Transforming Enterprise eCommerce:

Strategies for AI Adoption, Personalization, and Platform Modernization

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Introduction

The digital commerce landscape is undergoing one of the most rapid transformations in its history.

Buyers across both B2C and B2B markets now expect seamless, personalized, and consistent experiences across every touchpoint. Leading brands are delivering on these expectations and reaping the rewards of greater loyalty, higher engagement, and increased revenue. But for many, delivering these experiences at scale remains a challenge.

Organizations are under growing pressure to drive more revenue through digital channels while maintaining agility across geographies, product lines, and customer segments. Scaling modern commerce requires not just ambition but smarter architecture, integrated data, and the right applications of AI.

Market challenges for brands

Despite clear demand and opportunity, several structural challenges make it difficult for organizations to deliver on the promise of digital commerce:

AI Implementation and Scaling Complexity
Commerce teams see AI as a critical driver of efficiency and personalization - powering content creation, product recommendations, search, and automation. But despite strong intent, many are stuck at early stages of adoption.

The roadblocks are familiar: fragmented data, unclear ROI models, and limited internal expertise. Brand leaders need clear implementation pathways and scalable deployment strategies that balance innovation with oversight. Concerns around over-automation and loss of control remain real, especially in customer-facing experiences.

Platform Migration and Modernization Pressures
Legacy commerce platforms are increasingly viewed as barriers to agility. With end-of-life systems and rising support costs, many brands are actively planning migrations to modern, cloud-native platforms. But migration is no small feat. These transitions introduce technical complexity, operational risk, and significant investment. For brands looking to evolve quickly, success means choosing platforms that minimize disruption while supporting long-term flexibility, integration, and growth.

Personalization at Scale Implementation Demands
Personalization has shifted from a competitive differentiator to a customer expectation. But for most enterprise organizations, delivering personalization across millions of customers, multiple brands, and diverse channels remains out of reach.

Market challenges for brands cont.

Integration and Data Unification Requirements

Modern commerce relies on a patchwork of systems - CRM, analytics, CMS, automation - and the challenge is making them work together. Leading brands are prioritizing platforms with strong APIs, built-in connectors, and data activation capabilities to unify the customer journey across teams and channels.

Omnichannel and Multi-Brand Scaling Challenges

Brands now operate across multiple geographies, audiences, and channels all while trying to maintain distinct experiences per brand. Scaling requires infrastructure that balances centralization with flexibility, especially in areas like inventory, pricing, and personalization.

These challenges create a clear tension: brands understand what their customers expect, but many still lack the integration, speed, and cross-functional coordination to meet those demands at scale.

The focus of this research

Delivering Personalized Commerce Experiences at Scale

Consumers have made their preferences clear. According to research from McKinsey, 80% of U.S. adults expect personalization across digital touchpoints, and 76% feel frustrated when brands miss the mark. Leading organizations are seeing 2× growth when personalization is executed well but most still struggle to operationalize.

Data silos, legacy systems, and the sheer volume of customer data make it difficult to act in real-time. Brands recognize that automation, AI, and integrated data strategies are essential to delivering personalization at scale — but many are still in the early stages of this journey.

Building Differentiated and High-Performing Storefronts

In a post-Covid landscape, your storefront is your flagship. High-performing storefronts are no longer "nice to have" - they are mission-critical for growth. Organizations need storefronts that are fast, flexible, and optimized for conversion. They also need the ability to test, iterate, and evolve experiences quickly. Increasingly, brands are turning away from third-party marketplaces and focusing on their own digital storefronts, where they can control the experience, capture customer data, and maximize margins.

Addressing the Rising Demands of B2B Ecommerce

B2B e-commerce represents a monumental $32.1 trillion market opportunity according to data from Capitol One Shopping. Buyers now expect the same self-service convenience they enjoy in B2C - 24/7 ordering, personalization, and seamless purchasing flows. For businesses operating across both B2B and B2C, the challenge is even greater: managing complex business models often requires costly customization or even multiple ecommerce platforms. Without the right foundation, these complexities slow down growth, inflate costs, and limit agility**.**

Summary of Research Findings

We engaged with 100 industry experts to understand how they're rethinking platforms, personalization, and customer experience — and what sets top-performing brands apart.

Enterprise commerce is undergoing a wave of transformation - technically, operationally, and culturally. Brands are adopting AI to enhance personalization, content, and workflows, while also modernizing their platforms to support scalability and integration.

Leaders are focused on activating real-time data, delivering consistent omnichannel experiences, and building more flexible, future-ready architectures. Across interviews, six shared challenges emerged: scaling personalization, balancing B2B and B2C needs, adopting AI with care, modernizing without disruption, and unifying fragmented tech stacks.

Key Findings

This research explores how digital commerce brands are navigating the complexity of personalization, platform growth, and unified customer experiences at scale. Through analysis of the respondent transcripts, **six key findings were brought to light:**

✴️ **AI and Generative AI Adoption Accelerates, Guided by Strategy**
80% of ENT commerce orgs are adopting or exploring AI and generative AI.

✴️ **Platform Migration Drives Modern Commerce Architecture Adoption**
44.7% of organizations are migrating or planning to in order to scale.

✴️ **Scaling Personalization Demands Strategic Complexity**
52% of commerce organizations are in early-stage personalization rollout

✴️ **B2B and B2C Requirements Drive Platform Architecture**
62% of organizations manage both B2B and B2C commerce requirements

✴️ **AI Drives Storefront Performance and Content Optimization**
83% of organizations prioritize storefront performance & content optimization

✴️ **Omnichannel Integration Guides Platform Selection**
89% of organizations require omnichannel and unified commerce capabilities

The Reality of Modern Commerce

AI & Generative AI Adoption Accelerates, Guided by Strategy

AI Adoption Analysis
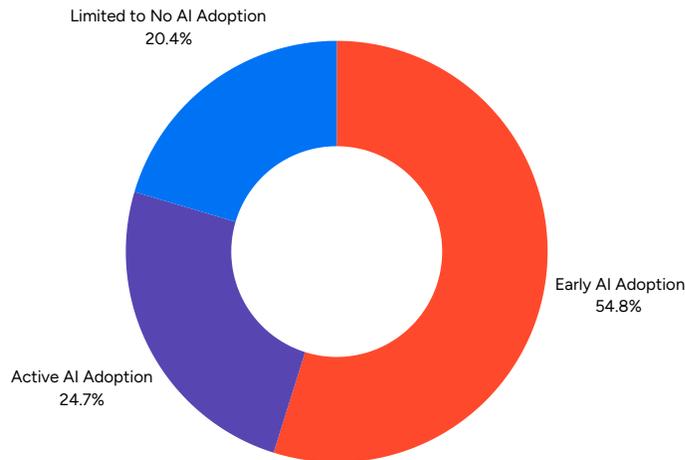
The Evidence: 80% of enterprise commerce organizations are actively implementing or exploring AI and generative AI capabilities, with clear patterns emerging around adoption maturity and strategic focus.

AI Adoption Distribution:

- **Early-Stage AI Adoption with Interest in Generative AI (55%):** Organizations exploring AI capabilities with strong interest in generative applications
- **Active AI Adoption with Generative AI (25%):** Companies with established AI implementations actively using generative AI tools
- **Limited or No AI Adoption (20%):** Organizations with minimal current AI usage but potential for future adoption

Voice of the Buyer: Discussing AI Implementation

"AI powered live search, AI-powered product recommendations. Especially on the generative side, are quite important, but we're still in the early stages of the adoption."
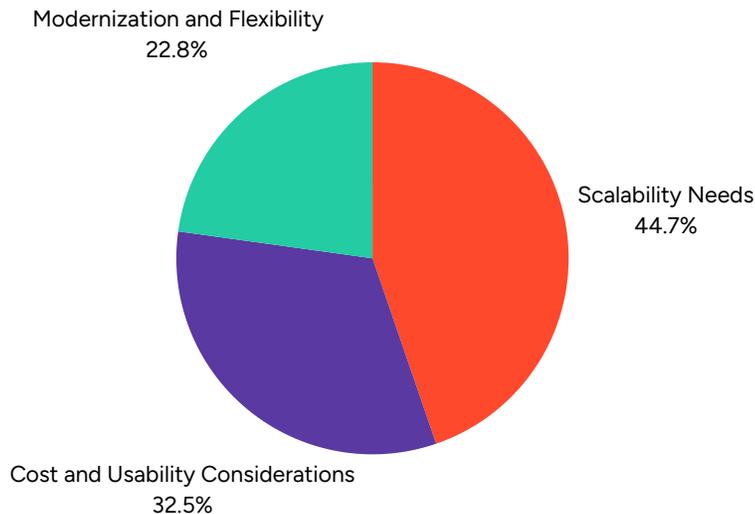- **Global E-commerce Director**

"AI tools play a huge part in speeding up and facilitating your ability to drive that market."
- **Digital Marketing Manager**

Strategic Implication: AI is no longer experimental, it's becoming foundational. But most organizations are still in early stages of maturity. Brands should focus on building clear implementation plans with defined use cases, starting where AI can deliver immediate value (like content creation, product search, and automation). The key is balancing innovation with practical ROI and ensuring your AI tools enhance, not replace, the customer experience.

Platform Migration Drives Modern Commerce Architecture Adoption

Platform Migration Analysis

Modernization and Flexibility
22.8%

Scalability Needs
44.7%

Cost and Usability Considerations
32.5%

The Evidence: 44.7% of organizations are migrating or planning on it to meet scalability needs, while all interviewed parties agreed that migration is on their minds.

Migration Patterns:

- **Scalability and Integration Needs (45%): M**igrations driven by need for scalability, ERP integration, and faster time-to-market from legacy platforms
- **Cost and Usability Considerations (32%):** Platform changes driven by usability limitations, support challenges, and cost optimization needs
- **Modernization and Flexibility (23%):** Strategic moves toward modern architectures, microservices, and flexible deployment capabilities

Voice of the Buyer: Discussing Platforms

"Migration driven by the need for a unified, scalable platform with feature-rich capabilities."
- **Multi-Brand E-commerce Director**

"We were on a homegrown legacy system, which was very out of date. It was a long time coming, and it was much needed."
- **Furniture E-commerce Manager**

Strategic Implication: Brands should focus on minimizing disruption by selecting platforms that offer proven migration paths, strong support models, and clear business value. Success depends on planning for flexibility, reducing risk, and ensuring new architecture aligns with future growth.

Scaling Personalization Demands Strategic Complexity

Personalization Implementation Approaches

Strategic Priority
16.5%

Active Implementation
17.6%

Emerging Capabilities
17.6%

Limited Personalization
48.4%
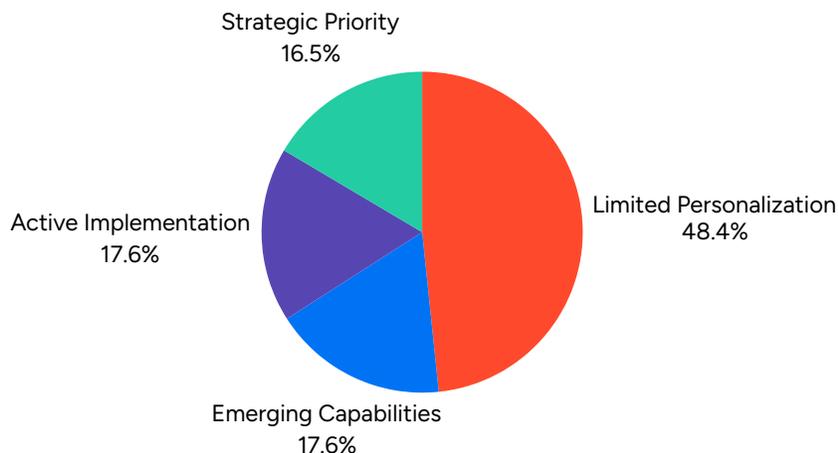
The Evidence: 52% of commerce organizations are in early stage development of implementing personalization

Personalization Implementation Distribution:

- **Limited or Basic Personalization (48%):** Organizations with manual processes and basic personalization capabilities, representing a significant growth opportunity
- **Emerging Personalization Capabilities (18%):** Companies developing real-time personalization with current limitations but strong potential
- **Active Implementation and Adoption (18%):** Organizations with established AI-driven personalization across channels and ongoing optimization
- **Strategic Priority with Challenges (16%):** Companies recognizing personalization as critical but facing data integration and execution challenges

Voice of the Buyer: Discussing Personalization Implementation

"We utilize personalization in our ecom and SMS marketing and looking to start implementing personalization across the user experience."

- **Beauty Brand CMO**

"[Our] focus [is] on real-time, data-driven personalization, automation, and customer expectation management."

- **Beauty Brand Operations**

Strategic Implication: Scaling personalization requires more than intent - it demands unified data, cross-functional coordination, and the right technology. Brands should focus on building a clear roadmap that aligns with their maturity level, prioritizing systems that enable real-time execution and measurable business impact.

Platform Architecture Driven by B2B and B2C Demands

B2B & B2C Commerce Models
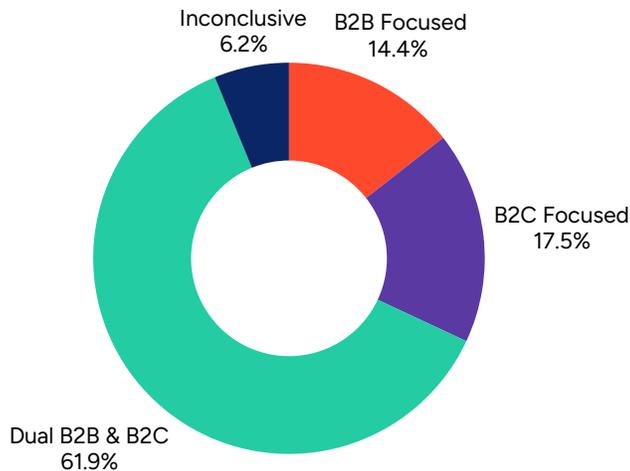
The Evidence: 62% of organizations operate dual B2B and B2C models, creating complex platform requirements and unified experience demands.

Commerce Model Distribution:

- **Dual B2B and B2C Models (62%):** Organizations supporting both business models on unified or integrated platforms with complex multi-segment requirements
- **B2C-Focused Requirements (18%):** Primarily consumer-facing organizations with direct-to-consumer focus and minimal B2B needs
- **B2B-Focused Requirements (14%):** Enterprise B2B organizations with complex workflows, self-service portals, and industry-specific pricing
- **Inconclusive (6%):** Organizations with unclear or unspecified business model requirements

Voice of the Buyer: Discussing B2B and B2C Needs

"We operate in B2B, B2C, and funded markets, deploying diverse products and services with distinct operational needs."
- **Renewable Energy Operations Manager**

"[We have] B2B-specific requirements, self-service needs, and audience segmentation."
- **Document Software Marketing Manager**

Strategic Implication: Managing both B2B and B2C models introduces real complexity across pricing, workflows, and user experiences. Brands should prioritize platforms that can support both models within a single architecture - enabling unified data, efficient operations, and consistent customer engagement.

AI Drives Storefront Performance and Content Optimization

Focus Areas Driving Storefront and Content Strategy

Low Storefront & Content Investment
16.7%

AI-Driven Content
42.7%

Storefront Performance Focus
40.6%
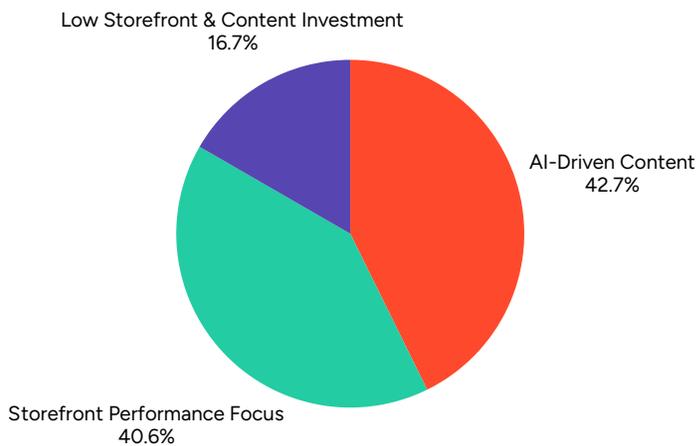
The Evidence: 83% of organizations actively focus on storefront performance and AI-driven content creation, with nearly equal emphasis on both areas.

Content and Performance Focus Areas:

- **AI-Driven Content Creation and Personalization (43%):** Organizations leveraging AI for content generation, visual optimization, and personalized storefront experiences
- **Storefront Performance and Optimization (41%):** Companies prioritizing site performance, user experience enhancement, and conversion optimization
- **Limited or Non-Applicable Storefront and Content Focus (17%)** Organizations with minimal current focus on advanced storefront capabilities or content creation

Voice of the Buyer: Discussing Storefront Content

"We are trying to really refine that and enhance that experience as you can imagine, especially for a furniture shopper, the more personalized we can get, the more likely we are to keep you on the site."

- **Furniture E-commerce Manager**

"AI plays a very important role in our business — from content creation and photo editing to helping with product descriptions."
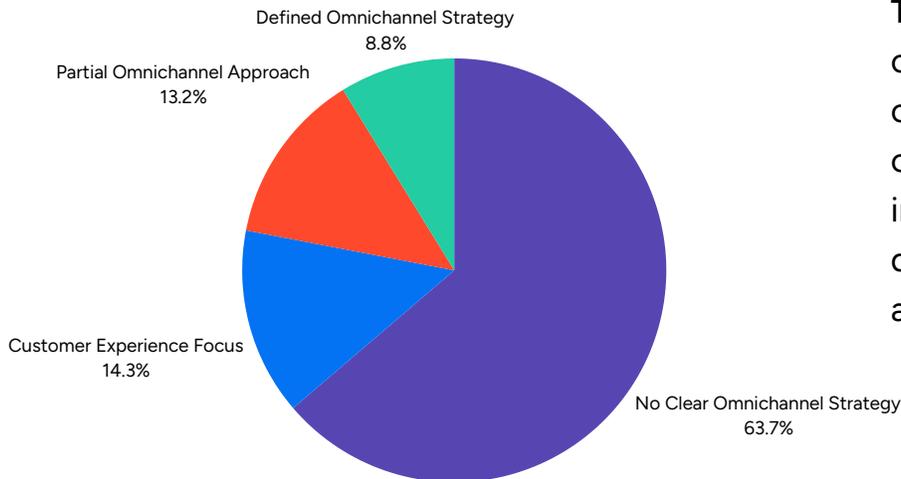
- **Online Retail Manager**

Strategic Implication: As brands compete on experience, AI-driven content and performance optimization are becoming essential. Focus on tools that improve conversion rates, streamline workflows, and personalize storefronts, while supporting faster and more flexible content delivery.

Omnichannel Integration Guides Platform Selection

Omnichannel & Unified Commerce Priorities

Defined Omnichannel Strategy
8.8%

Partial Omnichannel Approach
13.2%

Customer Experience Focus
14.3%

No Clear Omnichannel Strategy
63.7%

The Evidence: 89% of organizations require omnichannel and unified commerce capabilities, with integration complexity driving platform architecture decisions.

Omnichannel Strategy Distribution:

- **Limited or No Omnichannel Strategy (64%):** Organizations with minimal cross- channel coordination or unified commerce capabilities
- **Unified Customer Experience Focus (14%):** Companies prioritizing consistent customer experiences across touchpoints
- **Implicit Omnichannel Presence (13%):** Organizations with some cross-channel capabilities but no explicit omnichannel strategy
- **Explicit Omnichannel Strategy (9%):** Companies with defined omnichannel strategies and comprehensive cross-channel integration

Voice of the Buyer: Discussing Omnichannel Integration

"Strategic focus on unifying online and offline channels, real-time data, and inventory management for seamless customer experience."
- **Medical Supply Operations Manager**

"Most interactions with the brand and with the stores happen online first, which is why there's a lot of emphasis put on the ecommerce site."
- **Furniture E-commerce Manager**

Strategic Implication: Omnichannel execution is a top priority, but it comes with complexity. Brands should look for platforms that unify data, maintain consistency across touchpoints, and support real-time updates. Strong integration and operational flexibility are key to delivering seamless experiences.

Where to Invest Now: 5 Key Focus Areas for Scaling Enterprise Commerce

The six core findings reveal the most urgent challenges and motivations shaping enterprise commerce today — from the rise of AI to the complexity of B2B and omnichannel operations. The **five themes** that follow highlight how leading brands are responding.

These are the areas where teams are investing, experimenting, and building the foundations for future growth. Each theme reflects the real-world decisions that brand leaders are making to scale personalization, connect systems, activate data, and modernize storefront experiences. Taken together, these themes offer a blueprint for scaling smarter — not just with tools, but with cross-functional strategy.

✴ **Commerce Performance and ROI**

✴ **Marketing-Commerce System Integration**

✴ **Customer Data Strategy and Ownership**

✴ **Multi-Brand and Multi-Market Scaling**

✴ **Developer Experience and Time-to-Market**

Theme 1 - Commerce Performance and ROI

Enterprise Priorities for Commerce ROI
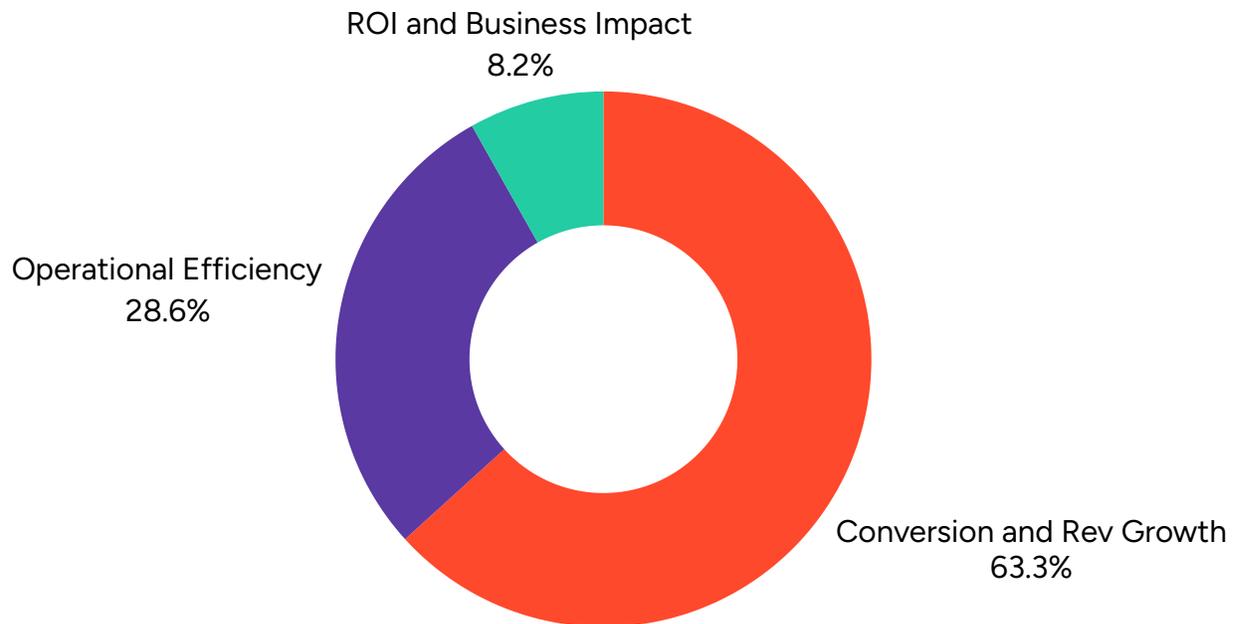
The Pattern: ROI measurement approaches show clear priorities, with 63% focusing on conversion and revenue growth, emphasizing revenue-driven optimization over operational metrics.

ROI Measurement Distribution:
- **Conversion and Revenue Growth (63%):** Focus on revenue-driven optimization and sales growth
- **Operational Efficiency and Process Improvement (29%):** Back-end efficiency gains and cost management
- **ROI and Business Impact (8%):** Comprehensive commerce metrics and business impact measurement

Strategic Implication: The focus on conversion and revenue growth shows that ecommerce leaders are prioritizing tools and strategies that directly impact sales. To drive results, brands should measure performance based on outcomes that tie back to growth, not just operational efficiency.

Theme 2 - Marketing-Commerce System Integration

Marketing–Commerce Integration Priorities

Inconclusive
24%

Basic Integration
43.8%

Strong Integration
32.3%
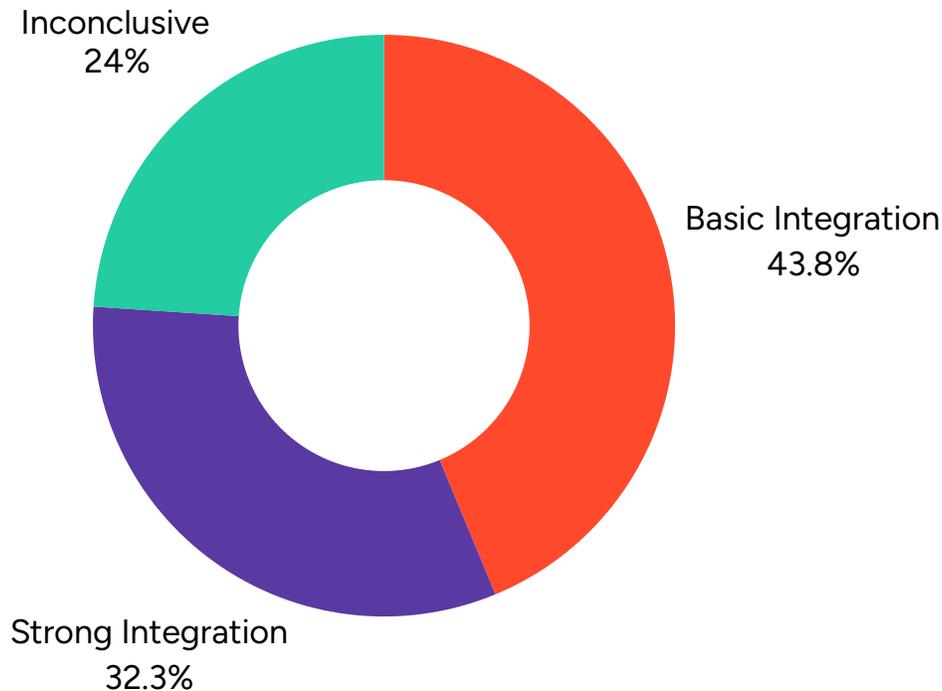
The Pattern: Marketing-commerce integration maturity is mixed, with 44% showing basic or partial integration, indicating partial implementations are more common than comprehensive integrations.
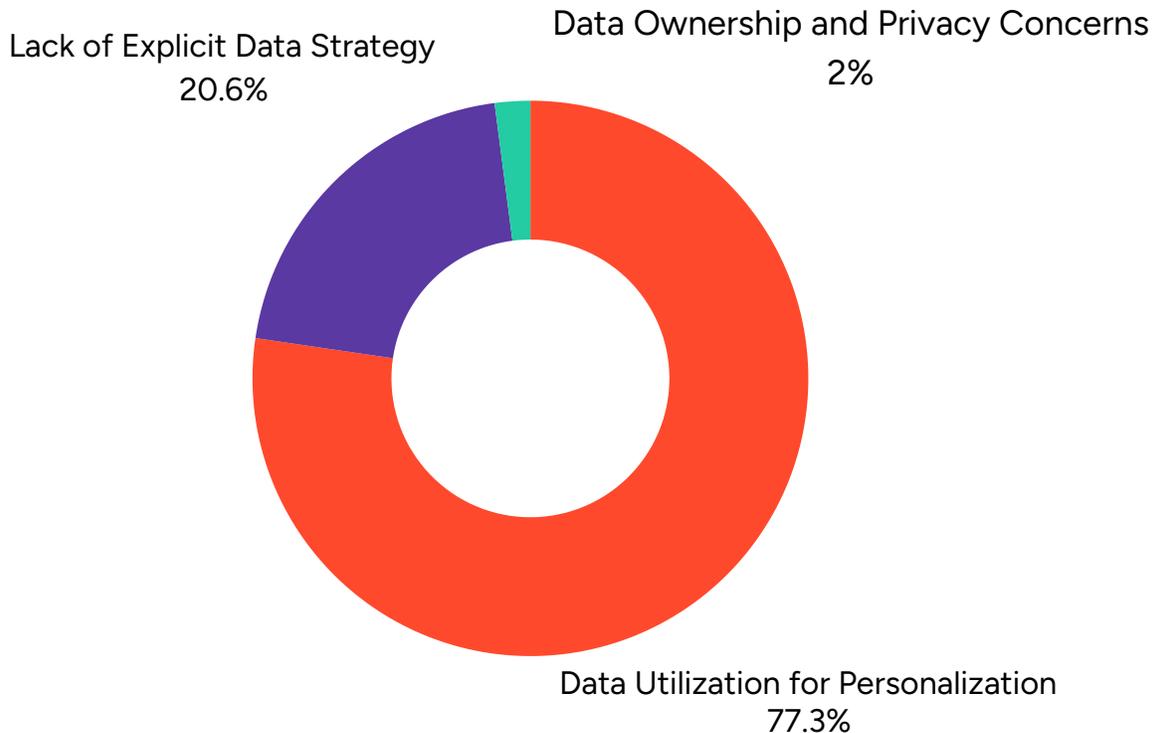
Integration Maturity Distribution:
- **Basic or Partial Integration (44%):** Implementation obstacles and partial system connections
- **Strong Integration and Strategic Priority (32%):** Comprehensive system unification and strategic focus
- **Limited or No Evidence of Integration (24%):** Minimal integration capabilities or evidence

Strategic Implication: Many brands are still operating with partial or disconnected systems. To improve performance and customer experience, ecommerce teams should prioritize platforms that support seamless data flow and tighter integration between marketing and commerce systems.

Theme 3 - Customer Data Strategy and Ownership

Customer Data Priorities

Lack of Explicit Data Strategy
20.6%

Data Ownership and Privacy Concerns
2%

Data Utilization for Personalization
77.3%

The Pattern: Customer data strategies show strong focus, with 77% emphasizing data utilization for personalization, indicating data activation for personalization is the primary concern rather than governance or privacy.

Data Strategy Distribution:
- **Data Utilization for Personalization (77%):** Customer-centric data activation and personalization focus
- **Lack of Explicit Data Strategy (21%):** Minimal or unclear data strategy approach
- **Data Ownership and Privacy Concerns (2%):** Comprehensive data governance and privacy compliance

Strategic Implication: With most brands focused on activating customer data, the priority is shifting from ownership to outcomes. To enable personalization and improve customer experience, teams should invest in platforms that make it easier to unify, access, and act on data in real time.

Theme 4 - Multi-Brand and Multi-Market Scaling

Multi-Brand & Multi-Market Complexity

No Clear Multi-Market Strategy
20.4%

Complex Multi-Brand/Multi-Market Ops
50.5%

Single or Limited Brand Focus
29%
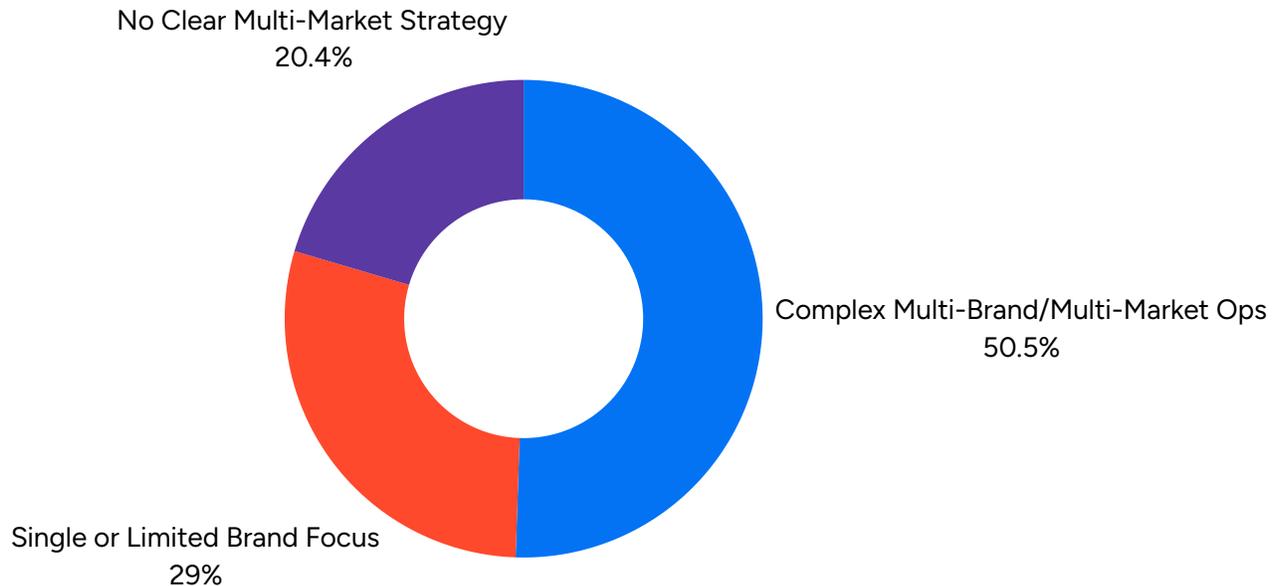
The Pattern: Multi-brand operational complexity is significant, with 51% managing complex multi-brand and multi-market management, creating substantial platform requirements for unified yet flexible brand management.

Scaling Challenge Distribution:
- **Complex Multi-Brand and Multi-Market Management (51%):** Complex multi-entity management and scaling challenges
- **Single Brand or Limited Multi-Brand Focus (29%):** Primary single-brand operations with limited multi-brand complexity
- **No Evidence or Limited Information on Multi-Brand/Multi-Market Challenges 20%):** Insufficient evidence of multi-brand operations

Strategic Implication: Managing multiple brands and markets adds significant operational complexity. To scale efficiently, ecommerce teams should look for platforms that support centralized control with the flexibility to localize experiences, manage distinct brand needs, and maintain consistency across markets.

Theme 5 - Developer Experience and Time-to-Market

Developer Experience Priorities
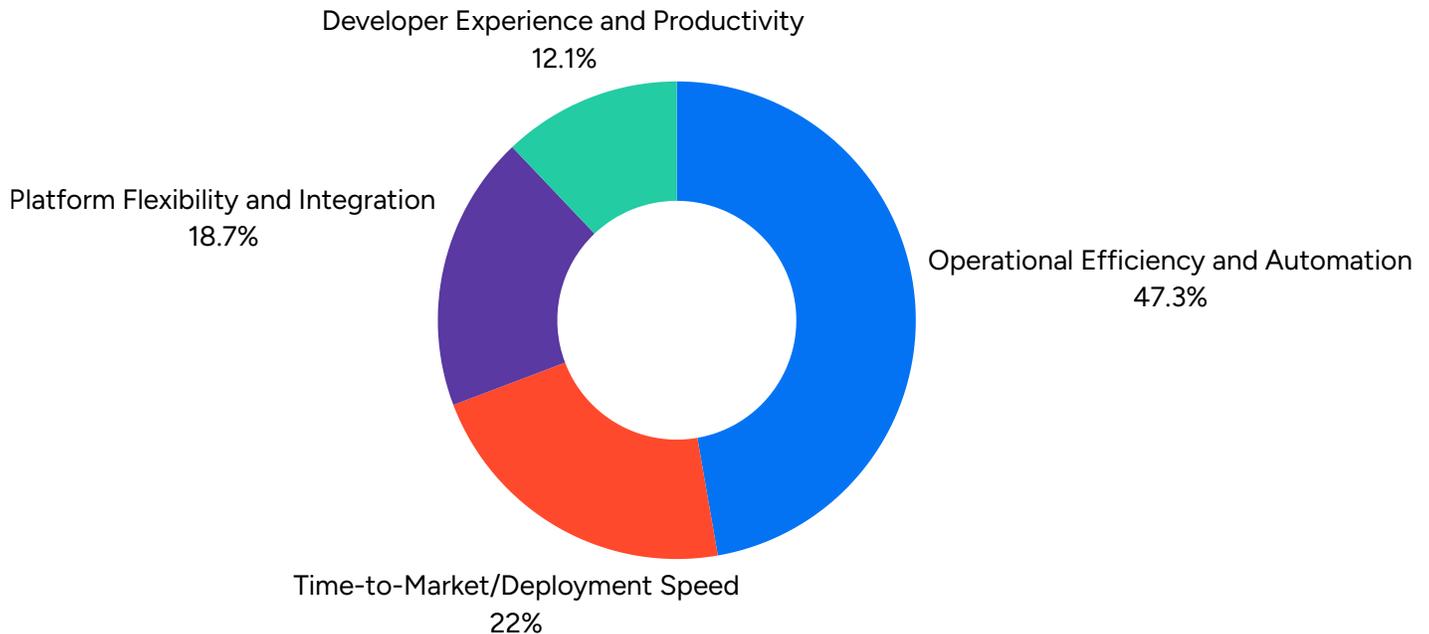
The Pattern: Developer priorities emphasize efficiency, with 47% focusing on operational efficiency and automation, indicating automation and operational efficiency take precedence over development flexibility.

Developer Experience Distribution:
- **Operational Efficiency and Automation (47%):** Process efficiency focus and automation priorities
- **Time-to-Market and Deployment Speed (22%):** Time-to-market optimization and deployment efficiency
- **Platform Flexibility and Integration (19%):** Development agility focus and platform customization
- **Developer Experience and Productivity (12%):** Development environment optimization and productivity tools

Strategic Implication: Improving operational efficiency is a top priority for development teams. Brands should evaluate platforms that reduce manual effort, support faster deployment, and simplify workflows — enabling technical teams to move quickly without sacrificing stability or control.

Conclusion and What's Next

Enterprise commerce is evolving fast — but most organizations are still navigating foundational challenges. AI is in early adoption, platforms are being rebuilt, and personalization at scale remains more goal than reality. But the direction is clear: brands that modernize their architecture, connect their data, and act on customer insight are pulling ahead.

This report has highlighted what your peers are doing differently:

✳ They're migrating off legacy systems to create more agile, scalable foundations.

✳ They're aligning teams around unified customer data, not siloed tools.

✳ They're using AI to improve performance, not just experiment.

✳ And they're designing storefronts and experiences that convert — across channels, segments, and markets.

If you're evaluating commerce platforms today, this research offers a roadmap. Look for solutions that align with where your brand is going — not just where it is today. Focus on platforms that scale with complexity, support personalization and performance, and help your teams move faster.

The path to modern commerce isn't linear, but the priorities are clear. Now is the time to make decisions that unlock growth.

See What's Possible with Adobe Commerce:

Adobe Commerce is a composable ecommerce solution that lets you quickly create global, multi-brand B2C and B2B experiences, all from one cloud-native platform. Use it to deliver personalized, high-performance storefront experiences that boost traffic, conversions, and GMV. Learn more about how Adobe can support your next stage of growth at: **https://business.adobe.com/products/commerce.html**

Methodology

This research draws on structured interviews with 100 enterprise commerce decision-makers representing a wide mix of roles, industries, and company sizes. Participants included executives, directors, managers, and technical specialists spanning 21.5% Commerce Decision Makers, 20.6% Marketers, 14% E-commerce Leaders, 14% IT Leaders, 11.2% Enterprise Commerce Leaders, 10.3% Commerce Professionals, 8.4% Merchandisers

The sample reflects a balanced view of the enterprise commerce ecosystem, with organizations ranging from mid-sized firms (100 – 999 employees) to large global enterprises (1,000+ employees). Industry coverage included retail, B2B services, manufacturing, healthcare, and technology, with a geographic distribution spanning North America.

This blend of perspectives ensures findings capture both executive-level strategic priorities and operational realities of commerce transformation, covering areas such as AI adoption, platform migration, personalization, B2B/B2C integration, and omnichannel experience delivery.

The analysis of 100 interview transcripts was conducted using AI for semantic understanding, with multi-iteration validation and cross-verification to ensure a 97.0% analysis success rate and confidence scoring. Each transcript was reviewed and formatted by G2's AI Solutions team to inform narrative, context, and clarity

Thank you!