

The Ultimate Guide to Distribution Digital Transformation

Here is How Modern Distributors Win with Digital by Turning Technology into a Growth Engine

When every manual quote or delayed order costs time and money, modernization becomes essential to protect margins and keep customers. Technology leaders at distribution companies are under pressure to do more with less: deliver results, modernize legacy infrastructure, and lead transformation across every department. But fragmented systems, outdated tools, and limited bandwidth stall progress. To move forward, distributors need a pragmatic roadmap that simplifies complexity, connects platforms, and builds a strong digital foundation. This guide is built for leaders ready to modernize with purpose and turn technology into a competitive advantage.



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The market is shifting fast. Buyer expectations are rising, costs are climbing, and nimble competitors are gaining ground. The status quo isn't sustainable. The enterprises winning in distribution are the ones embracing digital transformation and modernizing how they sell. The rest are playing catch-up in an industry that won't wait.

Legacy systems weren't built for speed or for today's customer expectations. Yet many distributors continue to rely on outdated tools, slow manual workflows, and disconnected platforms creating friction across their operations and buyer journeys.

87% of senior business leaders say digitalization is a company priority, but only 40% have successfully scaled their digital initiatives.

Source: The CIO's Guide to Digital Transformation

The gap between ambition and execution remains wide and costly.

Zaelab has worked with hundreds of distributors and seen a large spectrum of what leads to the success and failure of distribution commerce. This guide offers a clear path forward without hype or theory. We've gathered practical steps modern distributors should take to simplify complexity, bring teams and systems into alignment, and build the infrastructure needed for long-term growth. Dive in to build your roadmap for digital transformation.

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CHAPTER I

The State of Distribution eCommerce

Within the last five years, the industry's total GDP impact was estimated at \$4.583 trillion, nearly 20% of the U.S. economy.¹ It's the backbone of commerce, keeping supply chains moving and businesses stocked.

Though the industry has benefited from many tailwinds, headwinds are on the horizon. The old ways of doing business are under fire. Inflation is unpredictable. Tariffs keep shifting. Technology is evolving faster than most companies can keep up. And let's not even get started on supply chain disruptions.

Key Segments of the U.S. Distribution Industry

- **Wholesale Distribution:** This sector, valued at approximately \$10 trillion, connects manufacturers to retailers and provides essential services.² Wholesale distributors play a crucial role in supplying consumables to convenience stores, dollar stores, and grocery stores.
- **Industrial Distribution:** In 2023, the U.S. industrial distribution market was valued at \$2.84 trillion and is projected to reach around \$4.09 trillion by 2033, with a compound annual growth rate (CAGR) of 3.71% from 2024 to 2033.³ This growth is driven by increased spending on supply chain logistics and investments in transportation.
- **Foodservice Distribution:** This segment delivers approximately 12 billion cases to professional kitchens annually, averaging 33 million cases per day. It operates a combined vehicle fleet of 168,300 and approximately 17,100 locations in the U.S., supporting 487,000 ancillary jobs through supply chain and employee spending.⁴

1 Source: <https://santandertrade.com/en/portal/analyse-markets/united-states/distributing-a-product>

2 Source: <https://ordersinseconds.com/how-many-wholesale-distributors-in-the-us>

3 Source: <https://www.precedenceresearch.com/industrial-distribution-market>

4 Source: <https://ifdaonline.org/industry-facts/>

What's Driving Change in Distribution?

The U.S. distribution industry is a vital component of the economy, encompassing various sectors that collectively contribute significantly to GDP. While the industry has experienced substantial growth, it faces ongoing challenges:

- **Economic Pressures:** Persistent inflation has led to rising raw materials, transportation, and labor costs, pressuring profit margins. Distributors face higher operational expenses, which they must manage without significantly increasing customer prices.
- **Supply Chain Disruptions:** Global supply chain disruptions, initially triggered by the COVID-19 pandemic, continue to impact the distribution industry. Issues such as port congestion, container shortages, and geopolitical tensions have led to delays and increased shipping costs. Distributors must navigate these challenges to maintain inventory levels and meet customer demands. Threats of tariffs may only make this worse.
- **Technological Advancements:** The distribution industry is increasingly adopting digital commerce and automation to enhance efficiency and meet the expectations of digitally savvy business buyers. Distributors are accelerating their digital transformation efforts to cater to the growing demand for omnichannel purchasing options. However, most distributors are woefully unprepared for the speed of technological adoption.

So, where do you start? With a digital commerce strategy built for the complexities of B2B distribution.

B2B ≠ B2C in eCommerce

B2B eCommerce isn't plug-and-play like B2C. Distributors sell to businesses, not consumers. You're managing highly complex product catalogs, contract pricing, bulk orders, negotiated quotes, and an offline sales team that still plays a crucial role. B2B eCommerce is considerably more complex and challenging than B2C eCommerce. That's why mimicking B2C strategies is a misstep.

Let's dive into the key reasons why B2B eCommerce is so much harder and different than B2C eCommerce:

1. Larger and More Complex Catalogs

B2B companies often manage thousands, or even millions, of SKUs across industries, with detailed variations like size, material, or custom configurations. Many items require compatible accessories, replacement parts, or add-ons. What makes this even more difficult is that product data often comes from multiple manufacturers with poor quality standards and inconsistent formats, making it challenging to centralize and standardize information for online selling.

2. Customized Pricing and Quoting

Unlike B2C, where pricing is fixed and public, B2B transactions are highly individualized. Pricing often depends on contract terms, negotiated discounts, order volumes, and customer relationships. Buyers expect tailored quotes before placing an order, which can involve extensive back-and-forth with sales reps. To manage this, many companies rely on advanced tools like CPQ (Configure, Price, Quote) software or platforms like Logik.ai to handle the complexity efficiently.

3. Sales Rep Alignment Still Matters

In B2B, the sales process is relationship-driven, not transactional. Sales reps continue to play a critical role in guiding buyers, offering expertise, and maintaining long-term relationships. That means your eCommerce platform needs to support—not replace—your sales team. Tools that give reps access to real-time inventory, pricing, and customer data help them provide consistent service across channels and stay aligned with digital workflows.

4. Complex ERP and System Integration

B2B storefront in eCommerce storefront is a hub that must connect deeply with backend systems like ERP, CRM, and PIM. Orders need to update inventory, trigger invoices, and reflect real-time pricing. Unlike B2C, you can't simply duplicate ERP data into your platform; you often need real-time synchronization for accuracy. This adds layers of technical complexity and demands robust, purpose-built integration strategies.

5. Advanced Shipping and Payment Needs

Shipping in B2B often involves freight, scheduled deliveries, or special handling requirements, far beyond the simple shipping options of B2C. Payments are equally complex. Buyers may rely on purchase orders, require net 30/60/90 terms, or need approval workflows. Most platforms don't support these needs natively and require third-party tools like ShipperHQ or custom development to handle logistics and payment logic effectively.

6. ROI Goes Beyond Immediate Sales

In B2B, ROI isn't solely measured by quick transactions. It's about streamlining operations, reducing errors, and strengthening long-term customer relationships. Success may come from higher retention, increased order accuracy, or smoother reordering. With higher customer lifetime value and longer sales cycles, B2B businesses need platforms that support service, efficiency, and deep customer engagement.

The Takeaway: You Need a B2B Commerce Strategy

Trying to apply B2C tactics to B2B commerce will only lead to frustration for both internal teams and customers. The stakes are higher, the workflows more intricate, and the expectations more personalized. Successful B2B eCommerce requires purpose-built strategies and platforms that address these differences head-on. By understanding the unique demands of B2B, your business can create digital experiences that not only meet expectations but give them a true competitive edge.

CHAPTER II

Building An Effective Digital Team in Distribution: Assembling The Avengers

Many distributors struggle with eCommerce and digital transformation because they lack the right internal expertise. Without a knowledgeable team, even evaluating third-party vendors, whether agencies or technology providers, becomes a challenge. It leads to poor decisions, stalled progress, and wasted resources.

The starting point for success is the right leadership in place. You need a dedicated person to champion the initiative, align stakeholders, and drive execution. But before you hire anyone, it's critical to define what success looks like and how digital transformation supports broader business goals. Only then can you structure your team to support meaningful progress.

Define Your Vision and Goals

Your team structure should be guided by clear business goals. These may include:

- **Customer Acquisition:** Use SEO, marketing automation, and eCommerce to attract new buyers.
- **Customer Experience:** Deliver a seamless, self-service buying experience with real-time inventory and order tracking.
- **Operational Efficiency:** Digitize manual sales processes and integrate systems to streamline fulfillment and reduce errors.

Whether your priority is expanding into new markets, retaining strategic accounts, or improving operational KPIs, your eCommerce strategy must support those outcomes. A clear roadmap ensures every digital role contributes to business-wide growth.

Core Roles in a B2B Digital Team

Digital transformation takes a team with specialized skills and shared alignment. While your starting lineup may vary based on budget, business goals, and maturity, certain roles are foundational to every successful eCommerce initiative. Each brings critical capabilities that help move the strategy from vision to execution.

Below are the core roles that make up a high-performing B2B digital team. Use this as a blueprint for structuring your internal resources or identifying the right partners to fill the gaps.

- **eCommerce Manager:** Leads strategy, owns the digital roadmap, and bridges marketing, sales, and IT. They oversee the platform, performance, and team direction.
- **Digital Marketing Specialist:** Drives traffic and engagement through SEO, paid ads, content marketing, email, and social. Grows brand visibility and supports customer acquisition.
- **Web Developer & Designer:** Builds and maintains the front-end and back-end of the eCommerce platform, ensuring responsive design, performance, and system integrations.
- **Data Analyst:** Turns raw data into actionable insights. Supports conversion optimization, sales performance tracking, and audience targeting.
- **Product Manager:** Owns the digital catalog. Manages product data, images, specs, and pricing. Coordinates with logistics and merchandising.
- **Customer Experience (CX) Specialist:** Improves user journeys, handles feedback loops, and ensures a frictionless shopping experience across all touchpoints.
- **IT & Systems Integration Expert:** Connects ERP, CRM, and PIM systems to the eCommerce platform. Supports real-time pricing, inventory accuracy, and backend automation.

Outsource or Build In-House?

Not every distributor needs or can afford a full in-house digital team from day one. For many, outsourcing key roles can be a faster, more cost-effective way to access the specialized expertise required to launch and

scale eCommerce. The right partner can fill skill gaps, accelerate progress, and reduce the risk of costly missteps.

That said, outsourcing isn't a one-size-fits-all solution. The best approach depends on your internal capabilities, budget, and digital maturity. A contractor may be sufficient for short-term needs, while a mid-size agency might be ideal for distributors ready to invest in long-term digital growth.

Here is a quick guide to the most common outsourcing models, with pros, cons, and considerations to help you choose the right fit:

Contractors

- ✓ Affordable
- ✗ High risk without internal oversight

Small Agency

- ✓ Good for small-scale projects
- ✗ May lack full-scope expertise (e.g., UX, platform, marketing)

Mid-Size Agency

- ✓ Balanced cost, capability, and stability
- ✗ Often the best fit for distributors scaling digital initiatives

Enterprise Agency

- ✓ Global reach and deep specialization
- ✗ High cost; often unnecessary unless multinational

Pro Tip: No matter the option, ensure your partner understands distribution-specific challenges like ERP integration, complex pricing, and data standardization.

Building the Right Culture for Long-Term Success

Whether you're building in-house or relying on external partners, none of it works without the right internal culture. Tools and talent alone won't drive transformation. People and processes will.

A successful digital strategy requires a mindset shift across your organization. Teams must be willing to embrace new ways of working, challenge legacy thinking, and collaborate across departments. Without this cultural foundation, even the best digital plans will struggle to take root.

Here are the key elements of a modern digital culture and how to foster one that supports ongoing innovation, agility, and growth:

- Upskill Your Existing Team**
Retrain instead of replacing. Internal employees hold valuable institutional knowledge. Investing in training helps bridge the digital gap without losing operational context.
- Leverage External Expertise**
Not every role needs to be full-time. Agencies and consultants can fill key knowledge gaps while internal teams scale.
- Develop Agile Processes**
Once your foundational systems are in place, shift to agile workflows that allow for testing, iteration, and rapid optimization.
- Encourage Cross-Functional Collaboration**
Digital success requires Sales, IT, Ops, and Marketing to work as one. Set up regular touchpoints and feedback loops to align on priorities and solve real customer problems.
- Focus on Data-Driven Decision Making**
Set meaningful KPIs and track website adoption, order frequency, and customer behavior. Let data, not opinions, guide platform evolution.
- Foster a Culture of Innovation and Learning**
Give teams the space to experiment and fail forward. Fund attendance at digital commerce events, training programs, and certifications to stay ahead of the curve.
- Monitor, Measure, and Optimize**
Make digital progress part of your monthly review cycle. Track wins and setbacks to continuously refine your strategy.

CHAPTER III

Why Product Data Is the Foundation of Your Digital Growth

Product data is no longer just a back-office concern. It's at the core of how distributors go to market, earn trust, and grow revenue. Yet too many distributors still treat it like a static asset, managed through legacy systems built for internal use. In today's digital economy, customers expect instant access to accurate, detailed, and engaging product information. Anything less costs you business.

This chapter outlines how to move beyond ERP-driven data and print catalogs to a modern product data strategy built for scale. We'll explain why it matters, what great product data looks like, and how to get there—step by step.

The High Cost of Outdated Product Data

Customers don't wait for a printed catalog or a sales rep anymore. They search online, compare options, and expect answers in real time. If your product data lives in a system designed for operations, not for customers, you're already behind.

Poor product data results in:

- X **Lost Sales:** Incomplete specs, outdated pricing, and vague descriptions push buyers toward competitors with clearer info.
- X **Operational Chaos:** Inaccurate data leads to stockouts, overstocking, fulfillment delays, and frustrated internal teams.
- X **Marketing Struggles:** Weak product content undermines SEO, ad performance, and digital campaign ROI.
- X **Customer Distrust:** Inconsistent or missing information damages credibility and sends a message that your business isn't reliable.

The stakes are high. Clean, consistent, and enriched product data is the foundation for every high-performing digital channel.

What Modern Product Data Management Looks Like

Modern PDM is dynamic, customer-focused, and tightly integrated with your operations. Key characteristics include:

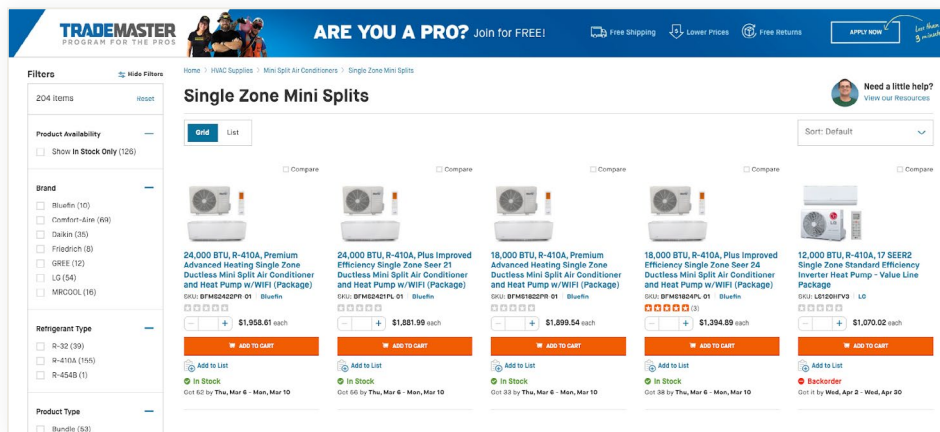
- **Richness:** Descriptions, tech specs, videos, images, compatibility guides, and more.
- **Structure:** Standardized fields and consistent formatting for filters, integrations, and marketplaces.
- **Real-Time Updates:** Instant reflection of pricing and availability changes across channels.
- **Accessibility:** Shareable via APIs, CSV feeds, or headless architecture.
- **Scalability:** Built to grow with your catalog and support omnichannel selling.

Here are a Few Examples of High-Quality Distribution Product Data

Category Pages

A strong category page groups products in a clear, filterable format. It should show inventory availability, estimated arrival dates, and accurate pricing.

This page allows users to easily narrow down products using filters while displaying inventory levels, pricing, and spec summaries—all in a structured, digestible layout.

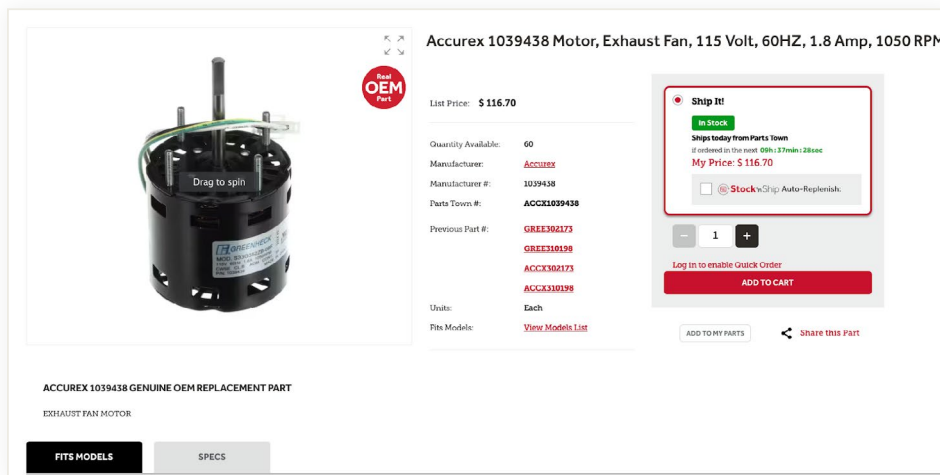


supplyhouse.com

Product Pages

Great product pages go beyond basic specs. They include compatibility charts, technical sheets, dynamic pricing, and even 3D visualizations.

This page shows pricing, availability, and compatibility with specific models. It also includes rich media (like 3D spin), downloadable datasheets, and clear callouts—all critical for purchase confidence.



www.partstown.com

Pro Tip: Google your top product categories and study the sites that rank highest. Chances are, they're getting product data right.

CHECKLIST

Steps to Transition to Modern Product Data Management

Audit Your Current Data

- Pull product info from ERP, spreadsheets, and catalogs.
- Identify missing details, outdated pricing, and inconsistent formats.
- Document pain points from sales, operations, and marketing teams.

Define Your Requirements

- Determine required product fields for customer decision-making.
- Prioritize integrations (eCommerce, CRM, PIM).
- Plan for future expansion—new SKUs, regions, or sales channels.

Choose the Right Technology

- ERPs weren't built for product discovery. Evaluate dedicated PIM platforms like Akeneo, inRiver, or Pimcore.
- Smaller distributors can start by leveraging their eCommerce platform's native PIM capabilities.
- Prioritize API-friendly, scalable platforms that support automation.

Clean and Enrich Your Data

- Standardize field formats.
- Fill gaps with supplier info or AI-generated content.
- Add visual assets—photos, videos, 3D renders, spec sheets.

Optimize Product Content for SEO

- Write keyword-rich descriptions.
- Use structured data to improve visibility in search results.
- Prioritize titles, alt text, and meta descriptions.

Centralize and Automate

- Create a single source of truth for all product data.
- Automate updates across systems via integrations.
- Build workflows for data governance and approvals.

Train Your Team

- Educate internal stakeholders on how to use the new system.
- Highlight wins (e.g., fewer product questions, faster sales) to build buy-in.
- Encourage collaboration across Sales, Marketing, and Ops.

Launch and Iterate

- Start with a subset of products or categories.
- Collect feedback from customers and teams.
- Improve continuously—product data is never truly "done."

Use Analytics and Customer Insights

- Track which products are performing and why.
- Use data to adjust pricing, presentation, and channel strategy.
- Let buyer behavior drive product merchandising decisions.

CHAPTER IV

Choosing the Right Platform for Distribution eCommerce

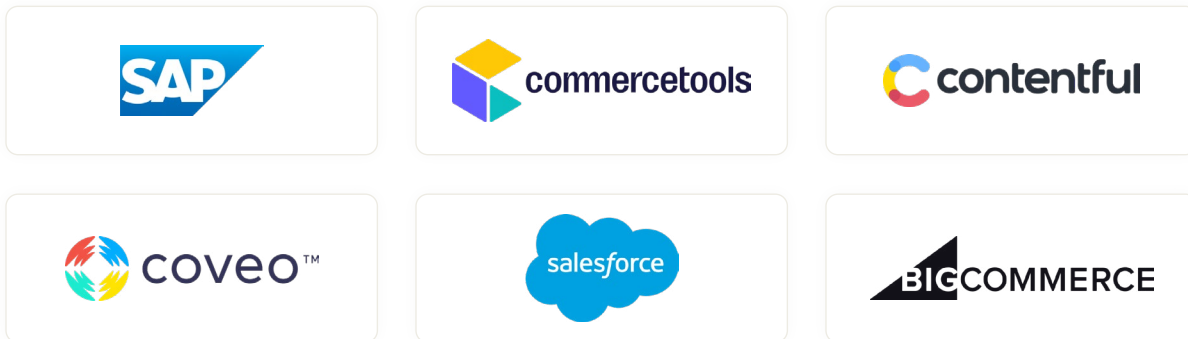
Selecting the right eCommerce platform is a critical step in scaling digital commerce for distributors. ERP systems will always play a key role in managing operations, but they aren't built to deliver the customer-facing experiences today's buyers expect. That's where a purpose-built eCommerce platform comes in—one designed for flexibility, extensibility, and growth.

For distributors, choosing a platform is more complex than in traditional retail. You need to factor in ERP integration, dynamic pricing, quoting workflows, company accounts, and large, ever-changing catalogs. These requirements go far beyond what most D2C platforms offer out of the box. Choosing the wrong platform can stall your digital strategy before it even begins. Choosing the right one unlocks speed, scale, and long-term ROI.

ZAELAB STRATEGIC PARTNERS



ZAELAB PLATFORM EXPERTISE



Types of eCommerce Platforms for Distributors

When evaluating eCommerce platforms, understanding the core differences between solutions is essential. The level of flexibility, complexity, and ownership you need will determine which model is right for your business.

SaaS (Software as a Service)

It's a great fit for distributors starting out or looking to simplify operations. SaaS platforms are hosted by the provider, making them low-maintenance and cost predictable.

- Fast to launch and easy to manage
- Limited customization, but often enough for most needs
- Prioritize platforms with strong B2B features like quoting and account-level pricing

Best for: Small to mid-sized distributors wanting speed and scalability without heavy technical overhead.

Open Source

It offers full control over the codebase and maximum flexibility but requires significant in-house resources to manage.

- Ideal for custom workflows or unique business models
- Requires dedicated developers and ongoing maintenance
- Higher total cost of ownership over time

Best for: Large distributors with complex needs and a technical team to support it.

PaaS (Platform as a Service)

It combines open-source flexibility with managed infrastructure. You keep control of the code while the provider handles hosting and scaling.

- Good balance of flexibility and support
- Still requires internal dev ownership
- Built for teams that want control without owning servers

Best for: Mid-to-large distributors with some dev resources, looking for control plus convenience.

Composable Architecture

It's the most flexible and scalable approach, connecting best-in-class tools (PIM, CMS, checkout) via APIs.

- Fully modular and customizable
- Demands strong technical leadership
- Allows distributors to future-proof their tech stack

Best for: Digitally mature organizations needing global scale, multiple channels, or a tailored experience.

There's no one-size-fits-all platform—only the best fit for your business today and where you want to go next. Whether you need speed and simplicity or full-scale flexibility, understanding your technical capacity, growth goals, and customer needs will help you choose a platform that supports long-term success.

Pro Tip: Not sure which platform is right for your business? [Connect with a Zaelab expert](#) to get tailored guidance and a strategy built for distribution.

Shopify for Distribution eCommerce

As one of the leading SaaS platforms, Shopify is increasingly chosen by distributors for its simplicity, speed to market, and growing B2B capabilities.

Here is Why Distributors Choose Shopify:

- **Ease of Use:** No-code setup options and intuitive interfaces make it accessible for non-technical teams.
- **Shopify Plus:** The enterprise tier offers features like custom pricing, customer-specific catalogs, and bulk ordering tools.
- **App Ecosystem:** With over 8,000 apps, distributors can easily add B2B features like ERP syncs, advanced search, and quoting.
- **Multi-Channel Selling:** Sell on your website, Amazon, social, and wholesale—all from one place.
- **Global Expansion Tools:** Shopify Markets makes localization, currency, and international taxes manageable from a central platform.
- **Fast Innovation:** Shopify consistently releases new features and integrations, staying ahead of industry trends.

While Shopify may not offer the deep customization of open-source platforms, its scalability, ease of use, and increasing B2B focus make it an excellent fit for fast-moving distributors.

Curious about Shopify's B2B capabilities? [Watch our Fireside Chat](#) to learn how leading distributors are turning technology into ROI.

Discovery & Architecture: The Blueprint for Long-Term Digital Success

Before selecting a platform or writing a single line of code, successful distributors start with strategy. That strategy is rooted in **discovery** and **architecture**—two foundational phases that ensure your digital investment supports long-term goals, not just a short-term launch.

Discovery

Discovery is where the current state is assessed—processes, systems, pain points, and strategic goals. For distributors, whose businesses depend on operational efficiency, supply chain precision, and strong customer relationships, this step is especially critical.

Here's what effective discovery uncovers:

- **Process inefficiencies:** Legacy systems and manual workflows often slow down critical functions like inventory, fulfillment, and customer support. Discovery identifies what's holding the business back.
- **Customer expectation gaps:** Buyers now demand speed, transparency, and personalization. Discovery highlights where current capabilities fall short.
- **Stakeholder alignment:** Distributors operate across departments and partners. Discovery ensures internal teams and external vendors are aligned from the start.
- **Technology risks:** Skipping discovery can result in mismatched tools, disconnected systems, and wasted investment.

Think of discovery as a diagnostic phase. You wouldn't begin repairs without understanding what's broken. In digital transformation, it's how distributors map the terrain before building a solution that's future-ready.

Architecture

Once discovery clarifies what needs to change, architecture defines how to make it happen. For distributors, this means designing a digital foundation that supports current operations while enabling future growth.

Effective architecture brings structure and strategy to the digital transformation process. It connects technologies, aligns teams, and ensures every investment supports business outcomes. Here's why it matters:

- **System Integration:** Distributors often rely on multiple systems—ERP, WMS, CRM, eCommerce platforms. Architecture ensures these systems work together seamlessly, eliminating data silos and operational friction.

- **Scalability:** Growth is the goal, and a strong architectural framework enables it. Whether entering new markets, expanding product lines, or increasing order volume, the tech stack should scale without disruption.
- **Process Efficiency:** Architecture supports smarter workflows—like automated reordering, real-time inventory tracking, and improved demand forecasting—all critical to margin protection in distribution.
- **Flexibility & Adaptability:** Markets shift, customer expectations change, and new technologies emerge. A well-designed architecture allows the business to adapt without rebuilding from scratch.
- **Cost Control:** Poor architecture creates technical debt—inefficient systems, costly workarounds, and frequent breakdowns. A clear structure from the beginning reduces long-term costs and complexity.
- **Defined Requirements & Scope:** Architecture serves as the roadmap, guiding the project from where the business is today to where it needs to go. It reduces ambiguity and ensures alignment across all stakeholders.

For distributors, architecture is like the blueprint for a warehouse. Without it, you might end up with something that functions but isn't built to scale, evolve, or support long-term growth.

Together: Discovery + Architecture

These steps create the roadmap from where you are to where you need to go. One without the other leads to imbalance: discovery without architecture is simply a list of problems with no path forward; architecture without discovery is a technical solution disconnected from business needs. Together, they create a transformation plan that is both strategic and executable, reducing risk, aligning stakeholders, and ensuring that your technology decisions support business goals.

CHAPTER V

Designing a B2B User Experience That Drives Revenue

Choosing the right platform and building a solid architecture is only half the equation. What comes next is an execution that translates that strategy into a usable experience for your buyers.

In distribution, a great B2B eCommerce experience isn't about flashy design or mimicking consumer trends. It's about functionality, speed, and clarity. B2B buyers like procurement leads, operators, and business owners, browse to get work done. Your digital experience should support that with practical tools, seamless workflows, and personalized support.

Here are 5 essential components to build an experience that wins B2B customers:

1. User Research

You can't fix what you don't understand. Start with buyer interviews, order history analysis, and on-site observation to understand how customers engage with your current platform.

Ask:

- Where do they get stuck?
- Do they need better search, faster reordering, or clearer pricing?
- What would make them trust your digital tools more?

These insights should directly shape your design decisions.

2. Persona Development

Your platform should support more than one type of buyer. Create specific personas based on your research.

Example:

- Sarah, Procurement Lead:* Orders monthly in bulk, cares about quick quotes, budget approvals, and order tracking.
- Tom, Field Technician:* Orders smaller, urgent parts, often from his phone on-site.

Design with each persona in mind: saved carts, mobile approval tools, or role-based dashboards.

3. Journey Mapping

B2B buying is complex. Map the full experience from discovery to post-purchase support.

Here are typical journey checkpoints:

- Discovery** – Can they find what they need easily?
- Evaluation** – Are specs, inventory, and lead times clear?
- Checkout** – Are quote workflows and approvals streamlined?
- After Purchase** – Is tracking, reordering, and support frictionless?

Fixing even one major pain point can dramatically improve conversion and loyalty.

4. Mobile-First Design

Many B2B buyers are in warehouses, offices, or out in the field. In fact, 70% of B2B buyers use mobile during their purchase process. Not to lose them to a clunky experience, make your platform mobile-first:

- Responsive layout
- Large, tappable buttons
- Access to order history, tracking, saved carts
- Easy quote approvals on the go

5. Performance Optimization

Speed = revenue. B2B buyers won't wait on slow-loading pages or buried SKUs. Optimize by:

- Compressing assets and simplifying scripts
- Using category filters and search autocomplete
- Organizing products by use case, not SKU alone

The faster buyers find what they need, the faster they convert.

Starter Guide to Turn Insights into Action

To design a better B2B experience, don't try to overhaul everything at once. First, identify what matters most to your users and improve it step by step. Here's how to turn buyer feedback, analytics, and internal knowledge into a roadmap that drives results:

1. Start Small

Prioritize essentials and focus on features that deliver the biggest impact early on.

Start with:

- Site Search: Buyers need to find products fast, especially when searching by SKU or spec.
- Order Tracking: Visibility builds trust. Show order status, estimated delivery, and tracking links.
- Mobile Checkout: Many B2B buyers approve or place orders from their phones. Make the process smooth and fast.

2. Use Data

Analytics tell you where buyers are struggling, even if they never say it.

Watch for:

- **Heatmaps:** Where are users clicking? What are they ignoring?
- **Drop-off Points:** Are users abandoning the website during product detail views, quote forms, or checkout?
- **Conversion Funnels:** Track where users are bouncing and how far they make it through the process.

3. Loop in Your Sales Team

Your sales team hears buyer frustrations firsthand. Use their feedback to uncover what isn't working in the digital experience.

Ask them:

- Where do customers still prefer calling instead of using the site?
- What features do customers constantly ask for?
- Where do manual quote requests slow things down?

4. Measure What Actually Matters

Vanity metrics don't drive business results. Focus on the KPIs that show if your user experience is really working.

Track:

- **Time-to-Checkout:** Is the process smooth or taking too many steps?
- **Repeat Order Rates:** Are customers coming back and using the platform again?
- **Cart Abandonment:** What % of users start but don't finish orders or RFQs?

Pro Tip: Start small, measure continuously, and build in iterations. The most successful B2B experiences aren't launched overnight but optimized over time.

CHAPTER VI

ERP Integration in B2B eCommerce

Now comes one of the most critical, technically complex, and high-stakes pieces of the puzzle: **ERP integration**.

For most B2B distributors, integrating an ERP (Enterprise Resource Planning) system with your eCommerce platform is essential. Your ERP houses the operational backbone of your business, from inventory and pricing to customer records and fulfillment logic. Your eCommerce platform is the interface your customers use to interact with that backbone.

This chapter breaks down why ERP integration is so important, what to plan for, and how to navigate its complexity without compromising performance, scalability, or customer experience.

Why ERP Integration is Critical

Your ERP system manages inventory, orders, customer data, and financials. Your eCommerce platform handles product discovery, ordering, and account management. When these systems operate in silos, the risks stack up quickly:

- Manual data entry errors lead to discrepancies in pricing, product availability, or order details.
- Delayed processes increase the likelihood of stockouts, missed shipments, or fulfillment errors.
- Inconsistent customer experiences like mismatched pricing or unavailable inventory erode trust with B2B buyers.
- Limited scalability makes it hard to grow efficiently as order volume and complexity increase.

Start with Integration Requirements

A successful ERP–eCommerce integration starts with clearly defined requirements. Understanding what kind of data needs to flow between systems and in which direction is essential for setting expectations and avoiding future roadblocks.

1. Identify the core data points to integrate.

These will vary based on your business, but there are common must-haves:

- Order data:** Includes items, quantities, pricing, taxes, and shipping details. Orders placed on your storefront are sent to the ERP for processing, invoicing, and fulfillment.
- Inventory data:** Syncs stock levels and locations to ensure product availability is always accurate across platforms.
- Customer data:** Transfers account details, pricing tiers, credit limits, and contact information to enable personalized experiences and enforce business rules.
- Fulfillment information:** Keeps order statuses, shipping details, and tracking numbers updated in real-time for both customer visibility and internal coordination.
- Returns and refunds:** Ensures consistency between systems when handling return requests, refund processing, and inventory updates.
- Product data:** Encompasses SKUs, descriptions, categories, and pricing—plus advanced attributes like size, color, or custom specifications.

2. Consider the customizations and edge cases common in B2B.

B2B distributors often deal with customer-specific pricing (e.g., negotiated contract rates), customized product catalogs, or unique shipping and billing rules. If you manage multi-warehouse inventory, serialized items, or kits and bundles, your integration needs to reflect these complexities.

Some platforms include custom fields or proprietary logic like specialized SKU formats or customer-specific payment terms that don't align cleanly across systems. These scenarios usually require tailored development to ensure data is mapped and displayed correctly.

3. Don't forget about business rules and workflows.

Define what should trigger what. For example, should inventory falling below a certain threshold in the ERP automatically hide the product online? Should customers exceeding their credit limit be blocked from completing checkout? What happens when a new customer submits a large order? Does it go through an approval workflow before fulfillment?

By clarifying these functional and technical rules early, you can ensure your integration supports the way your business actually operates.

Key Considerations for ERP Integration

Once you've defined your requirements, it's time to evaluate how your integration will function in practice. The decisions you make here (direction of data flow, scalability needs, error handling) will shape both the experience and the ongoing effort required to maintain the system.

1. One-Way vs. Two-Way Integration

Your first key decision is whether to build a one-way or two-way integration.

In a one-way setup, data typically flows from the eCommerce platform to the ERP system. This works well for simpler implementations, such as sending order information to the ERP for fulfillment and invoicing. While it's faster and more cost-effective to deploy, the tradeoff is limited real-time visibility for customers and internal teams.

One-Way Integration	
PROS	CONS
✓ Simpler setup	✗ No real-time visibility
✓ Lower development cost	✗ Manual syncing
✓ Less ongoing maintenance	✗ Risk of data mismatches

Two-way integration, on the other hand, enables real-time synchronization in both directions. That means when a product sells out or a price changes in the ERP, the eCommerce platform reflects it instantly. Likewise, status updates from the ERP like shipping confirmation can be pushed back to

the storefront. This setup is more robust and scalable but requires a higher investment in development and maintenance.

Two-Way Integration	
PROS	CONS
✓ Up-to-date inventory	✗ Complex to build
✓ Faster order processing	✗ Ongoing maintenance needs
✓ Seamless customer updates	✗ Risk of performance issues

2. Scalability and Flexibility

Think beyond your immediate needs. Will your integration scale if you add new warehouses, product lines, or expand to new markets?

Make sure the architecture can handle increased order volume, especially during peak periods like seasonal promotions or product launches.

3. Data Mapping and Transformation

ERP and eCommerce systems often speak different languages. For instance, your eCommerce platform may use "PROD-123" as a SKU, while your ERP system refers to it as "P123."

Data mapping ensures these inconsistencies are translated properly so nothing gets lost in the sync. This includes aligning formats for SKUs, customer IDs, addresses, date structures, and more.

4. Error Handling and Monitoring

No integration is perfect. You'll need systems in place to catch and fix sync errors before they disrupt operations. That means:

- Logging issues like failed syncs or duplicate orders.
- Alerting your team in real time.
- Providing an easy-to-use dashboard for both technical and non-technical users to monitor integration health.

5. Security and Compliance

Sensitive business data like pricing, customer records, and payment info flows through your integration. Security is not optional:

- Use secure APIs and encryption protocols.
- Comply with regulations like GDPR, CCPA, or industry-specific requirements like HIPAA, if applicable.

6. Custom vs. Prebuilt Integrations

You'll also need to choose between prebuilt connectors and customer integrations.

- **Prebuilt connectors** (e.g., Shopify to NetSuite via Celigo or MuleSoft) that accelerate deployment and reduce development time. These are ideal if your use case is fairly standard.
- **Custom integrations** built with APIs or custom code, which offer greater flexibility and control. These are often necessary for businesses with complex data models, business rules, or performance needs.

Some ERP systems, like Acumatica, provide native connectors that minimize the need for third-party middleware. Others may require more heavy lifting.

ERP Integration Touchpoints

To build a seamless ERP-eCommerce integration, you'll need to address several core data flows. Below are the most common touchpoints, along with important nuances to consider for distribution businesses:

Order Data

Orders placed through your eCommerce site must flow into the ERP with full detail: line items, quantities, pricing, discounts, shipping method, and payment status. In B2B, that might also include purchase order numbers or project codes. On the return path, your ERP should update order statuses and generate invoices visible in customer portals. Be prepared to handle complexities like partial shipments, backorders, or split orders across warehouses.

Inventory Data

Your ERP is the source of truth for inventory. It should push real-time stock levels, lead times, and safety stock thresholds to the eCommerce platform. In return, the storefront must communicate reserved inventory when an order is placed. Nuances arise with multi-location inventory, drop-shipping workflows, or consignment stock, all of which require careful syncing.

Customer Data

New account registrations and address updates from the eCommerce side should sync back to the ERP, while the ERP supplies credit limits, pricing tiers, tax exemption statuses, and buyer permissions. You'll also need to support layered account structures, such as multiple contacts per account or parent-child hierarchies, and potentially custom fields like SIC codes or industry classifications.

Fulfillment Information

As orders move through the fulfillment process, your ERP should push picking, packing, shipping, and tracking details to the eCommerce platform. On the flip side, the storefront may initiate fulfillment steps like allocating inventory or triggering pick lists. Advanced logistics like international shipping or 3PL coordination can introduce added layers of complexity.

Returns and Refunds

When buyers initiate return requests online, those need to flow into the ERP for approval and processing. Once complete, the ERP updates return statuses and syncs refund information and restocked quantities back to the storefront. Some returns may involve restocking fees, partial refunds, or warranty evaluations, all of which require system coordination.

Product Data

Your ERP will typically serve as the master for SKUs, product names, pricing, weights, and imagery. The eCommerce platform may only occasionally send updates (e.g., for discontinued products). Product complexity, like variants, bundled kits, and compliance data (e.g., hazmat indicators), can quickly increase the challenge.

Pitfalls to Avoid

Even the best ERP–eCommerce integrations can run into roadblocks. Here are some of the most common challenges, and how to mitigate them before they impact performance:

1. Data Inconsistencies

When SKUs, prices, or customer records don't match across systems, the integration can break or generate errors.

Fix: Conduct a full data audit before implementation. Define a single source of truth for each data type and keep it consistent.

2. Performance Bottlenecks

Large product catalogs or high order volumes (e.g., 100,000+ SKUs) can overload systems and slow down syncs.

Fix: Use batch processing, caching, or incremental updates to maintain speed and system stability.

3. Customization Overload

Tailoring the integration for every edge case can lead to fragile, high-maintenance systems.

Fix: Apply the 80/20 rule. Focus on the workflows that deliver the most value and standardize wherever possible.

4. Vendor Lock-In

Relying on a specific platform's native connector may limit flexibility as your business grows or changes systems.

Fix: Favor modular designs using open standards and APIs (e.g., REST), so you can pivot without starting from scratch.

5. Testing Gaps

Skipping real-world testing can result in missed issues like failed order cancellations or incorrect inventory handling.

Fix: Test full workflows, including edge cases, in a sandbox environment before going live.

Practical Steps to Get Started with ERP Integration

ERP integration can get complex fast, so it's important to start with a clear plan. From mapping out data flows to choosing the right tools, here's how to approach it step by step and avoid costly mistakes down the line:

Step 1. Document Your Requirements

Start by outlining exactly what the integration needs to accomplish. List your must-have versus nice-to-have features. Then, map out key data flows, such as: "Order placed → ERP creates invoice → Status syncs back to eCommerce platform."

Step 2. Assess Your Current Systems

Review your ERP and eCommerce platform APIs, including any documentation, performance limits, and customization history. Understanding system constraints early can prevent roadblocks later.

Step 3. Choose the Right Integration Approach

If your needs are fairly standard, prebuilt connectors (like Shopify-NetSuite) can speed up implementation. For more complex setups, especially those involving unique pricing rules or multi-warehouse inventory, middleware like Boomi or Celigo, or custom-built APIs, may be necessary.

Step 4. Engage Internal Stakeholders

Bring in representatives from sales, operations, IT, and finance early. Alignment is key, especially when it comes to data governance. Determine who's responsible for maintaining records like product pricing, tax rules, and customer data.

Step 5. Start Small and Iterate

Rather than launching everything at once, begin with one core function, like syncing orders from eCommerce to ERP. Once that's stable, expand to include inventory, customer data, or fulfillment. Piloting with a small segment of products or accounts helps identify issues without major disruption.

Step 6. Plan for Long-Term Maintenance

Integration isn't a one-and-done project. Budget time and resources for ongoing monitoring, updates, and support, especially after ERP or eCommerce platform upgrades. Implement error tracking tools so your team can respond to issues before they impact customers.

CHAPTER VII

A Balanced Approach to B2B eCommerce Implementation

When launching an eCommerce platform for distribution, success depends on creating a system that's robust, scalable, and easy to manage without unnecessary complexity or cost. The most effective B2B implementations follow a strategic formula built on three core priorities:

1. Maximize Built-In Platform Features

Modern platforms like Shopify offer strong out-of-the-box capabilities—catalog management, customer portals, advanced order processing, and more. Distributors can often support tiered pricing, multi-warehouse inventory, and reordering workflows without custom development. By leaning into these native features, you reduce time-to-launch, simplify ongoing management, and lower long-term costs.

2. Extend with High-Impact Third-Party Apps

Even the best platforms can't do everything. Strategic third-party apps can fill critical gaps, whether it's ERP integration (e.g., NetSuite via Celigo), shipping automation, or product data management (PIM). The key is selecting only what enhances your stack, avoiding tool overload that can slow performance and increase technical debt.

3. Customize Only Where It Counts

Custom development should be used sparingly and reserved for functionality that's unique to your workflows. This could include approval logic for high-volume B2B orders or specialized quoting tools. The less you customize, the easier your platform will be to scale, support, and upgrade over time. Prioritize platform-native functionality, extend only where needed, and limit custom code to high-impact areas. This balanced approach ensures your eCommerce foundation is flexible, scalable, and efficient—ready to support long-term success in distribution.

Four Implementation Pillars

Once you've selected the right platform and defined your approach, successful execution comes down to operational excellence. For distributors, that means planning around the systems, data, and teams that power day-to-day business.

The following four pillars will ensure your implementation delivers immediate value and sets you up for long-term scalability:

1. Data Migration: Flawless Transfer of Historical and Real-Time Data

Distributors live and die by their data. Migrating customer records, product catalogs, pricing rules, and order history from legacy systems into your new platform must be handled with care. Before migration, clean the data to remove duplicates, standardize formats, and ensure accuracy across the board.

Real-time data connections are equally critical. Inventory levels, order statuses, and pricing changes should sync seamlessly between your eCommerce platform and backend systems — so if a product sells out in one warehouse, your online stock reflects that immediately.

Pro Tip Always test migrations in a staging environment first. Catching issues early prevents costly mistakes on launch day.

2. Feature Parity & Enhancement: Existing Functionality + New Innovations

At a minimum, your new platform should replicate existing core functionality. At a baseline, it needs to support key B2B functionality such as multi-warehouse inventory visibility, tiered pricing, and quoting workflows. But true digital transformation goes beyond parity. Enhance the buyer experience with self-service features like downloadable invoices, live order tracking, and reordering tools.

For sales teams, streamline manual tasks with intelligent product recommendations and contract pricing logic. The goal is to eliminate friction for both internal teams and buyers, all while increasing long-term value.

Pro Tip: Focus on B2B must-haves like contract pricing, bulk ordering, and credit management—features often missed by B2C-first solutions.

3. Third-Party Integrations: Building a Cohesive Tech Ecosystem

No eCommerce platform operates in isolation. From your ERP and CRM to shipping carriers and payment gateways, your systems must work together. That means syncing real-time inventory and customer data from platforms like Oracle or QuickBooks, tracking customer interactions via Salesforce or HubSpot, and integrating with shipping providers like FedEx, UPS, or 3PL partners. You'll also want to support B2B-specific payment options such as purchase orders or ACH.

Pro Tip: Map out every system you use, identify APIs or middleware (e.g., Celigo, MuleSoft), and test integrations early to avoid bottlenecks.

4. Self-Service Enablement: Empowering Internal Teams

A great platform reduces dependency on IT. Equip your team with tools to manage the system themselves. Your marketing team should be able to launch promotions, update product content, and swap homepage banners without writing code. Operations should have tools to adjust inventory, pricing rules, or product availability from a user-friendly dashboard.

Training is key. Make sure staff have hands-on experience with the platform before go-live, and that ongoing updates are easy to implement.

Pro Tip: Empower internal teams with self-service functionality to ensure that your entire organization becomes more agile and responsive to market changes.

Your Typical Implementation Team

A successful B2B eCommerce implementation relies on a team with the right expertise. For distributors, where complexity is the norm, these roles are especially important:

B2B eCommerce Analyst

Translates distribution workflows (like order-to-cash or inventory replenishment) into clear platform requirements that match how your business operates.

Senior Project Manager

Oversees the timeline, budget, and coordination across teams—keeping the project on track from start to finish.

UI/UX Designer

Designs a practical, user-friendly interface tailored to B2B buyers. Think bulk ordering, fast navigation, and usability—not flashy design.

Software Architect

Develops the technical blueprint for how your eCommerce platform, ERP, and other tools will work together seamlessly.

Frontend Developer

Builds the customer-facing experience—responsive, branded, and optimized for performance across devices.

Backend Developer

Handles data flows, integrations, and system logic that power features like inventory sync and order automation.

DevOps Engineer (Optional)

Ensures hosting, scalability, and uptime—especially important for complex or high-volume sites.

Quality Assurance Engineer

Tests functionality, performance, and compatibility to catch issues before your customers do.

Account Manager

Acts as the bridge between your business and the implementation team to ensure alignment and smooth communication.

Most distributors don't need all of these roles in-house and likely can't justify them. That's why agency support is often the most cost-effective path. You can maintain a small internal team (e.g., a project lead or analyst) to guide priorities while leveraging agency experts to deliver the build.

Quality Assurance & Testing: No Room for Surprises

In B2B eCommerce, there's no margin for error, especially in distribution. A single bug can disrupt an order, damage trust, or delay fulfillment. That's why rigorous QA is essential.

Here's how a strong testing process ensures your platform performs as expected:

- Cross-Browser & Device Testing**
Your site is tested across major browsers (Chrome, Safari, Firefox, Edge) and devices (iOS and Android) to ensure consistency for every buyer, no matter how they access it.
- Real-World User Testing**
Simulated scenarios like a 1,000-unit order or a request-for-quote flow help ensure your platform works in high-stakes situations, not just in theory.
- Business Feature Validation**
Every must-have feature is tested, whether it's tiered pricing, inventory visibility, approval workflows, or reordering tools, to confirm nothing slips through the cracks.
- Performance & Load Testing**
The platform is stress-tested to ensure it can handle traffic spikes and order volume surges without slowing down or breaking, which is critical for distributors with seasonal demand or large clients.

As a result, you get a reliable, fully tested platform that's ready for launch without glitches, downtime, or missed expectations.

Stress-Free Launch & Post-Launch Support

Launch day should mark the beginning of growth, not the start of fire drills. With the right planning and support, going live can be seamless and stress-free.

Here's how you make it happen:

DNS Switchover

Your domain is pointed to the new platform without downtime, so customers experience zero disruption.

- 301 Redirects**
Old URLs are redirected to the new site to preserve SEO rankings and ensure buyers can still find the products they've bookmarked.
- Post-Launch Testing**
All critical workflows are re-tested after go-live to confirm that orders process correctly, payments clear, and integrations function smoothly.
- Final Data Sync**
Just before launch, migrate any remaining data like last-minute orders or inventory updates so everything is current.
- Training & Enablement**
Your team gets the documentation and live support they need to manage the platform confidently from day one

After launch, optimization begins. You'll monitor performance, gather feedback, and make improvements over time—whether that's refining checkout flows or adding new features. The launch is just the start of long-term growth.

WHAT'S NEXT?

Stay Ahead in Digital Commerce

Whether you're in the foundation phase or scaling new initiatives, Zaelab can help you plan your next move.

[Book a Strategy Session with a Zaelab Expert →](#)

Or shoot us a message at hello@zaelab.com — we'd love to hear about your goals and challenges.

“Modernization is a continuous process of identifying constraints and acting on them with discipline.”

— Evan Klein, CEO of Zaelab

Start Modernizing Your Distribution Business Today

Partner with Zaelab to build the digital foundation for long-term growth.

As operational complexity grows and B2B buyers demand faster, easier, and more personalized experiences, now is the time to modernize.

Distributors that act decisively by simplifying systems, enabling self-service, and strengthening digital infrastructure, gain the speed, flexibility, and insight needed to lead.