

2024 Top Ecommerce Technology Trends

Informing yourself about technology trends is crucial to the success of your ecommerce business for several reasons, most obviously (and importantly) that you risk becoming obsolete in a rapidly evolving digital landscape.

Of course, your time is precious, and you may find it hard to justify researching when you could be accomplishing real work.

But, if you don't take the time to discover and understand the latest technology trends, you might miss out on innovations that could **take your ecommerce business to new heights.**

Although researching innovations and solutions is sometimes just an academic exercise, it can motivate and invigorate you and your team, improving efficiency and profitability. Plus, many new technologies could give you or your team additional bandwidth and time, allowing you to make up for time spent studying and evaluating new technology trends.

In short, staying informed about ecommerce technology trends positions businesses to create plans that capitalize on opportunities and navigate short-term challenges effectively, driving long-term growth and success. What you decide to move forward with should be dictated by your brand, business, customer needs, and ability to implement and utilize the technology.

In this guide, we'll walk you through why adopting tech trends is essential, how to prioritize where you devote your efforts, what the latest trends are, including artificial intelligence (AI), and how to evaluate them.

Why Should I Follow New Tech Trends?

Not all trends are created equal.

Luckily, most technology trends have better staying power than trends in other categories; we may not still dress like we did in the early 2000s, but we're still glued to social media ever since Facebook opened registrations to a broader audience in 2006.

Here are some key reasons to stay on top of tech trends and be early adopters where possible:

- 1. Innovation and Competitive Advantage:** Many technologies bring new tools and methodologies to [ecommerce software platforms](#) that can fundamentally change your business functions, profitability dynamics, and customer expectations. Staying current can help leaders implement innovative technologies ahead of the wave, taking advantage of beta or pilot programs to reduce costs and stay well ahead of less agile competitors.
- 2. Enhanced Customer Experience:** Many recent advancements have facilitated dynamic customer experiences that adapt to consumer trends, such as personalized recommendations, omnichannel enablement, or intelligent chatbots. These additional services and solutions can bring almost instantaneous results to boost customer satisfaction and brand loyalty (and often increase profits).
- 3. Operational Efficiency and Scalability:** New technologies frequently enhance operational efficiency, [automate repetitive tasks](#), and improve scalability. Leaders can optimize backend processes, reduce costs, and support business growth by staying informed about tech trends.
- 4. Data-Driven Decision Making:** Powerful analytics and insights capabilities are increasingly essential to delivering competitive success. Leveraging these tools across your ecommerce technology stack—including in your [order management system \(OMS\)](#) and [inventory management software \(IMS\)](#)—to gather and analyze data more effectively, communicate trends, and provide access to a broader audience within your business enables informed decision-making that drives strategic initiatives and improves ROI.
- 5. Adaptability to Market Changes:** Technology trends often reflect broader shifts in consumer behavior, market dynamics, and regulatory requirements. By allowing your business to test new ideas and solutions, you will be better able to accommodate regulatory changes and unforeseen circumstances.
- 6. Data Security:** Keeping abreast of cybersecurity trends to protect customer data and maintain trust is crucial. Leaders who understand current security threats and best practices can implement robust security measures to safeguard consumer data and their operations.
- 7. Talent Acquisition and Retention:** Professionals in tech-driven roles are often attracted to organizations that embrace innovation and leverage cutting-edge technologies. Prioritizing research and innovation for personal and professional growth is usually crucial to keeping people in this field engaged and motivated.

Which Trends Should I Adopt?

The other problem with trends: there are a lot of them out there. Not all of them will produce equally amazing results.

Our advice: don't chase every trend.

Prioritizing which technology trends to follow involves a strategic approach to aligning available capital and expertise with business goals, market dynamics, and customer needs.

Only some new solutions or platforms are right for some businesses.

Businesses may feel tempted to skip the research stage—or not dig deep enough during their evaluation—often to their own detriment. However, careful and thorough consideration is the best defense against misalignment and wasted resources and time.

Here are our top 10 suggestions to help you evaluate and prioritize tech trends effectively and more profitably:

- 1. Understand Business Objectives:** Start by identifying your business objectives and strategic priorities. Are you focusing on enhancing the customer experience, improving operational efficiency, increasing sales, or entering new markets? Align your research with your long-term objectives to focus your efforts and ensure alignment from day one.
- 2. Assess Your Customer's Expectations:** Consumer behavior can vastly differ from business to business. By defining an ideal consumer persona—complete with the technology they likely use, their outside interests, and preferred customer journeys—you are more likely to meet the needs of your consumers. Otherwise, you may develop a solution that isn't useful for your audience. Monitor competitors and industry leaders to understand which technologies are gaining traction and meeting customer expectations.
- 3. Evaluate Potential Impact and Benefits:** Assess each initiative's potential impact on your business. Consider factors such as the effort required to implement, compatibility with your [integrated ecommerce tech stack](#), improvement to brand perception, and expected increase in revenue/reduction in expenses. Starting with projects with a short implementation timeline and a high likelihood of increasing income is an easy way to test your organization's readiness for larger, more complex projects.
- 4. Consider Resource Allocation and Budget:** Consider and evaluate your team's ability to take on new tasks and projects, their expertise and skills that might be required, and timelines to determine if it is feasible to implement within your current resources and bandwidth. Balance short-term ROI with long-term strategic benefits and morale benefits to your team.

BONUS TIP: When budgeting for the year, consider setting aside 5-10% of your budget for new projects and innovation that is unallocated to a specific project. This way, you will have the [working capital](#) to use midyear and will not be forced to go over budget or wait until the next budget cycle.

- 5. Prioritize Based on Urgency and Timing:** Some trends may require immediate attention due to market demands or regulatory changes, while others can be phased in over time as part of a strategic roadmap. Others may be such a quick-passing trend that it does not make sense to consider them.
- 6. Assess Risks and Challenges:** Evaluate potential risks, challenges, and barriers associated with each project. Implementing [new solutions in advance of a peak season](#) or revenue period is only advisable if it is essential to ensure stability, regulatory compliance, or required security patches.
- 7. Seek Stakeholder Input and Expert Advice:** Gather diverse perspectives and insights and engage stakeholders across IT, marketing, operations, and customer service departments. Consult with industry experts, advisors, or technology partners to validate your decisions and determine a go-forward strategy. Business engagement and adoption are often the most essential determining factors of long-term success.

BONUS TIP: Engage team members early in the research phase. Check in frequently and schedule monthly or quarterly feedback sessions where everyone presents what they're seeing that is interesting and could impact the business. Broader engagement will allow you to identify overlapping trends and interests while increasing buy-in and reducing the time/effort you need to spend researching.

- 8. Monitor Emerging Technologies:** Stay proactive in monitoring emerging technologies and innovations. Attend industry conferences, participate in webinars, and engage with tech communities to stay informed about upcoming trends that could impact your business.
- 9. Pilot and Test Innovations:** Consider piloting or “beta testing” new technologies on a smaller scale before full implementation. This approach allows you to evaluate broader feasibility, measure performance metrics, and gather real-world customer feedback before fully committing to a larger, often more expensive project.
- 10. Iterate and Adapt:** Technology evolves rapidly, so be prepared to iterate and adapt your priorities based on market dynamics, customer feedback, and the success of implemented technologies. Maintain flexibility to pivot strategies as needed to stay competitive and on-trend.



The #1 Trend We Can't Stop Seeing: AI

AI is a hot topic. You may be wondering,
“is it right for my business?”

Almost every business publication discusses AI and its impact on various tasks, people, and investments. Combined with machine learning (ML), AI technologies enable businesses to personalize customer experiences, improve product recommendations, optimize pricing strategies, and automate customer support through chatbots. AI-powered analytics also help forecast demand, optimize inventory management, and detect fraud. That is just the beginning of where you could apply AI/ML.

While still in its infancy, the ability to find efficiency through the adoption of AI—especially generative AI—is unquestionable. What is in question is finding the right solutions for your business that will be a win for your organization rather than a distraction.

Here's a structured approach to start investigating AI:

Step 1: Identify Business Challenges and Goals

Identify specific challenges, problems, or opportunities where AI can add value. Impacts could include improving customer service, personalizing marketing campaigns, optimizing supply chain management, or enhancing product recommendations. The options are endless, but starting small is often advisable. Here are some thought starters:

- Personalized product recommendations based on customer behavior
- Chatbots for customer service and support
- Predictive analytics for demand forecasting and inventory management
- Fraud detection and cybersecurity
- Image and video analysis for visual search and content moderation
- Email and marketing personalization

Step 2: Educate Yourself on AI Basics

Familiarize yourself with the basics of AI and its applications. AI can do a lot, but it can only solve some issues. Also, its effectiveness is limited and associated with risks. Understand different AI techniques such as ML, natural language processing (NLP), computer vision, and predictive analytics. Resources like online courses, webinars, and AI introductory books can be helpful; Coursera, LinkedIn Learning, and local universities and colleges are good places to start.

Step 3: Industry Research and Case Studies

Research how your competitors use AI. Look for case studies, whitepapers, and articles that showcase successful AI implementations and their tangible impact on business outcomes. Reach out to the people quoted in the articles to determine if you can get a behind-the-scenes perspective on the content.

Step 4: Engage with Solution Providers

Explore solution providers and vendors specializing in AI. Schedule demos, attend webinars, and engage in discussions to understand their capabilities, solutions, and how they can address your business needs. They are often willing to share insights to promote their current business offerings.

Step 5: Look for Solutions with Existing Partners

Many solution providers—including Extensiv—are working on enhancing their service offerings with AI capabilities. Although these may come at an additional cost, the implementation is often easier and faster and addresses predefined needs that likely already exist for your business.

Step 6: Assess Data Readiness and Infrastructure

Evaluate your company's data readiness and infrastructure capabilities to support this innovation. AI relies heavily on data quality, quantity, and accessibility—and not just future data collection but historical data as well to train and customize your system. Starting with an [automated inventory management solution](#) like Extensiv's software goes a long way to getting you ready to adopt AI. Ensure you have access to relevant data sources, know how accurate they are, and consider data governance and security implications. The ability to share data between systems on time can also be critical to the ongoing success past a launch.



Step 7: Start Small with Pilot Projects

To de-risk projects, test concepts in a controlled environment. Begin with limited-scope pilot projects or proofs of concept with an internal audience on test environments to limit the risk potential. Select a specific use case or business process to pilot AI implementation, measure outcomes, and assess feasibility before scaling.

Step 8: Monitor ROI and Performance Metrics

Establish [key performance indicators \(KPIs\)](#) and metrics to measure the success and impact of AI initiatives on your ecommerce business. Monitor ROI, customer satisfaction, operational efficiency gains, and other relevant metrics to evaluate the effectiveness of AI investments.

AI technologies are just in their infancy right now. It is entirely acceptable to put off taking the plunge while this technology finds its footing. Ensuring you continuously educate yourself and those in your business, whether you decide to take on a new project now or later, will help you keep abreast of changes and limit the risk of being left behind.



4 Other Key Trends to Know About Now

The number of options and trends are endless.

To make things simple, we identified the 4 trends we believe you should know about now and consider investigating in the future:

1. Voice Commerce and Conversational Commerce

Voice-activated assistants (e.g., Amazon Alexa, Google Assistant) and chatbots are transforming the digital experience by allowing customers to shop using natural language and voice commands. This trend simplifies the buying process, provides a more personalized shopping experience, and feels more like shopping with a sales associate. Look to global emerging markets to see this in practice already.

TOP BENEFITS:

- Increased customer convenience
- Higher engagement through conversational interfaces
- The potential for new customer acquisition channels
- Long-term connections with consumers

2. Augmented Reality and Virtual Reality

Augmented Reality (AR) and Virtual Reality (VR) technologies are revolutionizing the way customers experience products online. By enabling virtual try-ons, 3D product visualizations, and immersive shopping experiences like [metaverse ecommerce](#), retailers and brands can reduce return rates and enhance customer confidence in purchasing decisions.

TOP BENEFITS:

- Improved customer engagement
- Reduced return rates
- Ability to show products in context to give a better perception of size and shape

3. Mobile Commerce and Progressive Web Apps

Smartphones account for over 50% of many ecommerce sellers' web traffic. As a result, optimizing your online presence and storefronts for mobile devices is essential. A responsive website certainly helps improve the shopping experience for [mobile commerce](#) (also called m-commerce) while also supporting SEO efforts—unlike building a dedicated mobile website. Progressive Web Apps (PWAs) offer app-like experiences on mobile browsers, improving loading speeds and user experience. When complemented by a bookmark icon, it has many of the benefits of an app without the additional channel to manage and maintain.

TOP BENEFITS:

- Expanded reach through mobile channels
- Higher conversion rates on mobile devices
- Improved user retention

4. Factory Direct Selling and Dropshipping

Using AI to create virtual photography makes it possible to sell inventory even before it exists, directly from the factory where it is made or from a wholesaler. This practice often allows businesses to be more aggressive with initial pricing, enable individually customized products, and expand their product offering. Examples of this are Shein and Temu, where products may take longer to be received by the customer in exchange for reduced pricing.

TOP BENEFITS:

- Limits excess stock
- Reduces markdowns
- Eliminates the need to invest in inventory



Next Steps & Looking Ahead to 2025

While we can only imagine what ecommerce technology trends will emerge in 2025, one thing is certain:

Sleeping on this year's trends will only put you behind in the long run.

By investigating these trends and following the steps above, you should have a solid foundation to guide your decision-making process and have a better chance of succeeding at implementing projects big and small. Remember to prioritize projects relevant to your business and its customers, not just what seems to be on trend. What is suitable for the general market may be wrong for your brand or company.

But most importantly, don't forget that you aren't alone on this journey. Running an ecommerce business is difficult enough... The rapid pace of technological innovation and never-ending stream of new trends added on top of the daily grind can make anyone feel overwhelmed.

That's why Extensiv came to be: to take some of the complexity out of your day-to-day tasks.

We believe that the creators, the builders, and the designers of the world deserve to have access to the simplest and most efficient systems to run their business. We knew there could be a better way—**so we created it.**

Interested in learning how Extensiv can de-stress your ecommerce operations and help you adopt the latest ecommerce technology trends like AI?

Request a demo of our comprehensive, intelligent [solutions for brands](#) today!

For those of you that operate your own warehouses, be sure to check out our recent guide: [Top Warehouse Technology Trends for 2024](#).