The ecommerce playbook: **Turbocharge your tech stack for conversions**

Your guide to a value-driven ecommerce tech stack that delights, converts, and encourages repeat customers.





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Introduction

Whether starting out, scaling, or streamlining your operations, your ecommerce technology stack (tech stack) plays several critical roles.

- **First**, the right mix of tech can ensure the reliability and stability of your online store.
- Second, it can do the heavy lifting and reduce manual processes.
- Third, it can significantly enhance the online journey—and create shopping experiences that will outlast any short-term challenges in the online retail industry.

This playbook touches on all three aspects and more deeply explores how an optimized ecommerce tech stack can lift the shopping experience to engage, convert, and retain more customers.

Your giant leap starts with a tech stack audit

Start with one small step to make a giant leap forward with the online shopping experience; a tech stack audit.

If you're in the early stages of building your online brand, use this step to identify the ideal tech stack for future growth.

If you've been in the game for a while, take this opportunity to review your technology components and whether they're optimized for your needs.

It's easy to make the mistake of building or auditing your tech stack from the perspective of what makes things easy and cost-effective for your business. However, to create a real point of difference from the competition, you also need to think differently.

Turn the audit process around—and begin with your customer.

What does their shopping journey look like? What are their touchpoints with your brand? How are your ecommerce technology components improving (or hindering) the customer experience?



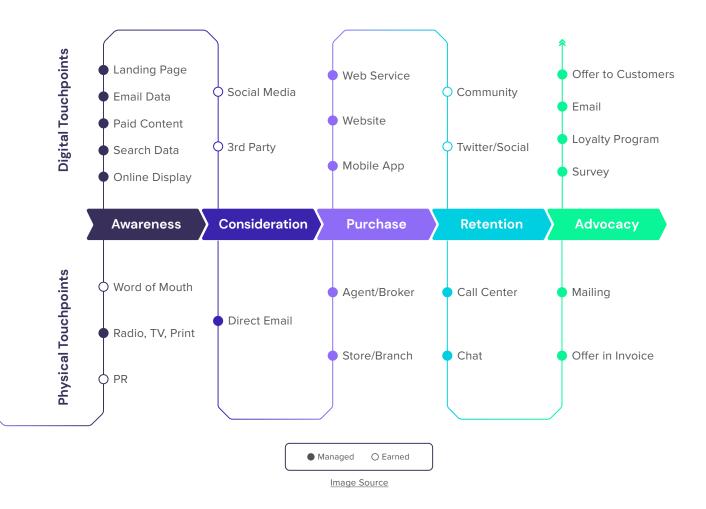
Of course, it's still important to know how applications or platforms affect internal operations. However, the ultimate goal is the positive impact on your customers.

Say you have a lean team that uses automated merchandising technology to spend less time manually merchandising.

What's the customer impact?

That team has more bandwidth to refine product selections and optimize campaigns and product display pages (PDPs), creating more engaging online shopping experiences. With a customer-centric mindset in place, **begin your audit by mapping out and documenting the following aspects of your tech stack:**

- A customer journey map (see below for an example) to define your shoppers' touchpoints with your brand
- A list of current technology applications, software, and platforms
- O Document which tech components enable or support each part of your customer journey map
- A diagram of integrations (current or desired) between applications and internal systems
- O Document which systems you'll rely on for measurement and analytics
- A list of any systems that overlap in functionality and may be consolidated at some point
- A list of systems that may need upgrades or changes in future



Mapping these points in detail can clarify which components provide the most (and least) value, possible consolidation opportunities, and how you can affect the online shopping experience.

Hosting your ecommerce store

Website hosting is like buying a block of land. Hosting services provide the space where your home (or online store) will live. So, it's critical to know you're on solid ground.

Hosting providers often throw a lot into the mix to differentiate their services. Easy WordPress setup, Google Workspace tools, included CDNs and domains are just some of the options you'll see on pricing pages. It's easy to get distracted when there's so much on offer. Here's what to focus on to ensure the best shopper experience.

Hosting type

Your website lives on your providers' servers, and you can choose to share that space with others or use a dedicated option—much like choosing an apartment or a house. The type of hosting solution can greatly impact the shopper experience in terms of performance and reliability. Here are the options to consider.

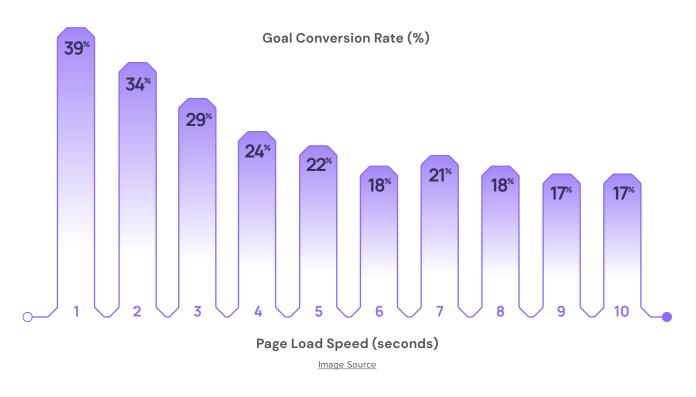
- Shared hosting is generally the least expensive and suitable for low-traffic sites. You're sharing the same server space as other companies here.
- Virtual private server (VPS) improve performance and add customization and configuration options to your hosting setup. Even though you're still on a shared physical server, you now have a dedicated virtual space on that server.
- Dedicated servers provide a separate, physical server just for your store. They're highly configurable and can offer excellent performance for high-traffic shops. However, they're also a more costly option.
- Cloud hosting is similar to a VPS solution. However, instead of having a dedicated space on a physical server, cloud hosting pools resources from multiple servers. This option can increase scalability and reduce downtime, as multiple servers work together to keep your site consistently resourced.

Guaranteed uptime

Site downtime can have a massive impact on revenue. If shoppers can't access your site, they can't make a purchase. While a 99.9% and 99% guarantee may not sound that far apart, there's actually a vast difference. An uptime of 99.9% equates to around 10 minutes of unavailability per week, whereas 99% comes out at about 1.68 hours per week.

Speed

The need for speed is real. A study by Portent shows that ecommerce sites loading in 1 second have a conversion rate 2.5x higher than sites that take 5 seconds. Additionally, an **analysis by Tooltester** of the top 100 web pages worldwide found the average load time is 2.5 seconds on desktop and 8.6 seconds on mobile. Pay particular attention to performance when looking at web hosting comparisons, such as this one by **WPShout**.



Storage and bandwidth

Some providers limit the number of concurrent shoppers who can access your site at one time or the amount of data that can be transferred between your site and its shoppers over a defined period. Look closely at options to scale as traffic increases and how your hosting plan can handle sudden influxes, such as peak sales periods.

Security

Many hosting providers have built-in security features to keep your ecommerce site safe from cyberattacks. Look for features such as web application firewall, malware scanning, DDoS protection, and Payment Card Industry (PCI) compliance.

The experiential perspective of ecommerce platforms

An ecommerce platform is the virtual engine that powers an online store. Think of it like the electricity provider for the ecommerce home you've built. **Shopify**, **BigCommerce**, **Shopware**, and **Adobe Commerce** are a few of the well-known platforms. While some platforms focus on ease of setup and operation, some allow deep customization, while others still have a rich ecosystem of third-party application direct integrations. As a result, the shopper experience with your online store can vary depending on the platform—so whether starting out or thinking about re-platforming, carefully consider the features they offer and what makes the most sense from an experiential perspective.

ERP, CRM, and inventory management systems

Enterprise Resources Planning (ERP), Customer Relationship Management (CRM), and inventory management systems organize and connect business information.

While ERP is an all-inclusive application that manages everything from invoicing to inventory, CRM focuses more on customer relationships and inventory management on the physical stock aspect.

Rather than relying on spreadsheets, documents, and emails, these systems combine data in the back end to drive benefits to customers on the front end. For example, an inventory management system integrated with your online store can deliver real-time stock availability.

Ease of use can be a determining factor when deciding on a suitable system or combination of systems to implement. For more information, see the detailed article from All My Systems highlighting the main differences between ERP and CRM.

Navigating the product data jungle



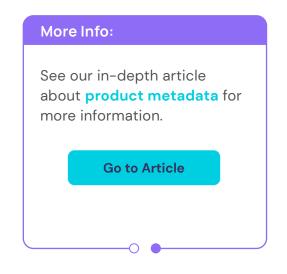
Product data speaks volumes about your brand. It can be a clear indicator to shoppers of how you value their time and their business. Are you making it easy for shoppers to find what they need with well-structured, properly maintained product data? Or are you leaving them to navigate through a jungle of data?

Product metadata management

Metadata communicates and clarifies website information for search engines. For PDPs, product meta descriptions can attract the interest of shoppers searching the web for products when they contain engaging, relevant information about the item.

The stronger your product metadata, the more likely you are to increase traffic from organic sources and encourage shoppers to click through to your site. It's essential to optimize product metadata with well-written product descriptions, inclusion of long-tail keywords, and SERP-friendly display.

Product information and data feed tools



Ecommerce managers and teams know the challenge of maintaining stock keeping units (SKUs) and associated information. Manual management of pricing, product descriptions, universal product codes (UPCs), and a plethora of technical, marketing, and sales information would be overwhelming, to say the least. That complexity is precisely why product information management (PIM) systems exist.

A PIM system allows you to store, enrich and manage complex product information. An effective PIM solution brings together data from various sources, such as supplier data, ERP systems, CRM, and more, to update, enrich, and properly communicate your products' attributes on your online store.

A product data feed, on the other hand, expands the reach of your products. It takes your product data and makes it accessible to other systems, including marketplaces, search engines, and social commerce platforms.

Product data feed solutions use a structured file, such as a CSV, TXT, XML, or JSON file, containing all that wonderfully detailed information about the items you sell. Take a moment to think about how important aspects such as material or fabric, style, color, imagery, category, RRP, and more are to your shopper when they see your items on a marketplace, search engine, or social commerce platform. These feeds provide that data to other systems so they can display your product listings correctly and completely.

With the right data managed behind the scenes and displayed correctly across multiple online channels, you can help shoppers connect with the products they need—and purchase with confidence.

When reviewing PIM solutions, look for tools that incorporate workflows to eliminate manual tasks and product lifecycle management to easily know when products are ready to be featured on your ecommerce store.

For product data feed solutions, pay attention to those that can check your product data quality, provide product performance metrics across multiple channels, and take a test-and-prove approach to optimizing your product data feeds. **Intelligent Reach** includes A/B testing, performance metrics analysis, and smart rules to optimize product data feeds with advanced machine learning suggestions.

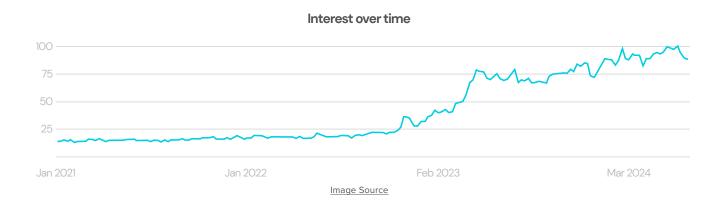
Intelligent Reach

Discover the Intelligent Reach data feed optimization and marketplace solution.



Behind every clever Al solution is a brilliant team of experts

It's no secret that AI has been the buzzword of the last couple of years— but a picture tells a thousand words, as they say. One look at Google Trends reveals the explosion of interest in AI from July 2021–June 2024.



The knock-on effect is that tech companies everywhere have scrambled to release new Al solutions and incorporate Al into their existing solutions. The sheer number of Al-labeled solutions creates a challenging task for any ecommerce manager, director, or decision-maker to sift through those with value-focused Al strategies and others jumping on the bandwagon.

How can you separate the contenders from the pretenders?

Shortlist the technology providers investing in their people as well as their products. You may have heard the saying, "Behind every great man, there is a great woman," but a new one may emerge for this decade: "Behind every clever AI solution is a brilliant team of experts."

How AI tools are trained, tested, and tweaked makes a night-and-day difference to the outputs produced. From a more strategic level, the human component is absolutely vital to effectively map out the practical applications, future roadmaps, and value opportunities of AI solutions.

Before jumping aboard the AI train, pay close attention to the human touch that makes that solution a bullet train—rather than a locomotive.

5 questions to ask an Al ecommerce solution provider



With the human element in mind and a shortlist of AI solutions that can boost the performance of your ecommerce store, it's time to get down to the nitty-gritty.

Here are the 5 big questions to ask Al-driven ecommerce solution providers.

1. How well does it understand shoppers' intent?

While some shoppers are on your site to browse, others already know what they want—and want the quickest path to purchase. Natural language processing (NLP) enables AI applications to understand and speak to humans using real-world language.

For example, when asking a generative AI application to create an image of "a spring shower," you wouldn't expect to see flowers streaming into a bathtub. Even though the literal meaning is closer to "raining in the springtime," NLP enables AI models to understand the true meaning and return a relevant result. The same applies to shoppers when they might be searching for a "baseball hat" rather than a "baseball cap." Look for proven examples of how well a solution understands your shoppers' intent.

2. How easily is it implemented?

It's essential to factor in the time and effort needed to implement an AI ecommerce solution. Does it already have a direct integration, i.e. a native app, with popular ecommerce platforms such as Shopify or BigCommerce? Or will you need your own technical resources to set up additional platform connections?

3. How scalable is the solution?

Some AI ecommerce solutions emphasize their relatively low starting prices. However, the devil is in the details. Pay close attention to—and ask providers—about query-based restrictions, such as limits on impressions or search requests that may create roadblocks as your store grows.

4. What is the breadth of the included AI capabilities?

Does the solution go beyond the basics of Al-based search, browse, and merchandising? If a provider is limited in functionality, it may mean bringing additional applications into the mix to bridge the gap.

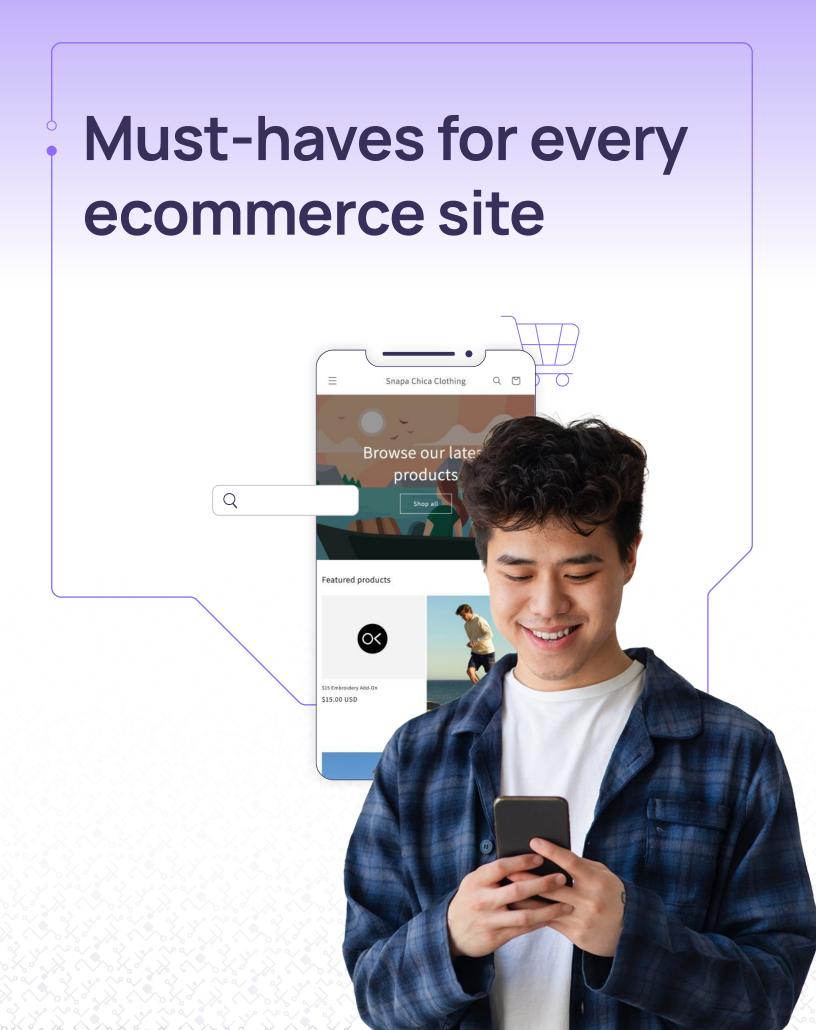
Consider the value of gaining additional functionality such as personalized product recommendations, product boost rules, automated product bundling, post-purchase email recommendations, and more. Ask the provider how much of the product discovery experience they actually handle, and look for full-featured AI ecommerce platforms that bring the most bang-for-buck.

5. What outcomes have other customers already realized?

There's no better proof of a solution than its real-world impact on those who have come before you. Ask for case studies showing measurable conversion, AOV, time savings, and revenue improvements.

The Searchspring team has partnered with a wide range of successful ecommerce brands and is proud to let them tell our story. Take a look at the gains Searchspring customers have made with our award-winning AI Product Discovery Platform.





The experiential benefits of mobile apps

To app or not to app? That is the question many retailers are asking themselves. As reported by **Business of Apps**, mobile ecommerce revenue reached US\$3.88 trillion in 2023, accounting for more than half of total ecommerce sales. Around US\$550 billion of that is attributable to mobile apps.

Interestingly, the Asia-Pacific region leads the charge of global app downloads by region, at over 57%. The US & Canada come in at around 11%, with Europe at about 7%. These figures suggest significant untapped potential for US and UK retailers, in particular.

Deploying an ecommerce app is simpler and less time-consuming than it was several years ago. The continued development of progressive web apps (PWAs) and platforms that manage the site-to-app process have created shortcuts for retailers to reach and retain more customers with engaging mobile app experiences. However, it still requires resource investment.

That investment is well worth the experiential benefits customers receive in gaining either a dedicated app or a PWA with mobile home-screen installation, push notifications, and geolocation information that brands can use to deliver more relevant and timely content.

Technology providers such as **Tapcart** and **Plobal Apps** offer innovative mobile app solutions that create memorable shopping experiences.

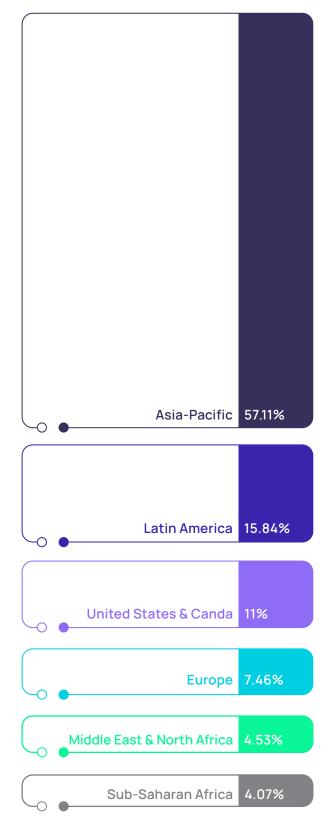


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On-site product discovery tools

What happens on-site can have a profound impact on conversion, average order value (AOV), and customer lifetime value (CLV).

Consider tools such as:

- Al-powered search that helps shoppers find what they're looking for and get to the checkout faster.
- Merchandising that can do the heavy lifting and automate the process of keeping campaign and collection pages looking fresh and relevant.
- **Personalized product recommendations** to show shoppers new and complementary products they'll love based on observed shopping behaviors.
- Product bundling to encourage shoppers to add related and complementary items to cart. See our in-depth article on why product bundling works: connecting psychology with sales.

With market-leading technology that personalizes every shopping experience to drive higher conversion, AOV, and CLV, the Searchspring Discovery Engine is the perfect place to start. Of course, we would say this as we believe whole-heartedly in our AI-powered search, merchandising, personalization, and product bundling solutions, powered by an intelligent team of ecommerce experts.

But don't just take our word for it.

Hear from our customers and the outcomes they've achieved.



Flexible, region-specific payment options

According to Linnworks, 89% of shoppers say flexible ecommerce payment options make buying decisions faster and easier. The same number also say they're more likely to make larger purchases when offered flexible payment types.

Online retailers must consider the range of payment options now available to online shoppers, such as digital wallets, credit and debit cards, account to account (A2A), and buy now pay later (BNPL), and offer payment types that are most relevant to their shoppers.

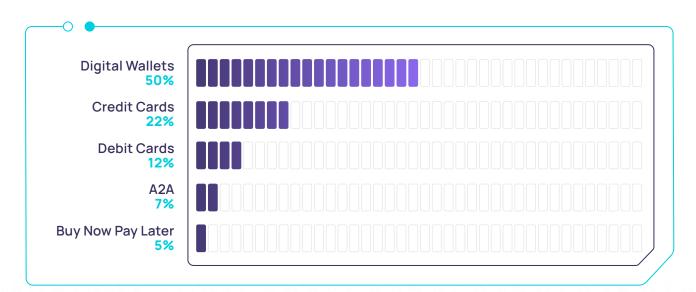
Worldpay reveals in their **Global Ecommerce Payments Report** that 50% of consumers want to use a digital wallet, followed by 22% for credit cards, 12% for debit cards, and 5% for BNPL.

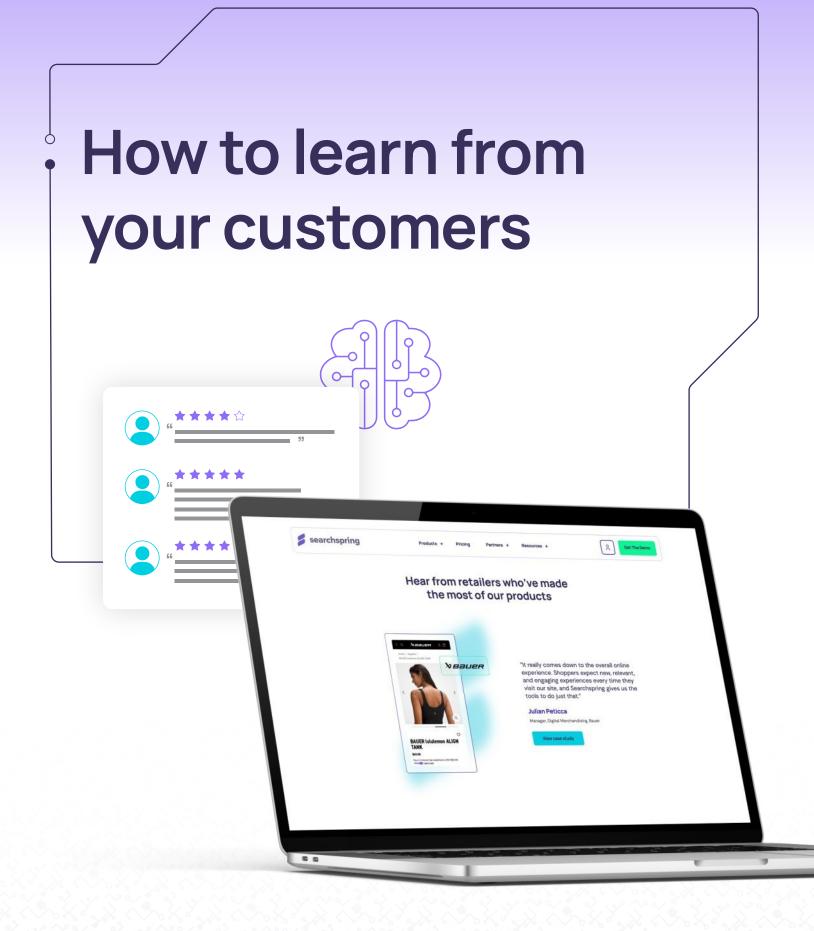
The Global Payment Report shows that 50% of shoppers now prefer to use digital wallets, such as Google Pay, Apple Pay, and Samsung Pay. 22% lean towards credit cards, 12% debit cards, 7% A2A, and 5% BNPL. However, there are significant variances by region.

Pay close attention to your customers' familiarity with payment options. For example, AliPay and WeChat in China, Paytm in India, and Samsung Pay in South Korea would make a lot of sense. On the other hand, Australians are more familiar with BNPL options, the English prefer digital wallets, and credit cards still get a heavy workout in North America.

Review payment solutions for your ecommerce store that build trust through familiarity and create seamless experiences during checkout. Technologies like **Stripe** and **Klarna** can help optimize checkout completion, increase authorization rates, and give shoppers the flexibility they want at this critical conversion point.

Additionally, solutions like **Avalara** help retailers more effectively manage sales taxes, tariffs, and duties, and stay compliant with tax regulations when selling in the US and across the globe.





Integrating the customer service experience

An ecommerce customer service platform can help you respond to customer queries and proactively provide a higher level of service. Many platforms are now leveraging AI capabilities to provide more helpful answers via chatbots, provide answers to common questions, and more effectively route support tickets to the most appropriate human operators.

It's also vital to think about the channels you'll need to support, for example, email, online chat, messaging from social networks, etc. How easily does your desired customer service platform integrate with these channels? Additionally, look at other features or integrations in the platform's roadmap that may help you scale as your brand continues to grow.

Consider how a customer experience platform will impact the experience of your customers while browsing, shopping, and during the post-purchase phase. For example, the **Gorgias** customer experience platform enables brands to tailoring chatbots with Al-powered responses while incorporating logical human handover points. Faster answers and human intelligence problem-solving, when needed, can drive a more well-rounded impression of customer service.

Centralization of data for customer service teams also boosts efficiency and increases the quality of responses. By consolidating information such as recent orders, communications over multiple channels, related issues, teams can leverage powerful customer service dashboards to serve customers faster and more effectively.

Tracking behaviors and expanding reach

BCG analysis has found that redirecting just 25% of spending on mass promotions to personalized offers can increase return on investment (ROI) by 200%. However, to accurately personalize ads, you need to go beyond your shoppers' interactions with advertising and social platforms.

What shoppers do on-site can reveal their preferences, motivations, and purchase intent. That information can also be used to better understand your ideal customers and more effectively target shoppers who aren't yet aware of your brand.

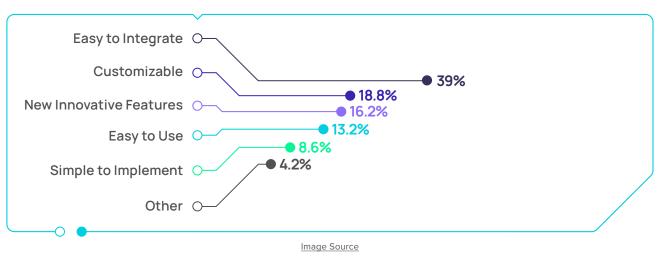
Elevar is an example of a solution that converts shoppers' on-site behaviors into tracking code that can more effectively match clicks to conversions and enable advertising platforms to continually optimize ad performance.

Loyalty and rewards that drive customer lifetime value

Loyalty and rewards programs can encourage higher-order frequency and CLV while creating a more engaging brand experience for customers. The Antavo Global Customer Loyalty Report reveals that members who redeem rewards spend 3.1x more with a brand versus non-redeemers.

When choosing the tech to support your loyalty and rewards program, look for technology providers that have clearly defined APIs for straight-forward integration, easy loyalty program management, and in-depth documentation to support the integration process.

Want to know what other online retailers focus on when selecting a loyalty and rewards tech platform? Here are the top reasons, as per Antavo's report data.



Benefits of a loyalty program

Also, think about how technology can help you encourage loyalty program sign-ups with personalized loyalty pages, tiered programs, gamification, and multiple perks and ways to spend rewards points. Check out **LoyaltyLion**, **Yotpo**, and **Stamped** for more ideas.

Thoroughly review your customer reviews options

Customer reviews provide powerful social proof, create trust in your brand, and encourage shoppers to make purchase decisions. The good news for online retailers is that **Gartner research** shows that 85% of consumers trust online reviews as much as personal recommendations.

When managed correctly, your customers' reviews can also help other shoppers understand product suitability and make more informed purchase decisions.

Reviews tech platforms do the heavy lifting of collecting and displaying customer feedback, helping other customers make better purchase decisions. When deciding on a reviews platform, consider:

- The ease of data collection does the platform provider automated tools to
- Where reviews will be published, including on your site and in PDPs, on the providers' platform, and on other platforms, such as Google Reviews
- Additional ways reviews data is used, such as aggregation of review data into Google store ratings
- Customization of reviews email and SMS messages that collect reviews information from customers
- Content moderation tools to filter and prevent sensitive information or profanity from being displayed
- O Easy management of replies to reviewers
- Customization of reviews widgets that appear on your site to showcase your customer feedback in line with your branding

The platform you choose can also bring benefits beyond the review. Some solutions extend their platform functionality into additional types of user-generated content (UGC), surveys, quizzes, referrals, and more. Reviews solutions such as **Yotpo**, **Okendo**, **PowerReviews**, **Bazaarvoice**, **Reviews.io**, and **Trustpilot** can support your conversion and retention efforts.

Each step builds a strong foundation

As you'll have seen throughout the customer journey mapping process, the shopping experience can have several twists and turns.

Global and local economies have seen similar "winding pathways" over the last few years, impacted by significant shifts in how consumers live and work, supply chain issues, geopolitical tensions, and cost-of-living concerns.

Despite the bumpy ride for ecommerce merchants, they still have a great deal of control over their own destinies. Some have diversified supply chains to bolster their resilience. Some have taken a step back to deeply understand their customers' needs and pivoted product offerings accordingly. Others still have doubled-down on their key differentiator within a competitive landscape—the online experience.

The fortitude or fragility of a tech stack plays the leading part on the stage of the ecommerce experience. Get it right and you can expect a standing ovation from customers who will become loyal advocates. Miss the mark and you may start hearing the curtain call.

While there are many steps on the road to building a strong technology foundation, taking them one at a time with a considered, well-planned approach can put you leaps and bounds ahead. Focus on one component at a time when selecting or optimizing your tech stack—and apply a customer-centric mindset to stay focused on shopper value.

After all, a strong technology foundation for your online store will help you engage, convert, and retain more customers for years to come.

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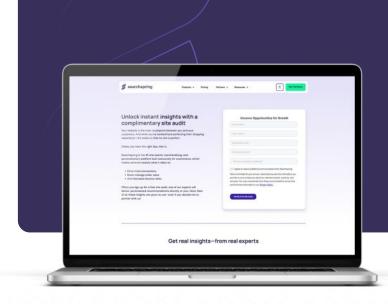
Searchspring is the #1 search, merchandising, and personalization platform built exclusively for ecommerce, enabling brands to get the right product, to the right person, at the right time.



With Seachspring's advanced features and intelligent automation, you can deliver the ultimate digital shopping experiences that turn browsers into buyers.

There are still more ways to increase conversion. To hear additional ideas, book your no-obligation chat with a trusted search, merchandising, personalization, and product bundling expert.

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