E-commerce, Retail & Distribution

With over 20 years of software engineering experience, TMA helps commerce businesses modernize platforms, integrate systems, and unlock new capabilities through AI, data, and automation.

Existing commerce ecosystem

E-commerce | POS | ERP | CRM/CDP | OMS | WMS/IMS | Logistics | Payments

TMA-Enabled Commerce transformation

CONNECT

Connected & trusted commerce data

- API & System Integration
- Unified Commerce Data
- Real-time Synchronization
- Security & Governance

PREDICT

AI & predictive intelligence

- Demand Forecasting
- Customer Intelligence
- Pricing & Promotion Optimization
- AI-Ready Product Data

ORCHESTRATE

Workflow & agent orchestration

- Workflow Automation
- AI Agents & Tool Integration
- Business Rules & Approvals
- Continuous Monitoring

Connected commerce

Gain real-time visibility across channels and operations.

- Real-time Stock Across Channels
- Lot & Expiry Tracking with Recall
- Unified Commerce Data

Data-driven & AI-enabled commerce

Anticipate demand and improve business decisions.

- Demand Forecasting
- Agent-Ready Catalog & GEO
- MCP Gateway & AI Evaluation

Proactive & agentic commerce

Enable AI agents to execute governed

- AI Shopping & Checkout Agent
- Proactive Replenishment Agent
- B2B Buying Agent
- Post-Purchase Agent

Areas of expertise

AI & data intelligence

- Demand forecasting & inventory planning
- Customer segmentation & churn prediction
- Personalized product recommendations
- Dynamic pricing & promotion optimization
- Customer data analytics & insights
- AI-Power order intake
- Voice/visual search
- Virtual Try-on

Digital commerce & omnichannel

- B2B, B2C & D2C commerce
- Unified commerce experience
- Cross-channel commerce integration
- Commerce platform customization

Pricing, promotion & loyalty

- Customer-specific pricing & discount rules
- Promotion & voucher orchestration
- Membership tiers & rewards
- Omnichannel loyalty management

Product & catalog management

- Centralized product information
- Multi-channel catalog synchronization
- SKU/SPU & variant management
- Channel-specific catalog & pricing
- Bundles & digital assets*

Order & inventory orchestration

- Omnichannel order orchestration
- Real-time inventory availability
- Inventory reservation & allocation
- Returns, refunds & workflow automation
- Batch & expiry (FEFO) control

Retail & store operations

- Multi-store POS integration
- Online/offline data synchronization
- Store inventory allocation
- Store operations & stock audit
- E-invoice at the POS
- Staff, shift and customer management

Warehouse, fulfillment & logistics

- Warehouse workflow management
- Fulfillment orchestration and 3PLs integration
- Transportation & route optimization
- Last-mile delivery & real-time tracking
- Remote container monitoring

Enterprise integration & modernization

- ERP, CRM & commerce system integration
- Payment & transaction integration
- API-based system connectivity
- Customer data unification (CDP/CRM)
- Legacy commerce platform modernization

Solutions

Front office

Sell to and serve customers

AI Order Intake
Voice ordering at the counter, sent straight to the POS

Virtual Try-on
Try products virtually before buying

Churn Prediction
Predict customer churn and improve retention

Digital warranty
Warranty registration and service tracking online

Loyalty & membership
Tiers and points that work in store and online

POS system
Sells offline and issues e-invoices at the counter

Affiliate Management
Manage affiliates and track commissions

Back office

Run products, stock, orders and data

Order management system
One hub for store, web and marketplace orders

Inventory management system
One live stock count across stores and warehouses

Product management system
One SPU/SKU product record synced to every channel

Pricing & promotion system
Prices, campaigns and vouchers for all channels

Customer data platform
Unified customer profiles for segments and campaigns

Demand forecasting
Forecasts product demand to plan inventory

Warehouse management system
Locates goods and tracks stock across warehouses

Digital Warranty

Digitize warranty processes

Track warranty service progress

Improve after-sales experience

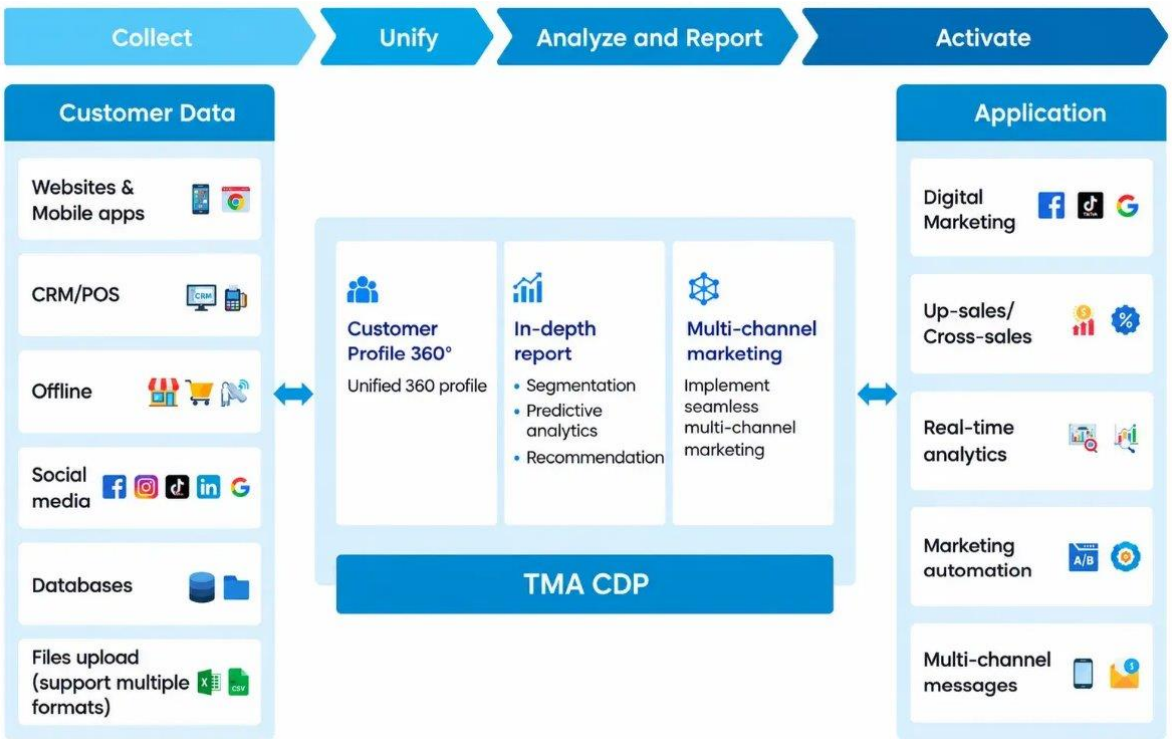


Customer Data Platform

Unify customer data across channels

Understand customer segments

Personalize customer engagement

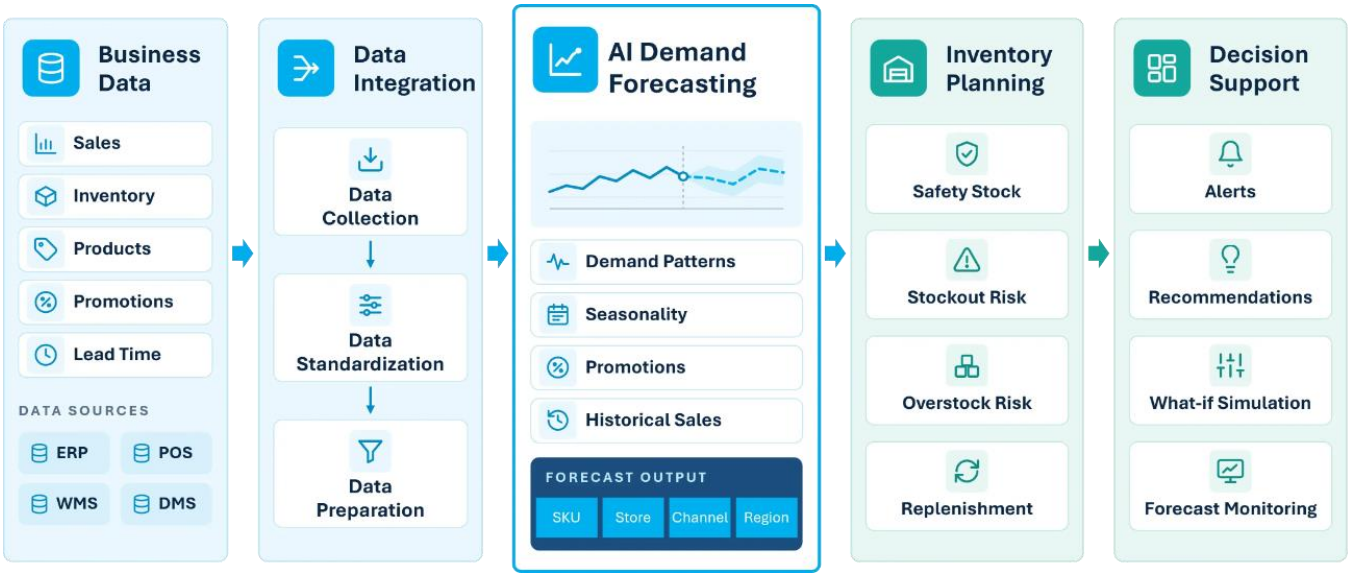


Demand Forecasting

Forecast product demand

Improve inventory planning

Explain and simulate forecasts with AI

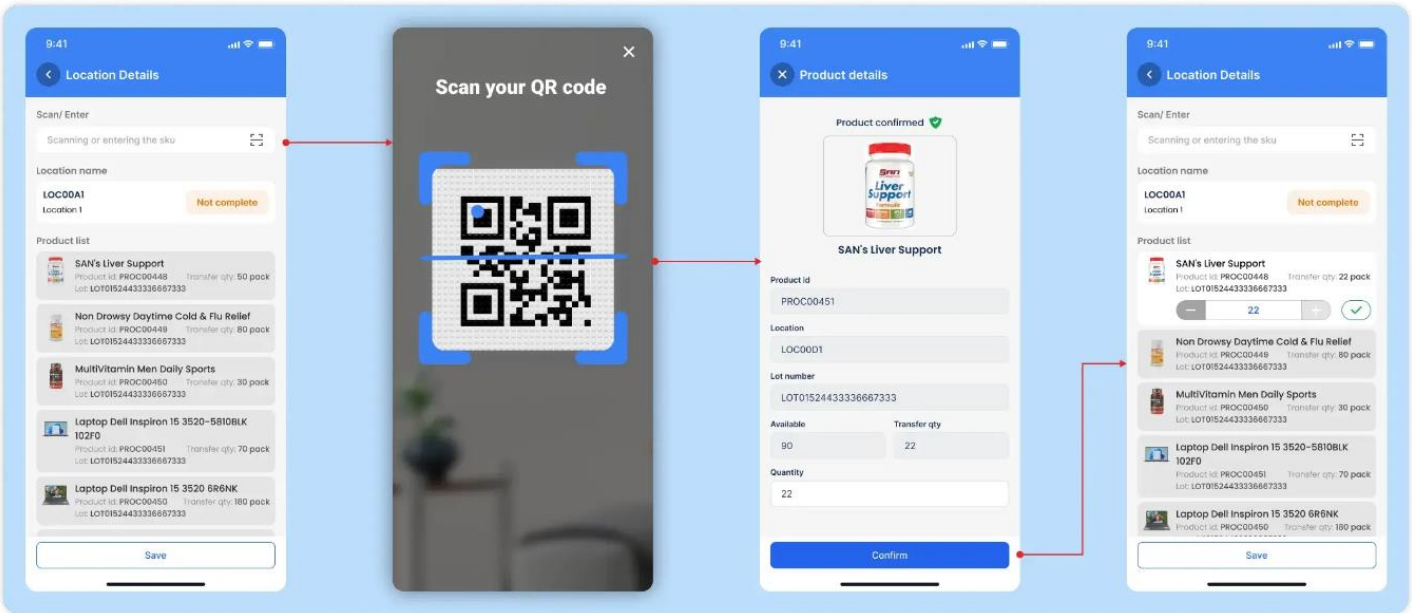


Warehouse Management System

Locate goods across warehouses

Track inventory in real time

Support warehouse tasks with AI

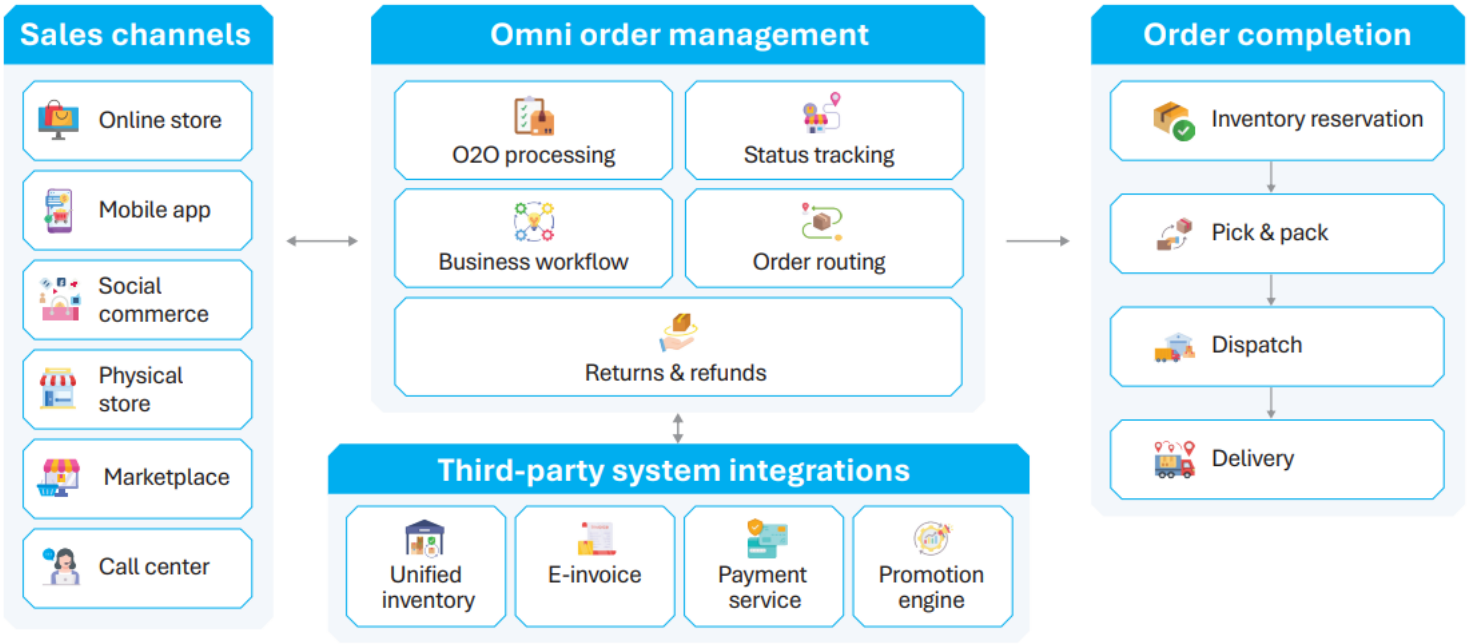


Order management system

Faster order processing

End-to-end order tracking and visibility

Order management across all sales channels

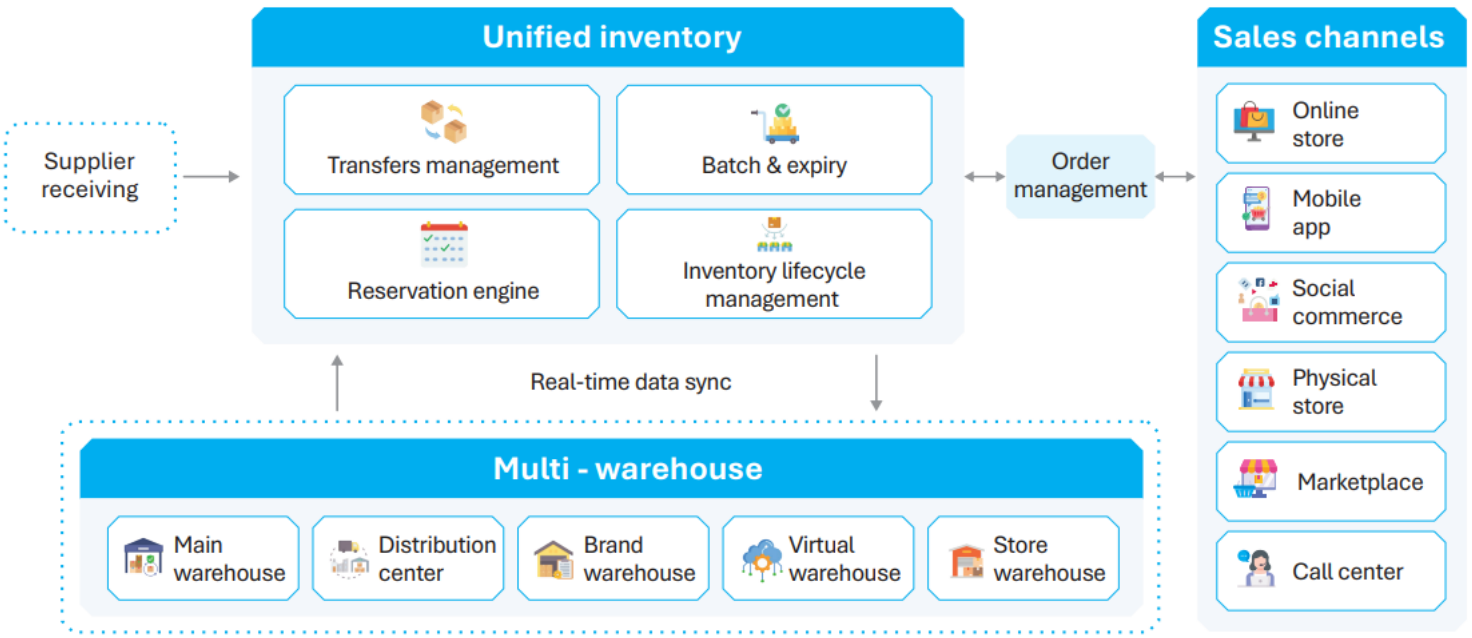


Inventory management system

Real-time inventory updates

Centralized inventory management

Optimized stock management



Product management system

Flexible SPU & SKU management

Update once, sync everywhere

Simplified product launch process

Product data

- Categories
- Brand
- Product media
- Traceability profile

1 Define product data



3 Sync product update

Sales channels

- Online store
- Mobile app
- Social commerce
- Physical store
- Marketplace
- Call center

2 Maintain product records

Product data setup

- SPU management
- SKU variants
- Attributes
- Barcode
- SKU price fields

POS system

Keep selling even without an internet connection

Upsell with personalize product recommendations

Automated order entry with AI

No internet? No problem. Keep selling

Keep selling offline, then sync automatically when back online

Internet down → Continue selling normally → Data save locally (on device) → Connection restored → Auto-syncs all data

Sales channels

- Website
- Mobile app
- Physical store
- Marketplace



Connected back office

- Inventory management
- Order management
- Promotion management
- Customer loyalty

Pricing & promotion system

Optimize pricing strategies for each business model

Implement flexible promotional campaigns

Sync promotions across all sales channels

Price management

SKU pricing strategy

- Cost price
- Sales price
- Promotional/ event price
- Market price
- Distribution price
- More

Order price types

- Goods total
- Cost total
- Shipping fee
- More

Pricing & tax rules

- Tax, currency, rounding rules

Promotion management

- Loyalty
- Voucher
- Coupons

Rule engine

- Conditions
- Targets
- Priority & stacking rules
- Validity period

Promotion types

- Percentage discount
- Fixed amount
- Buy X get Y
- Bundle /combo
- Tiered discounts
- Conditional discounts
- Seasonal events
- More

Voucher/coupon management process

- Create
- Issue
- Distribute
- Track

Management & analytics

- Track sales, ROI
- Campaign management
- Reports & audit
- Customer service

Synced sales channels

- Online store
- Mobile app
- Social commerce
- Physical store
- Marketplace
- Call center

Sample Projects



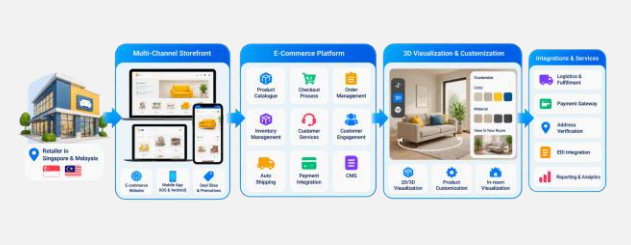
A Korean online marketplace:
Mobile E-Commerce



A Vietnamese stationery groups:
E-commerce Platform



A US school furniture supplier:
Sales & Distribution Management



A Southeast Asian furniture retailer:
3D Visualization & Customization



A Finnish IT services company:
B2B Marketplace for IT Services



A Southeast Asian delivery provider:
Mobile Delivery Management



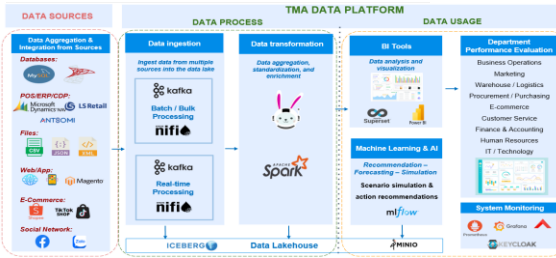
A Vietnamese service network:
Service Point Optimization



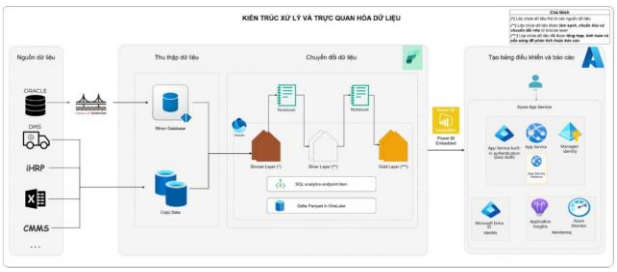
A Vietnamese distribution company:
Warehouse Management System



A logistics and transport compan
Goods Delivery Platform



A Vietnamese leading in M&B Retailer:
Data Warehouse for Retail



A Vietnamese distribution company:
Warehouse Management System

Case studies

Case Study: Long-term IT partner for a US furniture retailer

Client: US online retailer of school and office furniture.

Challenge: It needed an offshore partner to run its software and IT so it could focus on retail.

What TMA did: A dedicated team documented requirements, built and maintained a custom ERP for furniture retail, and monitored production websites and servers.

Result: Reliable support over a 10-year relationship while the retailer grew from a startup.

Case Study: Multi-store e-commerce for a Japanese solution provider

Client: Japanese e-commerce solution provider building online stores for the Japanese market.

Challenge: Every store needed discounts, points, coupons, product customization, online payment, delivery tracking and mobile support.

What TMA did: TMA trained e-commerce developers on EC-CUBE, customized it with PHP and PostgreSQL, and built the shared store features.

Result: New online stores went live quickly, so the client rolled out stores faster.

Case Study: Sofa designer app for a Singapore and Malaysia retailer

Client: Leading furniture retailer in Singapore and Malaysia, selling online and in stores.

Challenge: It wanted an interactive tablet app to present sofas and lift sales in its stores.

What TMA did: In five weeks, TMA turned its furniture app into a branded sofa designer: catalog, 3D views, room visualization, color and fabric choice.

Result: A one-store trial increased sofa sales; the retailer then bought more licenses for sofa stores in both countries.

Case Study: Offshore engineering for a global wireless distributor

Client: Leading global wireless distributor.

Challenge: It needed development, BI, managed services and support for its management information system, order tool, procurement portal and field force app.

What TMA did: A cross-functional team worked as an extension of the client's engineering group, following its processes and shared KPIs.

Result: Support started with the APAC office and expanded to the EU office.

TMA solutions

Contact us

www.tmasolutions.com
sales@tmasolutions.com
Vietnam: +84 28 3995 1060 | +84 28 3990 2680
North America: +1 844 224 4188 | Europe: +33 7 44 77 49 24
Australia: +61 411 276 342 | Japan: +81 50 5490 9867

Scan to visit our commerce page