Power forward: Five make-or-break truths about next-gen e-commerce

Research shows that leading companies aren't afraid to invest and are determined to make tech a centerpiece for the next generation of e-commerce.

by Arun Arora, Kevin Wei Wang, Rodney Zemmel, and Stephan Zimmermann

We at CII Institute of logistics, a renowned center of excellence in logistics and supply chain management are delighted to share this report on the next generation ecommerce. We invite you to read this report to equip yourself with the knowledge needed to foster e-commerce that not only endure but excel in an unpredictable world.

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E-commerce is undergoing a fundamental change that is reshaping how customers buy and companies sell. While generative AI (gen AI) has grabbed the attention of executives over the past year, a quieter wave of technology-driven innovation is washing over almost every aspect of e-commerce.

This technology infusion is powering a much more comprehensive and integrated version of next-gen e-commerce, in which a broad ecosystem of capabilities—such as R&D, logistics, warehousing, and marketing and sales—are increasingly interconnected.[1] With these deeper and broader integrations comes the promise of better performance leading to greater productivity, higher profitability, and better customer experiences.

To better understand how this more dynamic and tech-driven story is evolving—specifically, how companies are evolving their e-commerce strategies and which moves are making a difference—we surveyed 500 executives in B2C and B2B companies across more than seven sectors in Brazil, China, Germany, the United Kingdom, and the United States (see sidebar, "About the research").

Our analysis focused on the actions of leaders—those who reported that their businesses are growing at more than 10 percent above the sector average—to learn where they are distinguishing themselves from also-rans. The analysis shines a bright light on five truths about next-gen e-commerce that are the cornerstones of success:

1. *Invest like an attacker.* Leaders act like attackers, investing in particular in new technologies—such as gen AI—and new channels to better understand and serve their customers.

2. *You can't outsource your way to victory.* Leaders are not dependent on vendors for technology needs; instead, they build up their in-house talent to innovate at pace.

3. *Technology is strategy.* Solid tech foundations give leaders the speed and flexibility to innovate.

4. *You can't know your customers if you don't know AI.* Leaders are turning to AI to get an edge with complex shopping journeys and evolving standards.

5. *Lead from the center but empower teams.* A centralized operating model provides the necessary scale but is only effective if it enables autonomous e-commerce teams.

[1] "Becoming indispensable: Moving past e-commerce to NeXT commerce," McKinsey, November 15, 2022.

About the research

The online survey included 500 respondents from Brazil, China, Germany, the United Kingdom, and the United States across B2B, B2C, and D2C businesses. Respondents represented companies in the following sectors, among others: B2B products, B2B software, B2B services, consumer packaged goods, durables and electronics, financial services, and retail and fashion. Respondents included chief marketing officers, chief revenue officers, chief strategy officers, CEOs, heads of digital, and heads of e-commerce at the N-1 and N-2 level. The survey included 35 questions that delved into company business models, industry sectors, company size by revenue, and e-commerce contribution to revenue. The questions evaluated the role and impact of generative AI, marquee shopping events, customer insights, operating models, and tech investments pertaining to e-commerce.

1. Invest like an attacker

Geopolitical tensions and often-conflicting economic indicators have introduced a more cautious business outlook over the past year. Our own tech trends analysis saw a reduction in investment across almost all of those trends in our sample over the past year.[2] That caution is reflected in our e-commerce analysis as well. Tellingly, however, leaders are cutting costs at a much lower rate than laggards. For lagging companies, cutting costs is a top three strategic e-commerce priority. For leaders? It doesn't even crack the top ten.

That through-cycle approach to investment is an established winning strategy,[3] with leaders outstripping their peers in three areas in particular:

— *Technology and gen AI.* Almost 20 percent of leaders are making gen AI their number one priority in e-commerce (versus less than 5 percent of laggards) and are ready to spend (Exhibit 1). About 30 percent of them are planning to put more than 10 percent of their e-commerce budget toward gen AI in the next 12 months (with more than 10 percent shifting more than 25 percent of their e-commerce spend). In contrast, fewer than 10 percent of laggards are matching that shift.

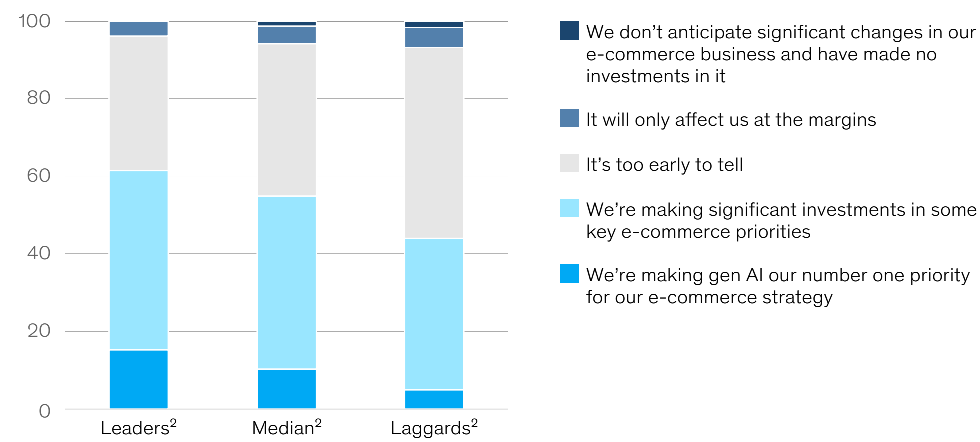
This focus partly explains why leaders are finding value in gen AI, with customer preparation for sales reps, software development, and product or service recommendations posting the greatest returns. B2B companies in particular are moving strongly into gen AI, making larger budget commitments (11 to 25 percent of their e-commerce budgets) to it than their B2C counterparts. This trend echoes a significant increase in B2B budgets for e-commerce in general, according to McKinsey's latest B2B Pulse Survey.[4]

[2] "McKinsey Technology Trends Outlook 2024," McKinsey, July 16, 2024.
[3] Rebecca Doherty and Anna Koivuniemi, "Rev up your growth engine: Lessons from through-cycle outperformers," McKinsey, May 27, 2020.
[4] Candace Lun Plotkin, Jennifer Stanley, and Liz Harrison with Víctor García de la Torre, "Five fundamental truths: How B2B winners keep growing," McKinsey, September 12, 2024.

Exhibit 1

Leaders are prioritizing generative AI and making significant investments.

Role of gen AI in e-commerce strategy,[1] % of respondents



[1]Q: *Which of the following statements best reflects your company's view of the role of generative AI in your business's e-commerce strategy?*
[2]Leaders, with more than 10% sector growth, comprise the top decile; laggards comprise the bottom decile; and the median comprises the other deciles.
Source: McKinsey survey of executives at B2B and B2C companies on next-gen e-commerce, 2024, n = 500

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A recognition of the gen AI opportunity underscores a more foundational prioritization of technology. In fact, leaders are twice as likely as laggards to make tech a top priority (for more details on the specific elements of technology, see truth #3 below).

— *Digital channels.* Omnichannel commerce is a well-established concept in e-commerce, but even here we see notable differences emerging. In general, leaders are making greater efforts to extend their touchpoints with customers in an effort to create more meaningful interactions with them. In terms of investments made, the difference between leaders and laggards is greatest in developing online marketplaces (60 percent versus 54 percent), direct-to-customer sites (56 percent versus 48 percent), and social commerce (63 percent versus 50 percent). These trends are largely consistent across B2B and B2C companies, though the gaps vary. For example, 70 percent of B2C leaders are increasing spend in social selling versus just 56 percent of laggards, while 55 percent of B2B leaders are increasing spend in that area compared with 47 percent of laggards.

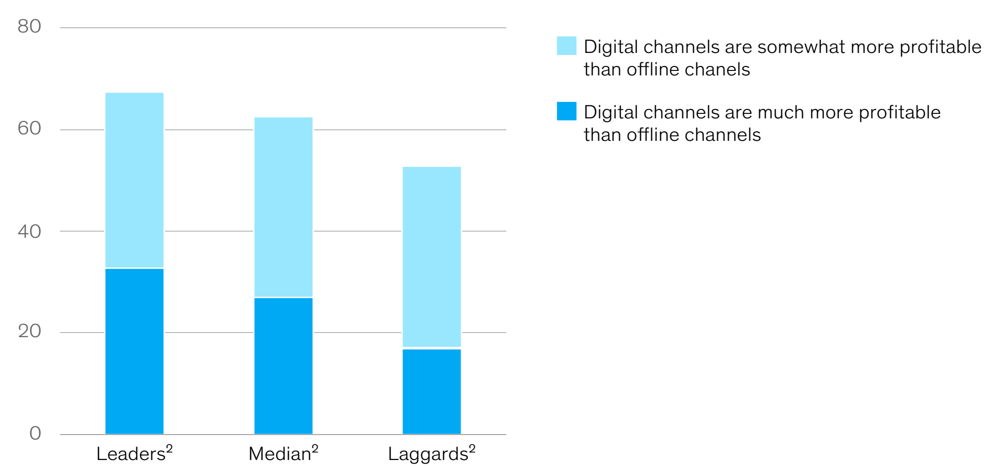
This push into digital channels is a crucial element for increasing profitability, with some 30 percent of leaders reporting that their digital channels are "much more profitable" than their offline channels—almost twice the share of laggards who say the same (Exhibit 2).

— *Shopping events.* More than 40 percent of leaders get a significant amount of their annual e-commerce revenues (more than 10 percent) from shopping events such as Black Friday, while almost 25 percent of laggards don't even participate. Among B2B companies, almost 30 percent of leaders say the same. Black Friday and the end-of-year holiday season, followed closely by companies' own shopping day events, are the most important shopping events, with companies planning to make major spend increases in them over the next 12 months

Exhibit 2

Digital channels are much more profitable for leaders than for their peers.

Profitability of digital versus offline channels,[1] % of respondents



[1]Q: *How do your digital channels' contribution to profitability compare with that of your offline channels?*
[2]Leaders, with more than 10% sector growth, comprise the top decile; laggards comprise the bottom decile; and the median comprises the other deciles.
Source: McKinsey survey of executives at B2B and B2C companies on next-gen e-commerce, 2024, n = 500

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(Exhibit 3). Almost half of all large consumer brands[5] are investing more than 10 percent of their e-commerce budget into shopping day events, with 42 percent of small consumer companies and 30 percent of B2B companies doing the same.

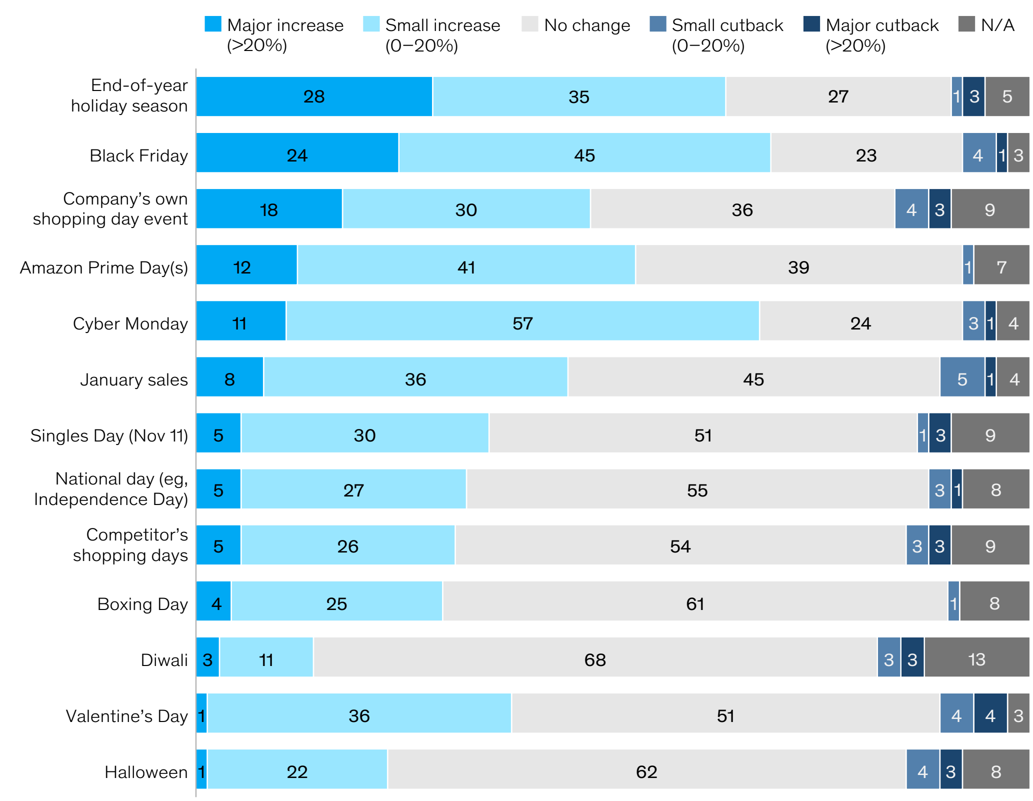
In our experience, companies that execute best on shopping event days develop war rooms staffed with the right talent—including marketers, pricing experts, data scientists, and engineers—so they can track opportunities and make changes quickly. More important, they invest in sufficient preparation well ahead of time. That includes forging deals and partnerships, building inventory, aligning on promotions, and securing both budget and head count. It also includes building up sufficient data to do A/B tests, putting in place the right analytics to track and adjust offers, and setting up rapid-reaction systems (such as the ability to send personalized emails or social offers). Many top organizations run different scenarios to test potential outcomes so they are sufficiently prepared when the shopping events happen.

[5] Greater than $5 billion in revenues.

Exhibit 3

Shopping events are a crucial focus of e-commerce growth.

Anticipated e-commerce spending on shopping events over next 12 months,[1] % of respondents



[1]Q: *For each of the shopping events your company participates in, how do you expect your e-commerce spending to change, if at all, over the next 12 months?*
Source: McKinsey survey of executives at B2B and B2C companies on next-gen e-commerce, 2024, n = 500

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2. You can't outsource your way to victory

Leaders in our analysis rely on internal talent to manage their e-commerce efforts, while laggards mostly rely on external vendors. This helps explain why about 50 percent more leaders than laggards are increasing investment in hiring technical talent.

Companies need to build up their own tech talent bench with product owners, data engineers, data scientists, software developers, and others who can work side by side with business colleagues. Close collaboration within cross-functional product teams has proved to be the best way to work quickly and effectively, and this approach operates best when the team is internal.

Vendors can provide leverage and an infusion of talent in some cases, but building up internal capabilities to work on the business's priorities—such as e-commerce—is mission critical. This reasoning contributed to DHL's decision, for example, to develop a European Innovation Center in Germany, which will focus on developing technology solutions in areas such as artificial intelligence, self-driving vehicles, robotics, and automation to drive innovation.[6]

While companies broadly accept the importance of tech talent, they are hampered by an unclear view of what kind of talent they need and what "good" looks like. The result too often is that HR scrambles to meet the need but ends up bringing on the wrong type of talent or people without the sufficient skill level. In contrast, top companies are deliberate in identifying the problem they're solving or opportunity they're going after and then focusing on the skills and proficiency levels needed to address it. During this process, they often look for people with experience in the identified area to help build up the skills profile (and target them for hiring).

An international healthcare provider reversed years of relying on agencies and vendors for the majority of its e-commerce technology needs by bringing the function in-house. The company started by identifying the need for a seasoned senior product manager with tech skills who could develop a road map to manage the priorities of sales teams, doctors, and customers.

3. Technology is strategy

In addition to bringing tech talent in-house, leaders have prioritized upgrading their technology infrastructure. That focus is becoming increasingly critical as technology infiltrates every aspect of the next-gen e-commerce value chain (Exhibit 4). When it comes to material handling, for example, robots were the fastest-growing technology over the past few years, mainly driven by the boom in e-commerce (as much as 30 percent CAGR) and warehouse management systems (17 to 19 percent).[7]

Traditionally, tech infrastructure has been seen as an issue for "IT to manage," but technology has become so foundational to a company's ability to compete that top companies now treat it as a source of strategic advantage. That helps to explain why almost 20 percent of leaders are planning to spend more than $100 million on e-commerce technology infrastructure, according to our analysis (compared with about 8 percent of laggards). But this is not about spending more; it's about spending smarter so businesses can innovate at speed and build at scale.

In our experience, enabling a modern tech infrastructure for e-commerce is best served by moving away from depending on single large vendors and embracing "MACH" development principles—microservices, API-enabled, cloud-native software as a service (SaaS), and "headless" (in which front-end design is decoupled from back-end systems).[8] This approach enshrines a commitment to developing a tech stack made up of scalable and replaceable elements that can be continuously improved. The headless approach is particularly crucial for large e-commerce

[6] "DHL breaks ground on cutting-edge European Innovation Center in Germany, prioritizing holistic sustainability," DHL Group, November 29, 2023.
[7] Based on external market reports, expert interviews, and McKinsey analysis on the material handling market in North America and Europe.
[8] This approach is espoused by the MACH Alliance. For more, see "MACH technologies," MACH Alliance, accessed September 25, 2024.

Exhibit 4

Technologies have applicable use cases across the enterprise.

Use of technologies across the entire next-gen e-commerce value chain

Consumer insights
- Say/do/pay analysis from 10,000+ free text comments
- Real-time first-party database
- Insights aggregator

Digital back office
- Gen AI for all work that involves aggregation, synthesis, recommendation, and known action

Digital commerce
- Hyperpersonalized D2C consumer journeys based on individual personas and history
- Enhanced and consistently high-quality product description pages with best content and imagery

Manufacturing
- Gen AI assist-bot to manage maintenance
- Identification of defects and anomalies from images

Marketing
- Accelerated content development via generative AI (gen AI) assistants
- Real-time campaign tailoring to consumer segments and demographics

Omni-fulfillment logistics
- Gen AI–enhanced digital twins to re-simulate distribution network
- Continuous analysis of transportation contracts for performance and risks

Organizational effectiveness
- Gen AI–fueled paradigm shift in how the organization operates—less paperwork, fewer PowerPoint presentations, less email

Procurement
- Rapid creation of should-cost models, negotiation scripts, and playbooks
- Rapid review and refinement of procurement contracts for changing environment and risks

R&D
- Expedited formulation and optimized packaging design
- Hypotheses for product development from consumer hotline data

Sales
- Key account team copilot to assist with joint business plans and sell-in stories
- Institutionalized territory knowledge
- Execution assessment from store images and rep coaching

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organizations because it allows businesses, products, and regions to easily tailor their strategies and offerings to local needs, either by building them or by integrating the best vendor option.

Amazon pioneered many of the principles of this approach, with its focus on API-enabled architectures and microservices. An international healthcare provider is also moving in this direction, with a focus on using open-source technology, which has allowed it to attract more qualified technologists, make system changes quickly, and radically reduce its maintenance costs.

This shift is not without its own challenges. Companies need to commit to actively managing and updating the platform. As a rule of thumb, while companies need to re-platform major systems every ten years or so, a MACH approach requires changing about 10 percent of the platform every year. Companies also need to have sufficient tech talent in-house to manage the systems. In addition, companies will need to thoughtfully manage the transition, given how many parts of the e-commerce value chain—from sales to fulfillment to logistics to pricing—depend on a single large system.

4. You can't know your customers if you don't know AI

Understanding the customer has long been a core tenet of successful businesses. But today's leaders are increasingly sophisticated and innovative, enabling them to get a better picture of their customer. They are, for example, eight times more likely to understand omnichannel (online and offline) customer interactions, with information easily shared across channels and decisions focused on delivering the best overall experience. This focus is particularly critical for B2B companies, where our pulse analysis showed that customer decision makers typically use ten or more distinct channels to interact with their suppliers during a purchase and fulfillment journey.[9]

As more ways to shop emerge and standards evolve, understanding customers and delivering what they want—from offers to experiences to products—will depend on how well companies can responsibly harness AI.[10] For example, many respondents to our survey are turning to AI initiatives to better understand their customers in preparation for Google's planned phaseout of third-party cookies in 2025.

Gen AI holds particular promise in omnichannel commerce, since it works on unstructured data (for example, videos, reviews, images, and chat conversations), and about 90 percent of all data is unstructured.[11] Gen AI tools, for example, can capture, transcribe, summarize, and analyze voice calls. Our survey shows that business leaders from CEOs to heads of e-commerce say gen AI helps them understand their customers better. Personal-clothing service Stitch Fix, for example, uses gen AI to help stylists interpret customer feedback and provide product recommendations.[12]

5. Lead from the center but empower teams

Integrating e-commerce capabilities into the organization has been a long-standing thorn in the side of incumbent companies. Isolated teams or subscale capabilities often lead to inefficiency and disappointing impact. One manufacturing company, for example, had $100 million of inventory sitting in different warehouses around the world, but no one knew what was available.

Many companies have started to address this by developing a centralized capability to manage and coordinate e-commerce activities—in fact, this was the top organizational model among respondents. Centralized capabilities allow companies to create leverage by, for example, investing in advanced AI capabilities to deliver massive analytics horsepower that teams can access or moving systems and databases onto the cloud to create more flexibility.

Where leaders distinguish themselves is in channeling these capabilities in the service of better customer experiences. About 15 percent of leaders (compared with about 2 percent of laggards) reported that their online and offline channels are well integrated, information is easily shared across channels, and decisions are made not by channel but in delivering the best overall experience for the customer (Exhibit 5).

A proven way to support this kind of distributed need at scale is to use a product and platform operating model, which combines the assets (products) that teams develop to meet a business need with the capability (platform) to support those assets.[13] Think dozens or even hundreds of e-commerce teams working globally. Shifting to this model requires substantial changes, including the following:

— modernizing the technology stack with a more modular architecture, exploiting the new capabilities provided by cloud technologies, and adopting modern software development practices

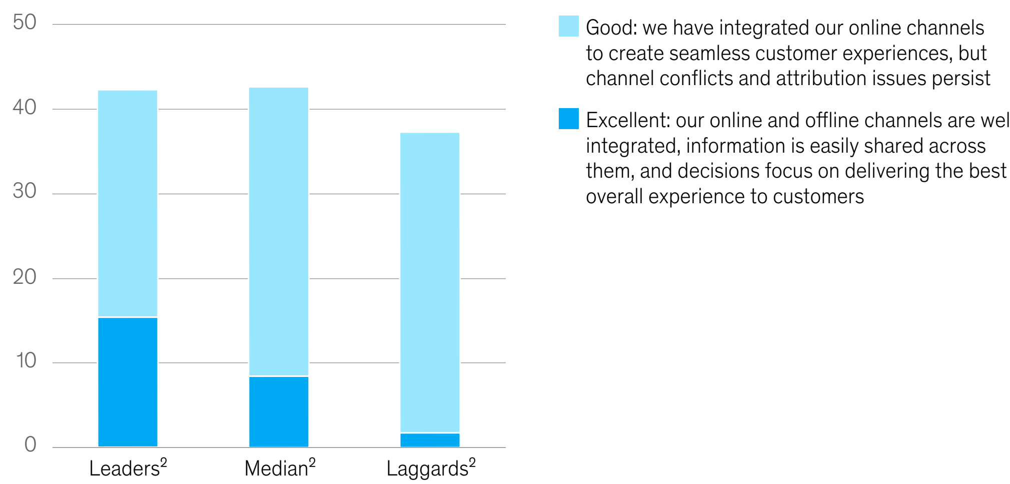
— reworking how control functions such as risk management, cybersecurity, and compliance work with teams so they enable speed rather than halt it

[9] "Five fundamental truths," September 12, 2024.
[10] "Implementing generative AI with speed and safety," *McKinsey Quarterly,* March 13, 2024.
[11] Asin Tavakoli, Holger Harreis, Kayvaun Rowshankish, and Michael Bogobowicz, "Charting a path to the data- and AI-driven enterprise of 2030," *McKinsey Quarterly,* September 5, 2024.
[12] Lisa Harkness, Kelsey Robinson, Eli Stein, and Winnie Wu, "How generative AI can boost consumer marketing," McKinsey, December 5, 2023.
[13] Aditi Chawla, Martin Harrysson, Hannah Mayer, and Megha Sinha, "The bottom-line benefit of the product operating model," McKinsey, December 19, 2023.

Exhibit 5

Digital leaders have integrated online and offline channels to deliver the best customer experience at a much higher rate than their peers.

Integration of online and offline channels,[1] % of respondents



[1]Q: *How would you rate your company's understanding of customers' interactions across online and offline channels?*
[2]Leaders, with more than 10% sector growth, comprise the top decile; laggards comprise the bottom decile; and the median comprises the other deciles.
Source: McKinsey survey of executives at B2B and B2C companies on next-gen e-commerce, 2024, n = 500

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— making a significant, multiyear commitment that only the CEO—in tight alignment with the rest of the C-suite—can manage

— developing a clear articulation of the value at stake and building a performance management capability to ensure that the value is, in fact, being captured

One international consumer packaged goods company created a B2B platform to support its retailers. The businesses in different markets rely on the underlying infrastructure and capabilities (such as order management and tracking, loyalty functions, and multicategory product management), while local markets can make certain customizations (such as the look and feel of the app) while including bespoke features. In one market, for example, the business added a gamification feature for retail customers to identify best-selling products, among other functionalities. This platform model has been integral to the double-digit growth the platform has experienced, including more than 50 percent growth in marketplace gross merchandise value (GMV) from September 2023 to September 2024.[14]

In some cases, this model will be too expensive to pull off or require talent that companies simply don't have. But the full potential of next-gen e-commerce will be elusive for these companies until they can take steps toward adopting this model.

As technology continues to improve, we can expect next-gen e-commerce to become an increasingly critical driver of growth. But extracting that value depends on how well companies can adapt their strategic, talent, and operating models. Tech is critical, but when it comes to value, it's never just tech.

[14] Year-over-year marketplace GMV variation estimated organically.

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