 APPROVE / APPLY	07 POST MOVEMENT	08 AUDIT HISTORY

CONTROL	DETAILED BEHAVIOR
Cycle counts	Set count frequency by location so high-risk or high-value areas are checked more often.
Annual count	Plan a full physical inventory with assigned users, scheduled dates and printable count sheets.
Blind count option	Hide expected quantity from the assigned counter when the process requires an independent count.
Adjustments	Record counted quantity, calculated difference, reason, responsible user and the person who applied the result.
Relocation and zeroing	Correct misplaced inventory, relocate units or set obsolete records to zero through controlled actions.
Scrap / damage	Move unusable goods to a scrap or loss location with reason and movement history.
Reversal and audit	Preserve history and create a reversing entry rather than silently removing the original adjustment.

CONTROL OBJECTIVE Every discrepancy should be explainable. The system records the before/after quantity, user, date, location, tracked unit and source movement needed for management and audit review.

Keep enough stock without carrying unnecessary inventory.

PLANNING LOOP

01 DEMAND	02 FORECAST	03 THRESHOLD	04 LEAD TIME	05 SOURCE	06 REPLENISH
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METHOD	HOW IT WORKS	BEST FIT
Min / max rules	Trigger replenishment when forecasted stock falls below a minimum and refill toward a defined maximum.	Regularly stocked items with stable control policies.
Manual replenishment	Review suggested quantities, lead times and forecast dates before creating purchase or manufacturing demand.	Operations that require planner approval.
Automatic replenishment	Create the source document when configured rules and forecast conditions are met.	Repeatable, trusted replenishment logic.
Replenish on order	Source a product in response to confirmed demand, with configuration determining reservation and linkage.	Low-stock or demand-driven items.
Inter-warehouse resupply	Generate transfer demand from a central warehouse to a branch or secondary facility.	Networks with central distribution.
Order multiples	Round replenishment to vendor packs, cartons or other configured multiples.	Products purchased or moved in fixed pack sizes.

FORECAST INPUTS On-hand, reserved, incoming, outgoing, lead times, scheduled dates and future demand.	PLANNER CONTROLS Horizon days, preferred route, vendor, warehouse source, minimum, maximum and order multiple.
OPERATIONAL OUTPUTS RFQ, manufacturing order or internal transfer according to the selected route.	EXCEPTION REVIEW Shortages, late receipts, excess stock and competing warehouse demand can be reviewed before action.

Match the picking method to volume, order profile and layout.

METHOD	OPERATING MODEL	BEST USED WHEN
Piece picking	Complete one order or transfer at a time.	Volume is moderate, orders are large or exceptions are frequent.
Batch picking	One picker collects items for several orders, then sorts them at an output area.	Many orders contain a small set of frequently ordered products.
Wave picking	Split and group work by product, category, schedule, route or other operational criteria.	High-volume operations need planned release windows and team allocation.
Cluster picking	Pick multiple orders while sorting directly into designated bins or reusable packages.	Speed and immediate order separation are more important than later consolidation.

ORDER RELEASE AND EXECUTION

01 CONFIRM DEMAND	02 RESERVE STOCK	03 CREATE WORK	04 ASSIGN OPERATOR
05 SCAN LOCATION	06 SCAN ITEM	07 HANDLE EXCEPTION	08 VALIDATE PICK

CONFIGURATION CONTROLS - Reservation at confirmation, manually or before scheduled date - One-, two- or three-step delivery - Priority and scheduled-date queues - Removal strategy and source location - Batch, wave and cluster settings	EXECUTION CONTROLS - Source-location verification - Product, lot, serial and package scanning - Short-pick and backorder handling - Operator responsibility and status - Separate pick, pack and ship validation
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OPERATIONAL DESIGN Picking optimization depends on order data and layout. RKieh reviews SKU velocity, order lines, travel path, packing method, staffing and delivery deadlines before selecting the workflow.
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Complete the order, prove the movement and control what comes back.

OUTBOUND WORKFLOW

01 PICK	02 CONSOLIDATE	03 PACK	04 LABEL	05 STAGE	06 DISPATCH
PACKAGES Create cartons, pallets or reusable containers and record the products held inside each package.		MULTI-PACKAGE ORDERS Split one delivery across several packages without creating separate customer orders.			
PACKING ZONE Use a dedicated validation step when the operation separates picking from packing.		LABELS AND CARRIERS Connect approved label, rate and tracking workflows where carrier integration is in scope.			
BACKORDERS Ship available items and keep the balance open for later fulfillment.		DISPATCH CONTROL Validate the final handoff from output location to customer or carrier.			

RETURNS WORKFLOW

01 REQUEST	02 RECEIVE RETURN	03 IDENTIFY	04 INSPECT
05 RESTOCK / QUARANTINE	06 REPLACE / REFUND	07 VENDOR RETURN	08 REPORT REASON

OPTIONAL DELIVERY EXTENSION A custom mobile workflow can add driver handoff, customer signature, photo evidence, GPS or proof-of-delivery steps when the standard warehouse and carrier flow is not sufficient.

Reduce manual entry while preserving a complete movement history.

PRODUCT SCAN Identify the SKU or unit being moved.	LOCATION SCAN Confirm where the operator is picking from or placing into.	PACKAGE SCAN Move or validate a carton, pallet or reusable container and its contents.	LOT / SERIAL SCAN Capture a batch or unique item for full traceability.
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TRACEABILITY OBJECT	WHAT CAN BE RECORDED AND QUERIED
Lots	Group identity for received or produced quantities; useful for recalls, quality history and expiration control.
Serial numbers	Unique identity for one unit, including source, locations, movements and customer delivery.
Expiration dates	Expiration, best-before, removal and alert dates; FEFO can prioritize the nearest removal date.
Packages	Contents, location, type, weight, container relationship and movement as one unit.
Movement history	Source and destination, product, quantity, date, operator, status and source document.
Traceability report	Where a tracked unit came from, where it was stored and where or to whom it was sent.

HARDWARE LAYER • USB, Bluetooth or rugged handheld scanners • Mobile phones or tablets for supported workflows • Label and document printers • Scales where integrated • Reliable warehouse Wi-Fi and device charging plan	BARCODE STANDARDS • Internal SKU and location codes • EAN / UPC where already assigned • GS1 nomenclature when supply-chain data requires it • Package, lot and serial labels • Controlled label templates and reprint permissions
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GS1 NOTE

The system can interpret configured GS1 barcodes, but the organization must obtain valid GTINs and related identifiers from GS1. Hardware, label stock and registration fees are separately scoped.

Connect the physical movement to its commercial and financial impact.

PROCURE TO STOCK

01 RFQ / PO	02 EXPECTED RECEIPT	03 RECEIVE	04 VALIDATE STOCK	05 VENDOR BILL	06 LANDED COST
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ORDER TO CASH

01 QUOTE / SALE	02 RESERVE	03 PICK	04 DELIVER	05 INVOICE	06 COST / MARGIN
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INTEGRATION	WAREHOUSE EFFECT	BUSINESS EFFECT
Accounting	Receipts, deliveries, returns, scrap and adjustments can feed valuation when configured.	Finance sees inventory value and cost movement from source transactions.
Landed costs	Freight, insurance, duties and similar charges can be allocated to validated receipts.	Product cost better reflects the cost of bringing goods into stock.
Purchasing	Expected arrivals, partial receipts, vendor returns and received quantities stay linked to the PO.	Procurement can follow supplier performance and open commitments.
Sales / CRM	Demand creates reservation and delivery work; delivered quantity returns to the order.	Sales sees availability, fulfillment status and customer history.
POS / retail	Branches and counters share products, barcodes and stock by configured location.	Store transactions update the same inventory environment.
Manufacturing / kitting	Components and finished goods can move through inventory and tracked-unit flows.	Production and warehouse quantities remain connected where modules are enabled.
Custom apps / APIs	Role-specific mobile screens or third-party systems exchange approved records.	Operational interfaces can be simplified without creating a second source of truth.

ACCOUNTING CONFIGURATION

Costing and valuation methods, accounts, taxes, fiscal localization and automated journal behavior are defined with the finance team. Available methods and postings depend on product category, localization and selected modules.

Give each team the right work, information and authority.

ROLE	TYPICAL ACCESS AND RESPONSIBILITY
Warehouse manager	Configuration oversight, work queues, exceptions, approvals, reporting and operational performance.
Receiver	Inbound scanning, quantity confirmation, lot/serial capture and discrepancy escalation.
Inventory controller	Counts, adjustments, relocations, stock investigations and accuracy reporting.
Picker	Assigned picking work, source and product verification, short-pick and backorder handling.
Packer / dispatcher	Package creation, final verification, labels, output staging and delivery validation.
Procurement	Expected receipts, supplier follow-up, replenishment demand and vendor returns.
Sales / service	Availability, reservation and delivery status without unrestricted warehouse control.
Finance	Valuation, landed costs, stock-accounting review and reconciliation.
System administrator	Users, permissions, integrations, configuration and controlled master-data changes.

KPI DASHBOARD CANDIDATES

INVENTORY ACCURACY System quantity compared with approved physical count.	DOCK-TO-STOCK TIME Arrival or receipt start to final putaway completion.
PICK ACCURACY Correct picked lines or units compared with total picked.	ORDER CYCLE TIME Order release to dispatch or delivery validation.
FILL RATE Quantity fulfilled on the first shipment compared with quantity ordered.	ON-TIME DISPATCH Orders completed by their committed warehouse deadline.
BACKORDER RATE Orders or lines that could not be fully fulfilled as planned.	STOCK AGING / EXPIRY Quantity and value approaching obsolescence or removal date.
INVENTORY TURNOVER Cost or volume issued relative to average stock held.	ADJUSTMENT / SHRINKAGE Value and quantity changed through counts, damage, loss or unexplained variance.

KPI availability depends on agreed definitions, clean timestamps, user discipline and configured reports. RKieh confirms the measurement logic during discovery so management and operators read the same result.

Build the process, data, controls and adoption together.

DELIVERY STAGES

01 DISCOVER	02 MAP PROCESS	03 BLUEPRINT	04 CONFIGURE
05 MIGRATE	06 INTEGRATE	07 TEST / TRAIN	08 GO LIVE

CORE DELIVERABLES

- Current-state and future-state process maps
- Warehouse, location and operation-type design
- Product, packaging and barcode data templates
- Roles, permissions and approval matrix
- Configured workflows and approved custom development
- Reports, dashboards and operating procedures

READINESS DELIVERABLES

- Hardware and label plan
- Data migration and opening-stock method
- User acceptance test scenarios
- Training for operators and administrators
- Cutover, stock-freeze and physical-count checklist
- Go-live support and improvement backlog

TESTING SCENARIOS

SCENARIO GROUP	EXAMPLES INCLUDED IN USER ACCEPTANCE TESTING
Inbound	Full, partial and excess receipt; damaged goods; missing barcode; lot/serial mismatch; quality rejection.
Storage	Putaway rule, full location, wrong location, internal transfer, package move and transit.
Fulfillment	Full pick, short pick, substitute decision, batch/wave/cluster flow, backorder and urgent order.
Outbound	Multi-package shipment, label reprint, dispatch validation, carrier exception and return.
Inventory	Cycle count, blind count, variance approval, relocation, scrap, adjustment reversal and full count.
Finance	Receipt valuation, landed cost, delivery cost impact, return, scrap and inventory adjustment review.

GO-LIVE PRINCIPLE

Opening stock must be trusted. The cutover plan defines the final transaction date, stock freeze, physical count, upload, reconciliation, operator readiness and first-day support before the warehouse begins live processing.

A configurable core for different warehouse environments.

WHOLESALE AND DISTRIBUTION High-volume receiving, multi-location storage, replenishment, batch or wave picking and customer delivery.	HUMANITARIAN AND NONPROFIT LOGISTICS Regional stores, accountable stock movement, field distribution, tracked items and controlled counts.
FOOD AND EXPIRY-SENSITIVE GOODS Lots, expiration dates, FEFO, quarantine, quality checks and loss monitoring.	RETAIL AND MULTI-BRANCH Central resupply, branch stock, POS connection, inter-warehouse transfer and click-and-collect support where configured.
SPARE PARTS AND EQUIPMENT Serial numbers, precise bin locations, unit history, returns and after-sales traceability.	E-COMMERCE AND OMNICHANNEL Reservation, high-volume picking, packages, carriers, backorders and stock shared across channels.

SOLUTION LEVELS

LEVEL	TYPICAL SCOPE	DESIGNED FOR
Core inventory	Products, one warehouse, receipts, deliveries, locations, transfers, counts and standard reporting.	Operations moving from spreadsheets or disconnected stock records.
Advanced WMS	Multi-warehouse, barcode, multi-step flows, putaway, lots/serials, packages, replenishment, advanced picking and traceability.	Growing or high-control warehouse operations.
Connected operations	Purchasing, sales, accounting, POS, manufacturing, apps, carrier and device integrations, custom reports and workflows.	Organizations seeking one operational ecosystem.

STANDARD Available through the selected core modules.	CONFIGURED Rules, locations, permissions, routes and reports adapted to the operation.	INTEGRATED Hardware, carrier, payment or third-party system connected through approved interfaces.	CUSTOM New workflow, screen, report or module developed when standard capability is not sufficient.
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Deployment may be managed cloud, Odoo.sh or on-premise/self-hosted depending on the selected architecture. Hardware, carrier accounts, GS1 registration, third-party subscriptions and custom integrations are separately scoped.

Process-led implementation with Canada-Lebanon delivery.

RKieh Solutions implements Odoo-based business ecosystems and connected applications. Its ERP work includes discovery, implementation, customization, custom development, integration, data migration, training, performance optimization and ongoing support. The warehouse solution is delivered as part of that wider operational model - not as an isolated stock application.

OSAMA RKIEH

Founder & CEO - company direction, partnerships and Canada-facing leadership.

MOHAMMAD MOSTAFA

Co-Founder & COO - operations, ERP, application delivery and Lebanon-based execution.

CONTACT

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TECHNICAL SCOPE NOTE

This profile describes the warehouse capabilities RKieh can implement, configure, integrate or customize using Odoo and related approved components. It is not a claim that every function is active in every deployment. Final scope is confirmed through discovery and a signed solution blueprint.

RESEARCH AND TECHNICAL BASIS

- 01 RKieh Solutions - ERP services: rkiehsolutions.com/erp/
- 02 Odoo 19 - Inventory and warehouse management: odoo.com/documentation/19.0/applications/inventory_and_mrp/inventory.html
- 03 Odoo 19 - Inbound and outbound flows, putaway and multi-step delivery: odoo.com/documentation/19.0/applications/inventory_and_mrp/inventory/shipping_receiving/
- 04 Odoo 19 - Reordering rules, replenishment report and inter-warehouse resupply: odoo.com/documentation/19.0/applications/inventory_and_mrp/inventory/warehouses_storage/replenishment/
- 05 Odoo 19 - Barcode, packages and GS1 workflows: odoo.com/documentation/19.0/applications/inventory_and_mrp/barcode.html
- 06 Odoo 19 - Batch, wave and cluster transfer documentation under Inventory picking methods.
- 07 Odoo 19 - Cycle counts, adjustments, locations reporting and product tracking.
- 08 Odoo 19 - Landed costs and inventory valuation documentation.