

eCommerce Guide for Industrial Manufacturers & Distributors



Who Will Benefit from This Guide?

This guide provides a practical overview of the top ecommerce challenges facing the manufacturing and distribution industries in 2025, and how a modern, flexible digital commerce platform can help overcome them. It is designed for professionals and decision-makers involved in operations, IT, commerce, and digital transformation within:

INDUSTRIAL MACHINERY AND EQUIPMENT

DISTRIBUTION METAL, STEEL, AND RAW MATERIALS

SUPPLY PACKAGING AND PLASTICS

MANUFACTURING ELECTRICAL COMPONENTS AND SYSTEMS

This guide is especially relevant to:

DIGITAL TRANSFORMATION AND ECOMMERCE LEADERS

CIOs AND IT DIRECTORS

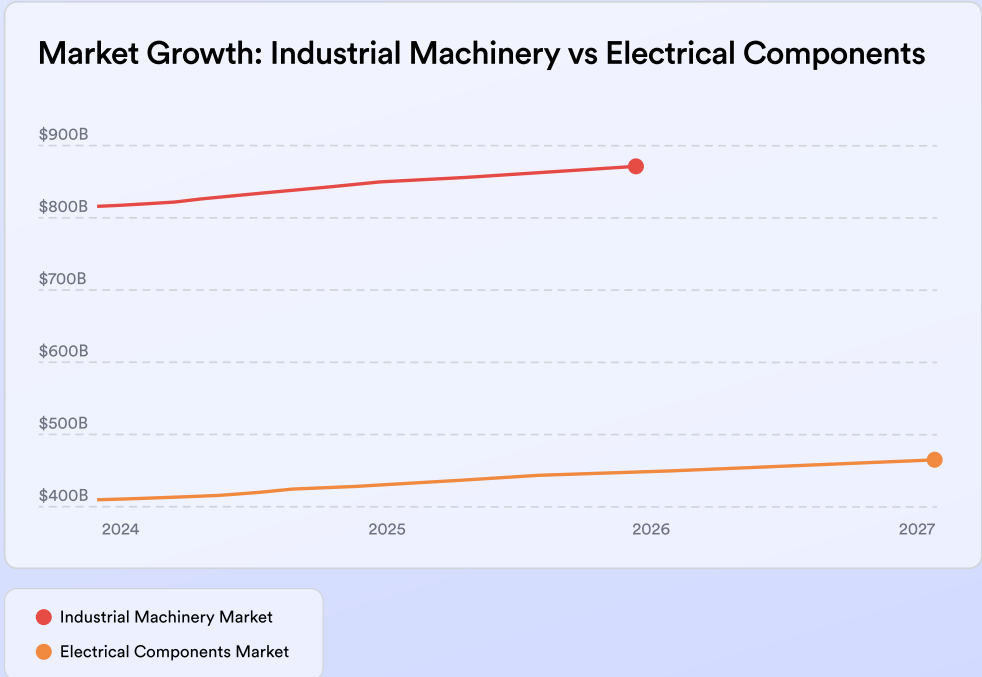
COOs AND OPERATIONS EXECUTIVES

COMMERCIAL LEADERS AND BUSINESS OWNERS

You'll gain a clear, practical understanding of the key challenges shaping the future of industrial B2B, the critical capabilities modern ecommerce platforms must deliver, and why traditional solutions fall short in complex B2B settings. You'll also learn how Virto Commerce enables greater flexibility, scalability, and control, lower initial efforts and costs, and how real manufacturers and distributors are succeeding through digital transformation.

Industrial Sector Outlook: Statistics & Forecasts

Despite ongoing global economic uncertainty, the industrial manufacturing and distribution sectors are expected to experience steady growth through 2030. In industrial machinery, [Deloitte](#) and [IBISWorld](#) project the market will reach \$860 billion by 2026, driven by automation, smart manufacturing, and infrastructure modernization. The electrical components and systems sector is also on a strong trajectory, [forecasted](#) to surpass \$460 billion by 2027 as electrification, industrial IoT, and smart city initiatives gain momentum. Meanwhile, plastics and packaging continue to expand, especially in sustainable and eco-friendly segments, with a CAGR projected at 6.3% or higher through 2028. Export-oriented industries such as steel and machinery are navigating heightened complexity, as global tariffs and localization pressures reshape sourcing, production, and distribution strategies. These macroeconomic shifts highlight both the urgency and opportunity for manufacturers and distributors to embrace digital transformation. Modern, adaptable ecommerce solutions will be key to unlocking growth in the industrial landscape.



Key Challenges Facing Industrial Manufacturers & Distributors

Industrial manufacturers and distributors are facing a perfect storm of economic pressure, digital disruption, and shifting buyer expectations. The most pressing challenges include:

01

Supply Chain Fragility and Tariff Shock

- **Tariff wars and protectionism:** Rising tariffs on metals, components, and finished goods, especially from China, Mexico, and Canada, are driving up costs, reducing pricing flexibility, and forcing businesses to localize sourcing.
- **Dependency on global supply chains:** Heavy reliance on unstable suppliers and congested ports increases delays and volatility.
- **Lack of inventory visibility:** Limited end-to-end visibility leads to stockouts, overstocking, and frozen working capital due to poor forecasting and logistics blind spots.

03

Digital Lag and Platform Inflexibility

- **Legacy system barriers:** Aging ERP and ecommerce systems block integration, omnichannel readiness, and adoption of new sales models like D2C and B2B marketplaces.
- **Vendor dependency:** High reliance on IT vendors inflates costs and delays digital initiatives.
- **Rigid platforms:** Inflexible, high-TCO systems make it difficult to adapt to regional markets, evolving sales channels, or compliance requirements like traceability in metals.

02

Margin Pressure

- **Volatile input costs:** Raw material, energy, and logistics costs, particularly in steel and chemicals, remain unpredictable and high.
- **Low-margin distribution:** Thin B2B margins demand precise discounting, channel ROI tracking, and contract compliance to maintain profitability.
- **Labor shortages:** Manufacturing labor gaps are driving up operational costs and slowing execution across production and distribution.

04

Maximizes Reusability

- **B2C-like expectations:** Today's B2B buyers expect real-time pricing, personalized portals, order history, and shipment tracking similar to consumer experiences.
- **Multi-touchpoint journeys:** Buyers now engage across up to 10 touchpoints, including portals, email, sales reps, and marketplaces, before making a purchase.
- **Mobile-first demand:** Self-service and mobile tools are becoming essential in field-heavy industries like HVAC, electronics, and packaging.

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05

Security, Compliance and Data Fragmentation

- **Rising compliance demands:** Regulated sectors like metals, electronics, and plastics face growing traceability, documentation, and certification requirements (REACH, CE, RoHS).
- **Sensitive data protection:** B2B transactions involve pricing, contracts, and configurations that require robust access controls and encryption.
- **Data silos:** Fragmented data across ERP, PIM, OMS, and CRM systems undermines analytics, personalization, and supply chain planning.

06

High Cost of Change and Platform Misalignment

- **Expensive replatforming:** Migrating off SaaS platforms not built for industrial B2B is costly and resource intensive.
- **Limited adaptability:** Many platforms lack support for workflow automation, API integration, visual configurators, and multi-brand or regional storefronts.
- **Vendor lock-in risks:** Proprietary systems limit innovation, slow upgrades, and increase longterm platform risk.

07

Globalization vs. Fragmentation

- **Emergence of B2B2C and marketplaces:** Manufacturers face growing pressure to engage directly with end customers or build dealer portals to stay competitive.
- **Diverse compliance needs:** Regulatory standards (UL, RoHS, ISO) require adaptable storefronts and built-in compliance modules.
- **Regional complexity:** Varying pricing, currency, contract rules, and taxation across markets demand flexible, localized pricing engines.

What a Modern eCommerce Platform Must Deliver?

A B2B eCommerce platform is the operational backbone connecting global supply chains, legacy systems, and customer expectations. To stay competitive, manufacturers and distributors need a customizable, and integration-ready platform that supports complex B2B transactions while enabling omnichannel customer experiences across global markets.



Support for Complex B2B Commerce

- Supports bulk orders, BOM-based configurations, reorder programs, kits, and dealer-exclusive assortments
- Enables tiered and contract-based pricing across distributors, geographies, and agreements
- Offers volume discounts, regional markups, and time-based pricing terms
- Includes dealer and partner management with dedicated portals and user segmentation
- Provides regional authorization levels and reseller workflows
- Integrates approval hierarchies, partial invoicing, and credit-check processes
- Supports channel-specific promotions and B2B-specific business rules



Deep Integration & Fulfillment Visibility

- Integrates with ERP and backend systems like SAP, NetSuite, Dynamics, Oracle, WMS, OMS, PLM, and PIM
- Provides real-time inventory visibility and warehouse allocation logic
- Displays expected delivery timelines and cross-border availability rules
- Ensures product data accuracy and multilingual content through PIM integration
- Displays certifications and technical attributes clearly
- Supports marketplace readiness with onboarding, syndicated catalogs, and drop-shipping workflows
- Connects directly to logistics and fulfillment systems for end-to-end visibility

What a Modern eCommerce Platform Must Deliver?



Seamless Omnichannel Experience

- Delivers a unified experience across web portals, mobile, sales reps, email, and third-party marketplaces
- Supports multi-site and multi-brand operations from a single backend
- Enables mobile-first ordering for field teams and contractors
- Offers self-service tools like reorders, saved RFQs, and contract-based views
- Provides access to documentation downloads and live shipment tracking
- Improves customer retention through intuitive digital tools
- Simplifies management of multiple business units and regional operations



Control, Compliance & Business Intelligence

- Ensures compliance with UL, RoHS, CE, REACH, ISO, and regional standards
- Provides full traceability of products, sourcing, and customer interactions
- Enables role-based access control for pricing, catalogs, and workflows
- Supports governance for both internal users and external partners
- Includes dashboards segmented by geography, SKU, distributor, or customer group
- Improves visibility into sell-through, inventory planning, and customer retention
- Offers a composable architecture for adding or swapping components without vendor lock-in

A Roadmap for Choosing the Right eCommerce Platform

Selecting an [eCommerce platform](#) is a strategic investment that determines how well your business will adapt to supply chain volatility and channel complexity. To maximize value, follow these 6 essential steps, each tied to critical questions and key risks to address.

Step 1: Define Your Commerce Model

Key questions:

- Are you selling directly, through distributors, or both?
- Do you need to support RFQs, BOM configurations, repeat orders, or marketplace expansion?

Why it matters:

Most SaaS platforms are built for simple retail logic. Manufacturers and distributors operate with complex processes like approval chains, contract pricing, multi-account access, and role-based catalogs. Your platform must either natively support these models or give you the flexibility to build them.

Virto Commerce supports advanced B2B models by design, not as a workaround.

Step 2: Map Your Integration Landscape

Key questions:

- Which systems must connect: ERP, PIM, WMS, OMS, PLM, CRM?
- Are real-time inventory and pricing updates critical to your workflows?

Why it matters:

B2B commerce doesn't operate in isolation. If the platform can't integrate deeply, or forces manual syncs, operational efficiency suffers, and costs rise.

Virto is API-first and cloud-native, with prebuilt connectors and GitOps-friendly deployment for enterprise integration.

Step 3: Balance Control vs. Speed

Key questions:

- Do you want to own your roadmap, tech stack, and user experience, or follow a vendor's limits?
- Is full customization and extensibility a priority?

Why it matters:

Many SaaS platforms prioritize vendor simplicity over customer control, locking you into their roadmap, UI, and pricing structure. That works for smaller brands, but not for industrial-scale operations.

Virto Commerce is a PaaS: you own, configure, and extend it on your terms, with full autonomy.

Step 4: Prioritize a Modular, Scalable Architecture

Key questions:

- Can you start with a portal, then expand into a marketplace or pricing engine without replatforming?
- Can different divisions or brands run on the same core?

Why it matters:

You need to experiment, localize, and evolve. Rigid platforms slow you down and increase long-term TCO.

Virto's composable, microservice architecture lets you start small and scale fast.

Step 5: Evaluate the Total Cost of Innovation

Key questions:

- What will upgrade, extensions, or multi-country rollouts cost in 3 years?
- Do you control TCO — or does the vendor?

Why it matters:

Many platforms offer low upfront costs but balloon over time due to proprietary add-ons, integration workarounds, and replatforming cycles.

Virto delivers the industry's lowest cost of innovation by letting your teams or SI partners control delivery, scaling, and extensions without hidden costs.

Step 6: Align Platform Capabilities with Business Agility

Key questions:

- Can your platform adapt to new pricing models, compliance rules, customer tiers, or product lines in days, not months?
- Can it support rapid MVPs and global expansion?

Why it matters:

Industrial markets are evolving faster than ever. A platform that can't keep up will slow your growth or block it entirely.

Virto Commerce gives you composability, cloud-native speed, and architectural freedom so you can move at the pace of business.

BOTTOM LINE: Choose a platform that fits your business, not one that forces your business to fit into it. With Virto Commerce, you gain the architecture, tools, and strategic freedom to build the digital commerce infrastructure you actually need.



How Virto Commerce Solves B2B Challenges in Industrial Manufacturing & Distribution

For manufacturers and distributors across sectors like HVAC systems, metal fabrication, engineered packaging, and industrial electronics, Virto serves as the digital backbone for global sales, partner enablement, and operational agility.

Whether you're navigating global tariffs, modernizing legacy infrastructure, or enabling self-service dealer portals, Virto is designed to meet the complexity of industrial B2B head-on, without forcing trade-offs between control, flexibility, or speed.

Why Virto Commerce is Built for Industrial B2B Success

<p>Modular PaaS architecture: You own the logic, the code, and the roadmap, critical for industrial businesses managing complex workflows, regional variations, and compliance-driven processes. Scale up or adapt without ever needing to replatform.</p>	<p>Marketplace-ready architecture: Build multi-vendor marketplaces or internal procurement hubs. Manage onboarding, catalog syndication, and order routing—ideal for distributors, dealer networks, or multi-plant operations.</p>
<p>Headless and API-first by design: Create any customer experience your business demands —mobile apps, dealer portals, online stores—with backend independence. Virto integrates seamlessly with ERP, PIM, PLM, WMS, CAD, and field service tools</p>	<p>Security and compliance embedded: Role-based access controls, audit trails, traceability, and support for ISO, UL, RoHS, and other certifications are built into the platform, ensuring readiness for regulated environments.</p>
<p>Deep enterprise integration: Native connectors for SAP, Dynamics, NetSuite, Infor, and niche industrial systems provide unified visibility into products, pricing, orders, and fulfillment across regions and business units.</p>	<p>Scalability from MVP to enterprise ecosystem: Launch fast with a pilot (customer portal, D2C storefront) and scale into a global marketplace spanning divisions, currencies, and tax rules—all on a single platform core.</p>
<p>Complex B2B logic built-in: Bulk orders, BOM-based configurations, RFQ, multi-tier pricing, approval workflows, and inventory rules—all supported out of the box, without workarounds or costly custom development.</p>	<p>Business-driven implementation: Virto doesn't lock you into templates or unnecessary features. Deploy only what you need today, extend when ready, and maintain full architectural control, keeping your TCO low and predictable.</p>

AI & Automation

Virto Commerce equips manufacturers and distributors with business-ready AI and automation tools that eliminate manual friction and accelerate digital commerce. From intelligent search to precision pricing, Virto's AI features are designed to address the challenges of industrial B2B.

AI-Driven Product Recognition (AI Capture)

Virto's AI Capture allows users to upload a photo of a part or product and instantly:

- Identify the item using advanced visual recognition
- Cross-check it against catalog data
- Auto-generate a pre-filled order or quote

This capability is ideal for industries like HVAC, electrical, and steel distribution, where large SKU catalogs make manual search slow, inefficient, and error prone.

Accelerates ordering and reduces costly errors in complex product environments.

Configurable, Precision-Driven Pricing Engine

Virto's flexible pricing engine is built for B2B complexity, supporting:

- **Contract pricing and tiered pricing** by volume or partner level
- **Dynamic** regional pricing adjustments
- **Real-time pricing** based on customer role, order history, or custom rules
- **Built-in promotions**, bundles, and discount structures

Unlike flat retail pricing models, Virto's pricing engine empowers manufacturers and distributors to maintain precision pricing across brands, countries, and customer groups.

Delivers pricing control tailored to the complexity of industrial sales.

AI & Automation

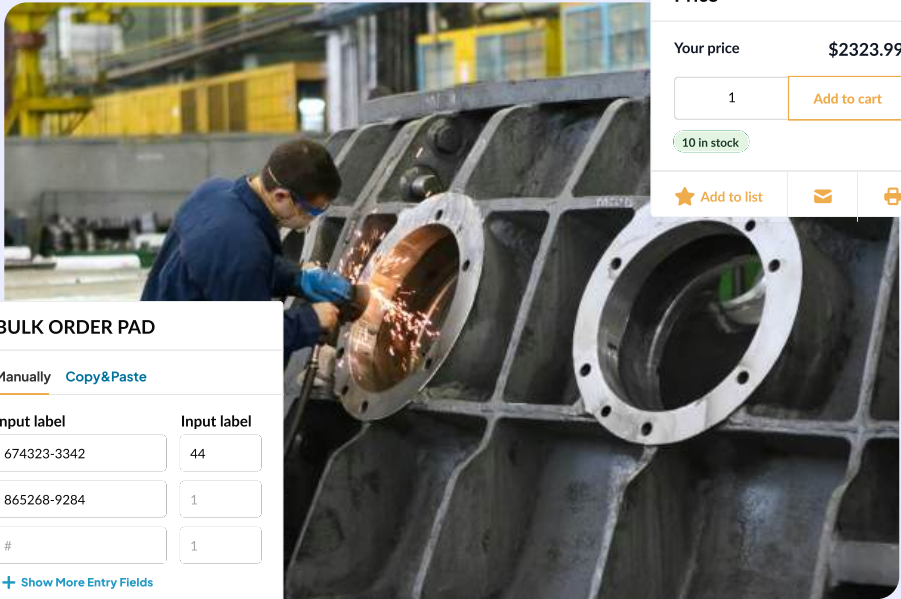
Predictive Insights & Personalization

Virto Commerce enables AI-powered optimization across the buying journey, including:

- **Smart search**, product recommendations, and behavior-based promotions
- **Demand forecasting** and inventory optimization across warehouses
- **Personalized catalogs** and user experiences tailored by buyer, region, or industry

These AI modules are fully API-driven, composable, and seamlessly integrable with ERP, PIM, and CRM systems, giving your business complete control without vendor lock-in.

Whether you're a steel distributor launching a B2B portal, a packaging manufacturer building a dealer marketplace, or an HVAC supplier modernizing an ERP-connected ordering platform, Virto Commerce provides the flexible, intelligent foundation to power your commerce on your terms.



Price

Your price **\$2323.99**

1 [Add to cart](#)

10 in stock

[★ Add to list](#) [✉](#) [📄](#)

BULK ORDER PAD

Manually [Copy&Paste](#)

Input label	Input label
674323-3342	44
865268-9284	1
#	1

[+ Show More Entry Fields](#)

[🛒 ADD TO CART](#)



Success Stories

How Industrial Leaders Are Winning with Virto Commerce

Virto Commerce is helping industrial companies worldwide modernize their **sales infrastructure, streamline partner collaboration, and unlock new digital revenue streams.** Leading manufacturers and distributors rely on Virto to power global operations and enable customer-centric experiences.

A decorative graphic consisting of several overlapping circles of varying sizes and colors (orange, blue, and white) on a dark blue background. A white arrow points to the right, starting from the end of the text block.

01

Canadian Aerospace Supplier: Powering Global Partner Distribution

Context: A leading aerospace supplier needed a secure, flexible digital platform to manage relationships with regional aviation service providers and streamline access to proprietary maintenance parts.

Solution: Virto Commerce enabled a secure B2B portal integrated with ERP and logistics systems, allowing partners to:

- Access real-time inventory
- View regional pricing and documentation
- Place direct orders and track fulfillment

The Results

+42%

Increase in repeat orders



Significant reduction in manual quote processing

3 continents

onboarded with new partners faster

[Read the full case study](#) to explore the detailed implementation, key insights, and measurable impact.

02

De Klok Dranken: Replatforming a National Beverage Distributor

Context: Outdated infrastructure made it difficult to manage pricing, stock, and customer interactions across hundreds of B2B buyers and logistics partners.

Solution: Virto Commerce replaced the monolithic platform with a modular PaaS solution:

- Integrated ERP and WMS
- Customer-specific pricing
- Self-service ordering for restaurants, bars, and retailers

The Results

60%

Reduction in order processing time

2x

Reduction in manual quote processing



Transparency in product availability and delivery

Want the full story? Dive into the complete case study for deeper insights, implementation details, and results.

03

Major Caps Manufacturer: Migrating to a Scalable B2B Platform

Context: Their legacy ecommerce couldn't support international expansion or B2B clients needing custom branding, tiered pricing, and approval workflows.

Solution: A phased replatforming to Virto Commerce delivered:

- First region launched in 8 weeks
- Regional storefronts with shared backend logic
- Multi-brand catalogs and personalized distributor content

The Results

+34%

Growth in digital channel revenue



Higher conversion with personalized pricing and catalogs



Full control over brand frontends and partner segmentation

[Explore the full case](#) to learn how this solution was delivered from strategy to success.



Bonus Insight

Lessons from B2B Innovators

Across industrial sectors like HVAC, metals, electronics, and packaging, leading companies are proving the transformative power of flexible, composable, and AI-driven commerce platforms. By embracing MACH architecture, AI personalization, and omnichannel strategies, they're setting new benchmarks for growth and customer experience.



01

Parts Town: MACH & AI for Part Ordering

Challenge: Managing a vast catalog of replacement parts in a high-complexity, time-sensitive market.

Approach:

- **Adopted MACH architecture** (Microservices, API-first, Cloud-native, Headless) for modular agility
- **Integrated AI-powered** search and recommendations, including visual and voice search
- **Launched augmented reality and 3D** previews to simplify part identification
- **Built a best-of-breed ecosystem** using APIs for rapid integration and experimentation

Impact:

355%

YoY growth in same-day delivery orders

200,000+

Daily website visits

02

Wesco: Scaling with AI and Omnichannel Enablement

Challenge: Transforming a global distribution business while maintaining operational continuity.

Approach:

- Implemented **AI-driven chatbot and analytics** trained on extensive product data
- **Enabled advanced inventory** visibility and automated fulfillment
- Delivered **24/7 omnichannel** customer support across global markets
- **Layered improvements** over legacy systems using an API-first integration strategy, no replatforming required

Impact:



Boosted conversions and customer satisfaction



Scaled seamlessly across regions

03

Watsco: Personalization & Mobile UX at Scale in HVAC

Challenge: Building a scalable, customer-centric digital ecosystem in a fragmented market.

Approach:

- Created a **custom marketplace platform** handling over **1 million SKUs**
- Achieved **35% of total revenue** via online channels (\$2.6B in 2024)
- Focused on **mobile-first** tools like HVAC Pro+ App and OnCallAir for instant quoting
- Integrated **AI-powered** inventory optimization and service automation

Impact:

\$2.6B

Online revenue in 2024



Accelerated adoption of mobile commerce in a field-service-driven industry



Summing Up

In a world of supply chain disruption, rising material costs, tariff shifts, and evolving customer demands, the industrial sector needs platforms that deliver flexibility, scalability, and control. The winners will be those who boost their operations with a resilient, adaptable digital commerce foundation.

Virto Commerce is a composable, API-first solution built for the complexity of industrial B2B, empowering you to evolve, integrate, and scale on your terms.

- ✓ Launch an MVP in 4–6 weeks: fast, focused, and aligned to your business
- ✓ Your architecture, your rules: full control over pricing, catalogs, workflows, and UX
- ✓ Seamless integration with ERP, WMS, PIM, CRM, CAD, and supply chain systems
- ✓ AI-powered tools for product recognition, predictive ordering, and personalization
- ✓ Configurable pricing by customer, contract, volume, region, and more
- ✓ Enterprise-grade DevOps with CI/CD pipelines, modular updates, and GitOps support
- ✓ Built-in compliance with ISO, REACH, UL, RoHS, and industry standards

Ready to Transform Your Digital Commerce?

Planning to modernize your healthcare and medical digital commerce or replace a legacy platform?

Virto Commerce offers a path without compromise between flexibility and security. Discuss your unique goals with one of our experts.

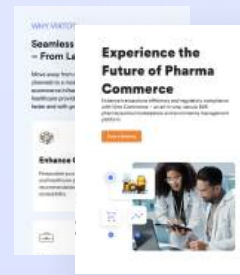
[Book a Demo](#)

Recommended Reading

[See What Virto's Commerce Innovation Platform Is Made Of](#)



[Create a B2B Pharma Marketplace with Virto's Commerce Innovation Platform](#)



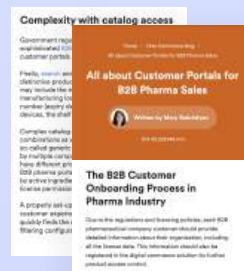
[Explore Pharma eCommerce: Current Landscape, Key Initiatives, and Trends](#)



[Understand Digital Transformation in the Pharmaceutical Industry](#)



[Build Customer Portals for B2B Pharma Sales](#)



[Learn How to Successfully Replatform Your Current eCommerce Solution](#)





About Virto Commerce

Virto Commerce, founded in 2011, is a global leader in B2B ecommerce and marketplace solutions, with offices in Los Angeles, Limassol, and Vilnius.

Virto Commerce specializes in innovative, highly customizable headless commerce platforms. Our mission is to empower businesses with cutting-edge ecommerce solutions through relentless innovation.

At the heart of our offerings is the Commerce Innovation Platform, which enables businesses to build commerce products that drive sustainable business transformation.

Powered by our proprietary Virto Atomic Architecture™ and Virto Cloud, our Commerce Innovation Platform offers unparalleled flexibility, seamless integration, and extensive customization, enabling businesses to create unique, high-performance digital experiences and to drive sustainable business transformation across various industries.

Book a Discovery Call

[Get a Demo](#)

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