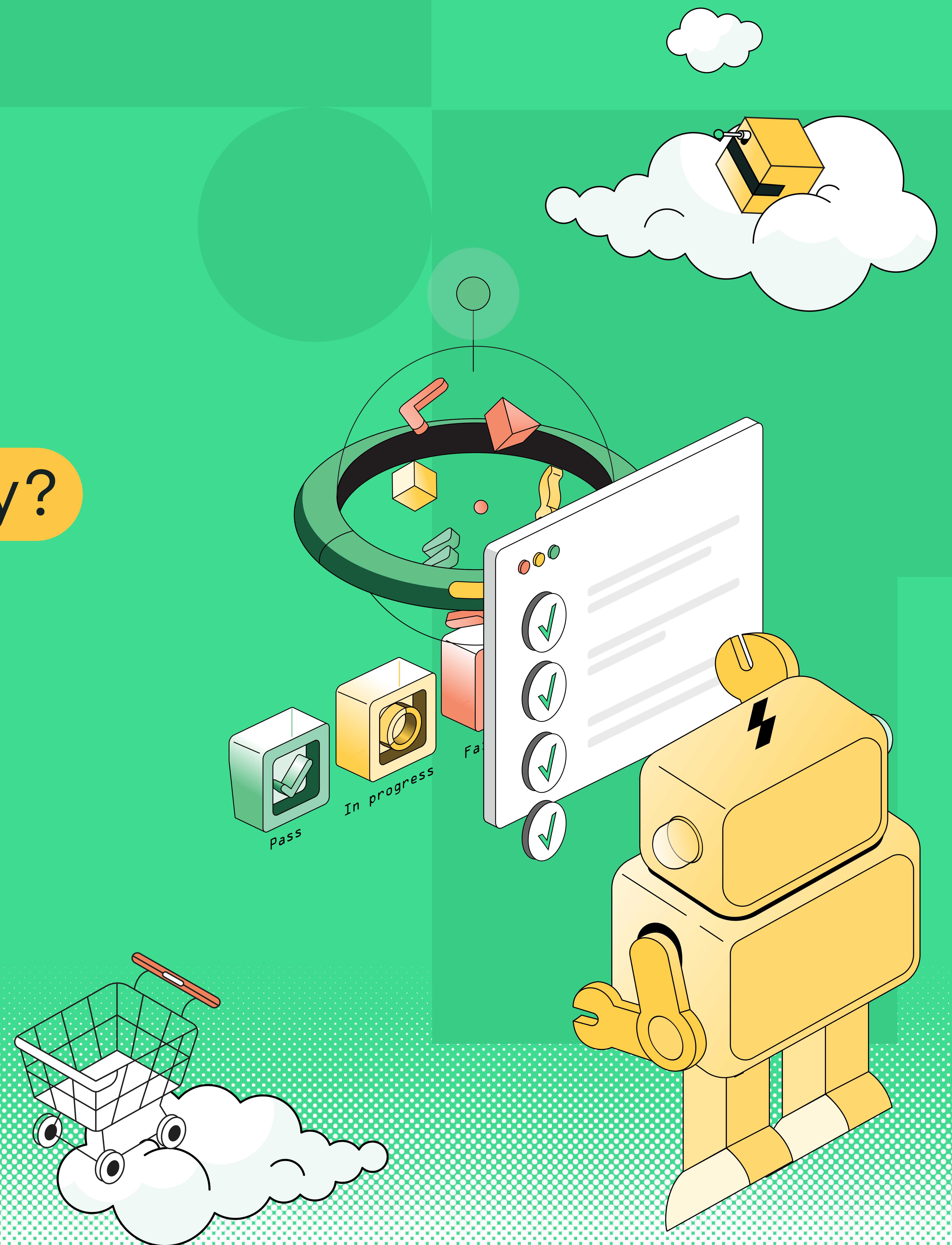


Is Your App Holiday Ready?

9 Ways to Deliver Flawless Software Just in Time for the Seasonal Rush



For many people, the holidays represent celebration, togetherness, and goodwill towards all. But for many organizations, the holidays represent something else: profit, growth, or sometimes even survival. That's because the holidays and other peak shopping events are often a make-or-break opportunity for many businesses as they see more transactions, new customers, and larger shopping carts.

While software quality is always important, it's critical during the holidays. Gone are the days of lining up at dawn on Black Friday; instead, your customers wake up and reach for their phones to search for gifts and great deals. If your mobile app is buggy or your website is inaccessible, their ability to buy—and your chance to make the sale—is at risk. In fact, 57% of people consider switching to a competitor after just 3-4 negative experiences with a site, software, or app, while 70% agree that poor digital experiences impact their purchasing decisions.¹

The bottom line: your customers expect **fast, seamless digital experiences** over the holidays, which means even the smallest software glitch or bug can lead to **lost revenue, unhappy customers, and damage to your brand**.

In this guide, we'll give you nine proven strategies for improving your software quality so you can deliver a winning customer experience during the holiday season and other high-traffic events.

65%

Businesses that say that holiday shopping directly impacts their overall financial health.²

\$1.35 trillion

Expected US retail sales for November and December 2024.³

¹ Sauce Labs, [Every Experience Counts](#). 2024.

² American Express, [New American Express Survey Shows 2 in 3 U.S. Small Businesses Say Holidays are Important for Their Business' Financial Health](#). 2023.

³ eMarketer, [US Holiday Shopping 2024](#). 2024



Define what high-quality software means to you

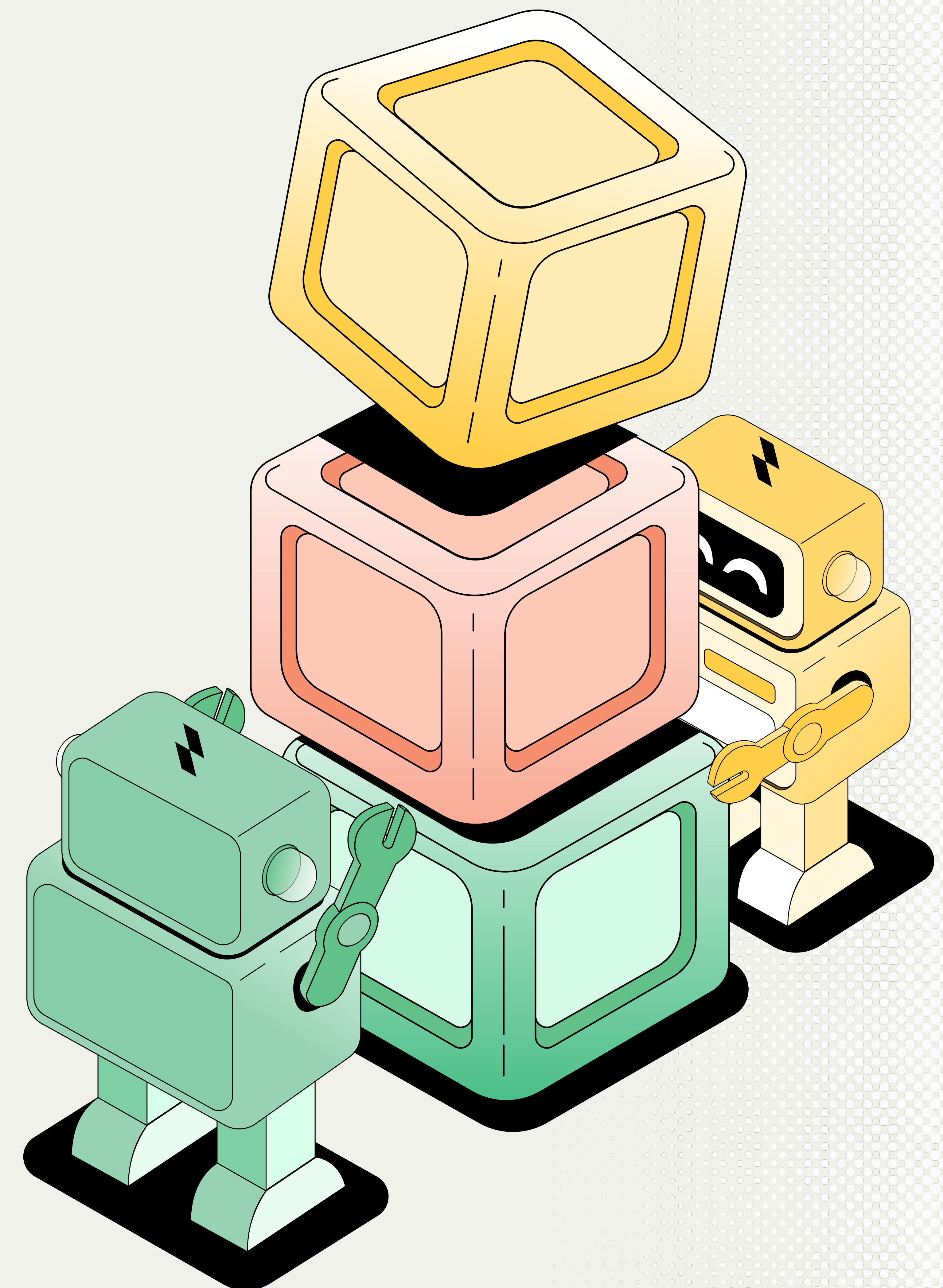
Just as each family has its own holiday traditions, different development teams may have different ideas when you tell them to focus on software quality.

Ideally, software quality means consistent reliability, high performance, seamless usability, and equal accessibility across devices, operating systems, and browsers. In short, an amazing user experience that encourages shoppers to click the buy button no matter what device they're using.

However, for some teams, limitations in bandwidth, timing, and resources mean software quality is defined as meeting the bare minimum requirements. For example, if you only test on the latest iPhone or version of Chrome, you'll likely catch many issues but miss just as many on other devices or browsers that could end up costing you significant revenue.

During the holidays, the minimum might not be enough. This is the time of year when every aspect of your digital experience will be under greater scrutiny by more customers. As a result, your definition should include a highly reliable digital experience that can handle traffic spikes without crashing or slowing down. In addition, critical revenue-driving functionalities like your search, checkout, and payments must work 100% of the time on every relevant browser and device. Finally, your digital experience must be high-performing and consistent across all devices, browsers, operating systems, and network conditions.

By setting expectations early, you can strategically leverage testing and debugging to ensure your development time leading into the holidays is focused on what matters most.



Measure your holiday readiness

If 'The Twelve Days of Christmas' has taught you anything, it's that the holidays are a numbers game.

The right KPIs can help you measure and improve your holiday readiness, especially as you begin to leverage some of the other strategies in this guide. Note that these aren't holiday-specific; you'll be able to use these to measure your readiness for other peak shopping times throughout the year, such as back-to-school shopping, summer vacation, major sporting events, or any other period where you might see a sharp increase in traffic.

While there are thousands of metrics you can track during the holidays, you'll want to focus on the three core KPI buckets that are most relevant to managing peak traffic spikes. You can then use a tool like Sauce Insights to analyze your KPIs so you can discover failure patterns, identify trends, and help determine where to focus your limited time and resources.

Peak Season KPIs



Performance metrics

KPIs like response times, server latency, error rates, and page load speed help you understand how your application will respond during Black Friday, Cyber Monday, and other high-traffic days.



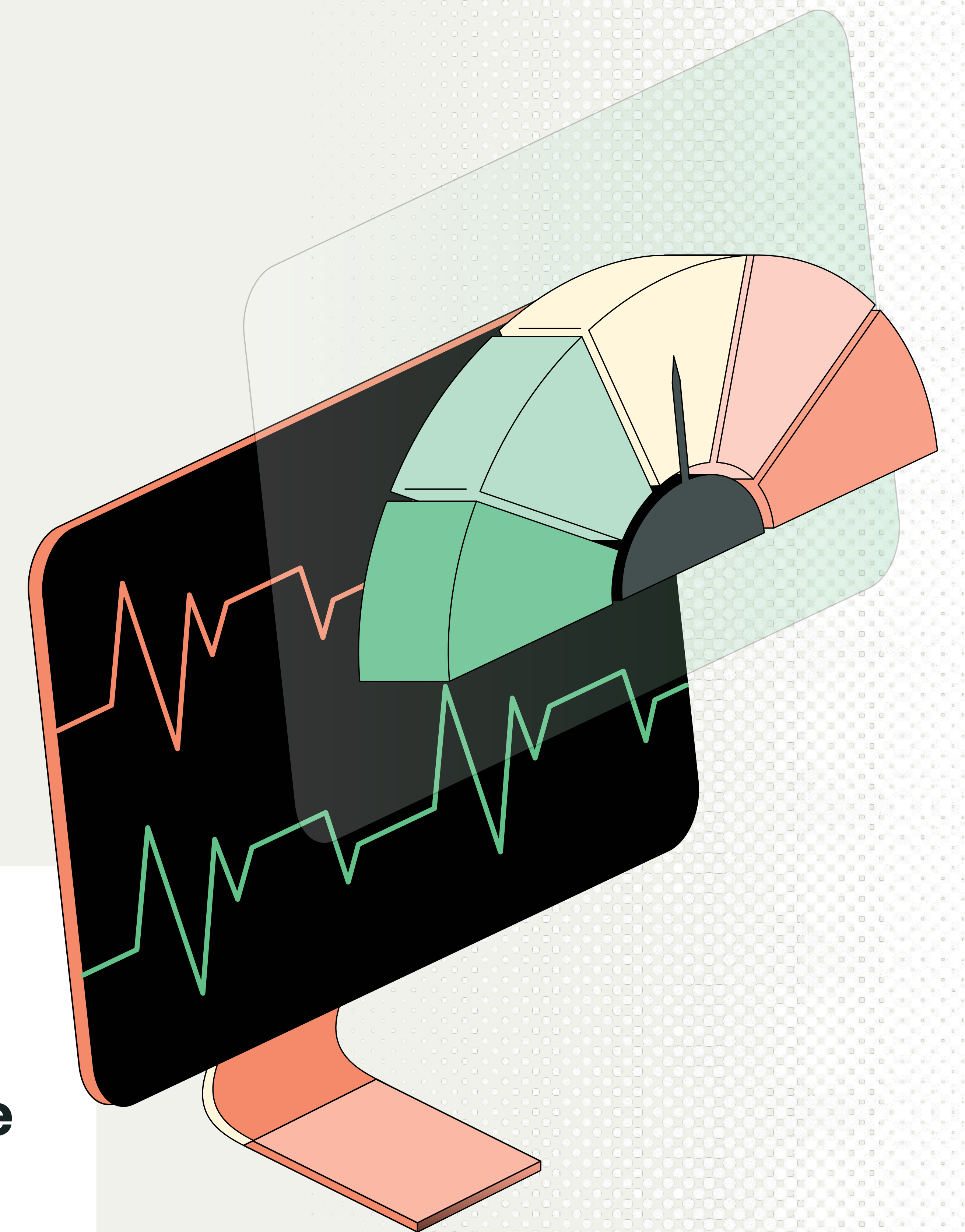
Stability metrics

KPIs like cross-platform coverage, bug resolution time, Mean Time to Resolution, and developer/QA sentiment help you discover how quickly your team is able to get your application back on track.



User experience metrics

KPIs like user engagement, session duration, bounce rates, and conversion rates help you identify any bottlenecks standing between your customers and their purchases.



Test all devices and browsers

You could create a pretty spectacular lighting display just with all the different device combinations you need to serve.

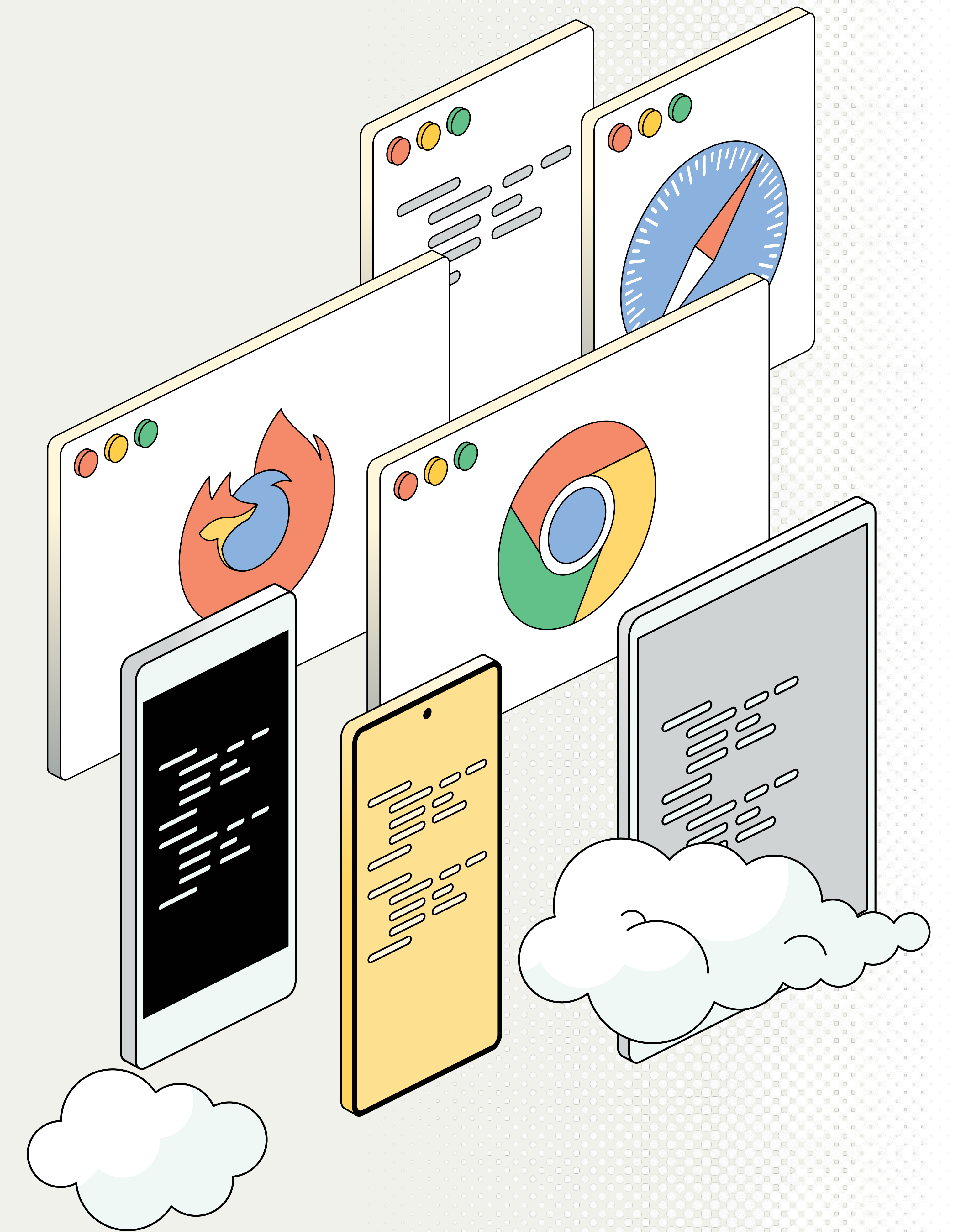
In fact, your overall customer base uses an average of 82 unique device/OS/browser combinations.⁴ This means you need to ensure full test coverage across all device types, browsers, and OS versions to catch unique compatibility issues for a specific combination before it impacts that subset of users.

Sauce Labs helps you reach every customer, no matter their device or browser, ensuring you deliver a winning user experience time and again. Access the widest and latest selection of device, browser, and OS configurations so you can achieve the extensive coverage needed for a wide range of shopper demographics accessing your site from various OS and browser versions.

Cross-browser testing with Sauce Labs enables coverage of 20% more device and OS combinations.⁵ Our cloud-based continuous testing platform allows you to run thousands of tests in parallel 24/7, significantly improving your engineering efficiency. Live testing and dev tools let you validate functionality and UX in real time, while integrated results let you share your test with other dev teams throughout CI/CD.

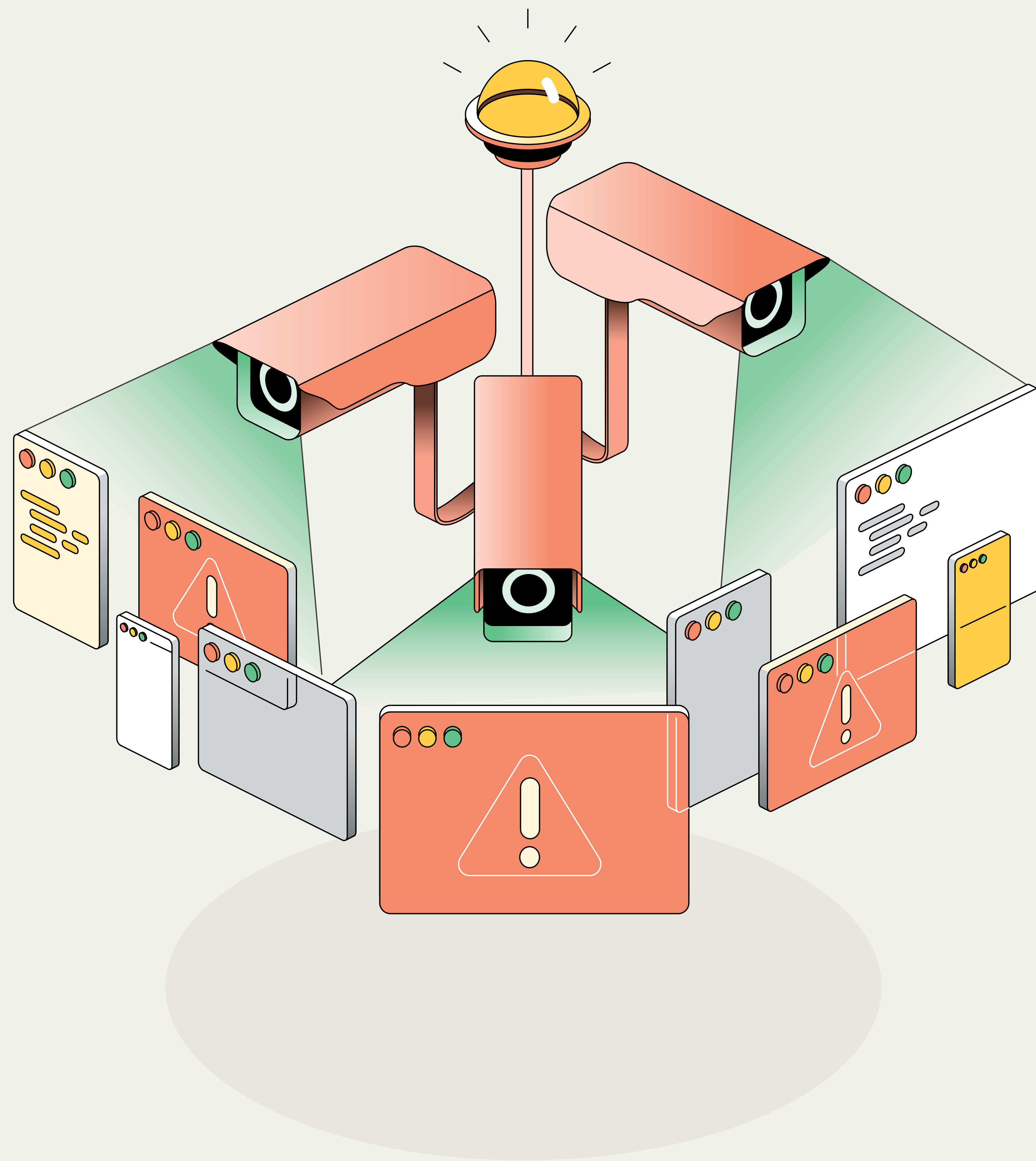
With automated cross-browser testing, you can find and solve issues that may be common across combinations or unique to less common devices or older browser versions that might still be used by different audience segments. It will also help you test against the latest device models and OS versions to ensure your application remains compatible with new hardware and software.

You may also discover that your specific shopper demographic favors specific devices, browsers, and operating systems; with this insight, you can tailor your testing to prioritize the UX for those combinations.



^{4,5} ESG, Economic Validation: Analyzing the Economic Benefits of Sauce Labs for Mobile Testing and TestOps, April 2023.





Incorporate real-time monitoring and diagnostics

Even good little girls and boys don't get everything on their wish list. It's the same thing with bugs. No matter how thoroughly you test your software, unexpected errors and glitches can still pop up over the high-traffic holiday season.

Real-time monitoring tools can give you instant feedback on things like performance, error rates, and downtime so you can take action faster. For example, Sauce Labs Error Reporting cuts resolution time in half by automatically monitoring and capturing process errors from panics, core dumps, minidumps, and during runtime across your stack with a single system.

This helps you get an early warning of what to remediate and in what order so you can fix bugs before they're ever noticed by your customers, reducing both your downtime and customer frustration.



Prepare a holiday season Quality Assurance (QA) checklist

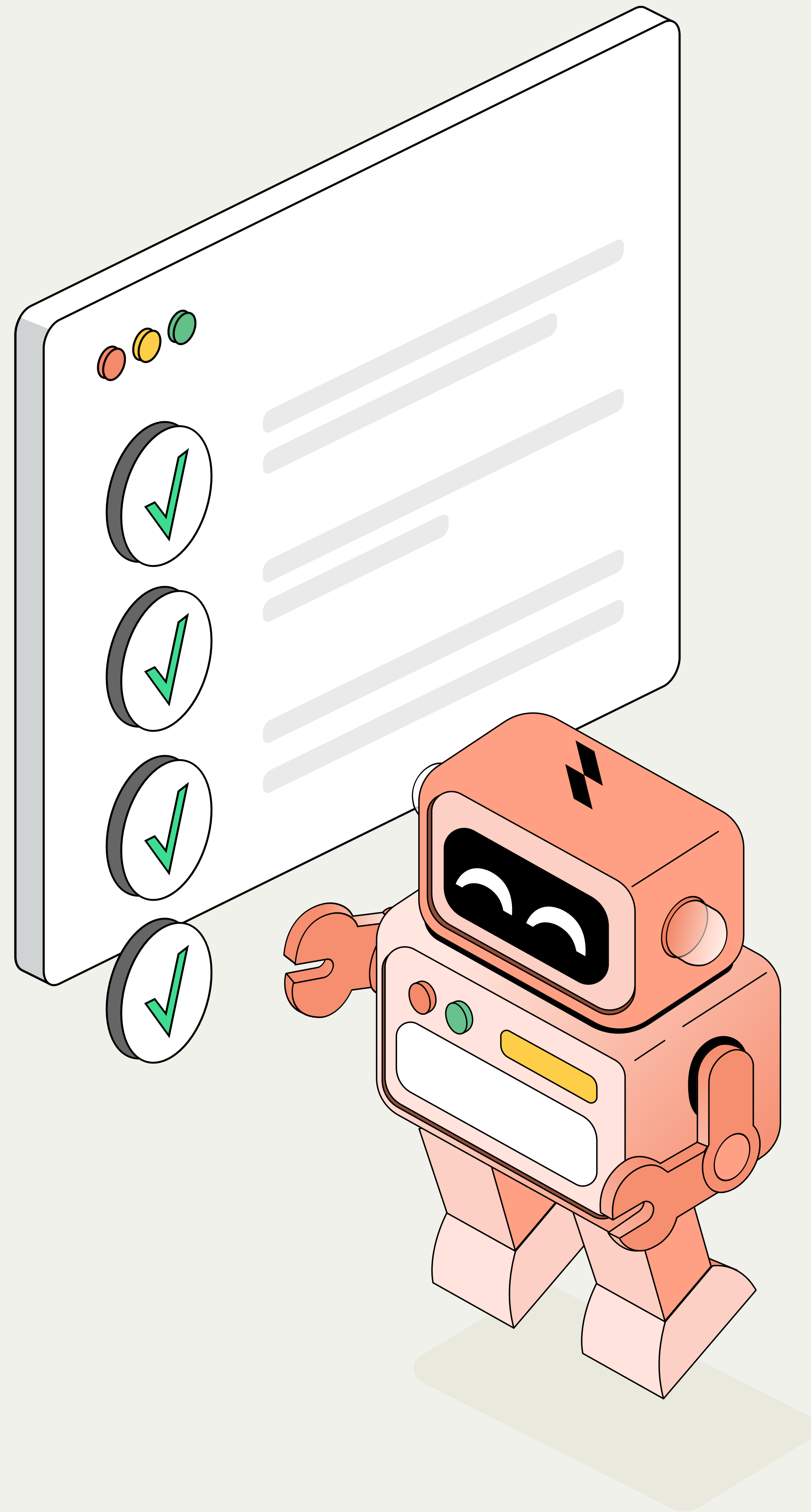
Imagine delivering billions of presents around the globe in a single night. That's why you should take it from the pro: there is enormous value in making a list and checking it twice. By creating a comprehensive holiday QA checklist, you can focus on the specific issues you need to prioritize during the season.

The checklist should cover the critical user journeys that will impact the customer experience, including:

- **Browsing:** Ensure users can easily navigate and explore products through filtering and sorting.
- **Search:** Test the search function for accuracy and speed to ensure the relevant results appear without delay.
- **Checkout:** The checkout process should be seamless, with no interruptions or issues like incorrect totals, promo code errors, or page timeouts.
- **Payment Processing:** Ensure your payment gateways work across all platforms and methods, such as credit cards, mobile payment options like Apple Pay and Google Pay, and multiple currencies if you sell internationally.

Each path should be tested for both functionality and performance, with a focus on identifying and proactively solving any underlying issues that may impact revenue.

Want to learn more? [Check out our list of top tips for more ways to elevate your testing strategy over the holidays.](#)



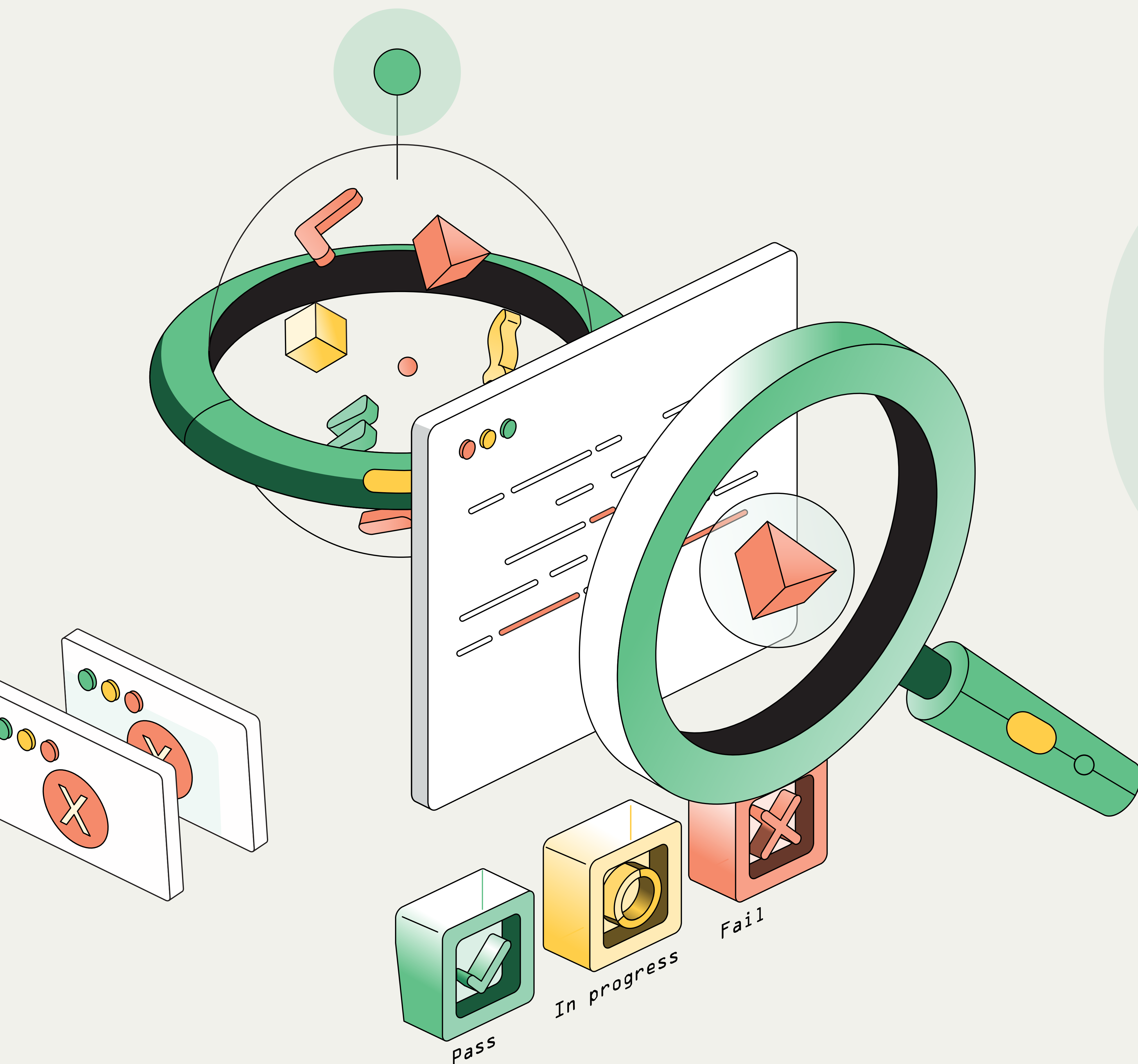
Benchmark against past holiday performance

The best way to avoid getting coal in your stocking two years in a row is to get on the nice list. That means now is the time to review your performance data from the last holiday season to avoid making the same mistakes.

Use your performance, stability, and user experience KPIs from last November and December to create a benchmark you can use to measure your efforts as you enter the holiday season. Benchmarking your progress specifically against the previous holiday season gives you an apples-to-apples comparison that can be more illuminating compared to using benchmark data from the rest of the year.

By measuring your performance on peak traffic days like Black Friday and Cyber Monday, you'll be able to make smarter decisions about where to focus your debugging efforts for the rest of the holiday season. You can also use this strategy to compare other peak shopping periods throughout the year for specific seasonal insight you can use to drive incremental improvement.





Make debugging a continuous activity

All the time and effort spent preparing for the holidays often comes down to one family gathering and 15 minutes of furious gift unwrapping. If only debugging were so simple.

The fact is debugging is a continuous activity, which means you need a continuous quality approach that integrates testing from the earliest development phase through post-production monitoring, enriched with in-app insights and real-time feedback. This allows you to catch bugs in the moment so you can accelerate your testing speed and error resolution. And by making testing easy, developers feel less stressed and more prepared to tackle any last-minute issues with confidence so revenue continues to come in.



Prioritize the bugs that most impact holiday sales

The question every kid asks on the big day: which present to open first? To ensure software quality, your team must ask a similar question: which bug to fix first?

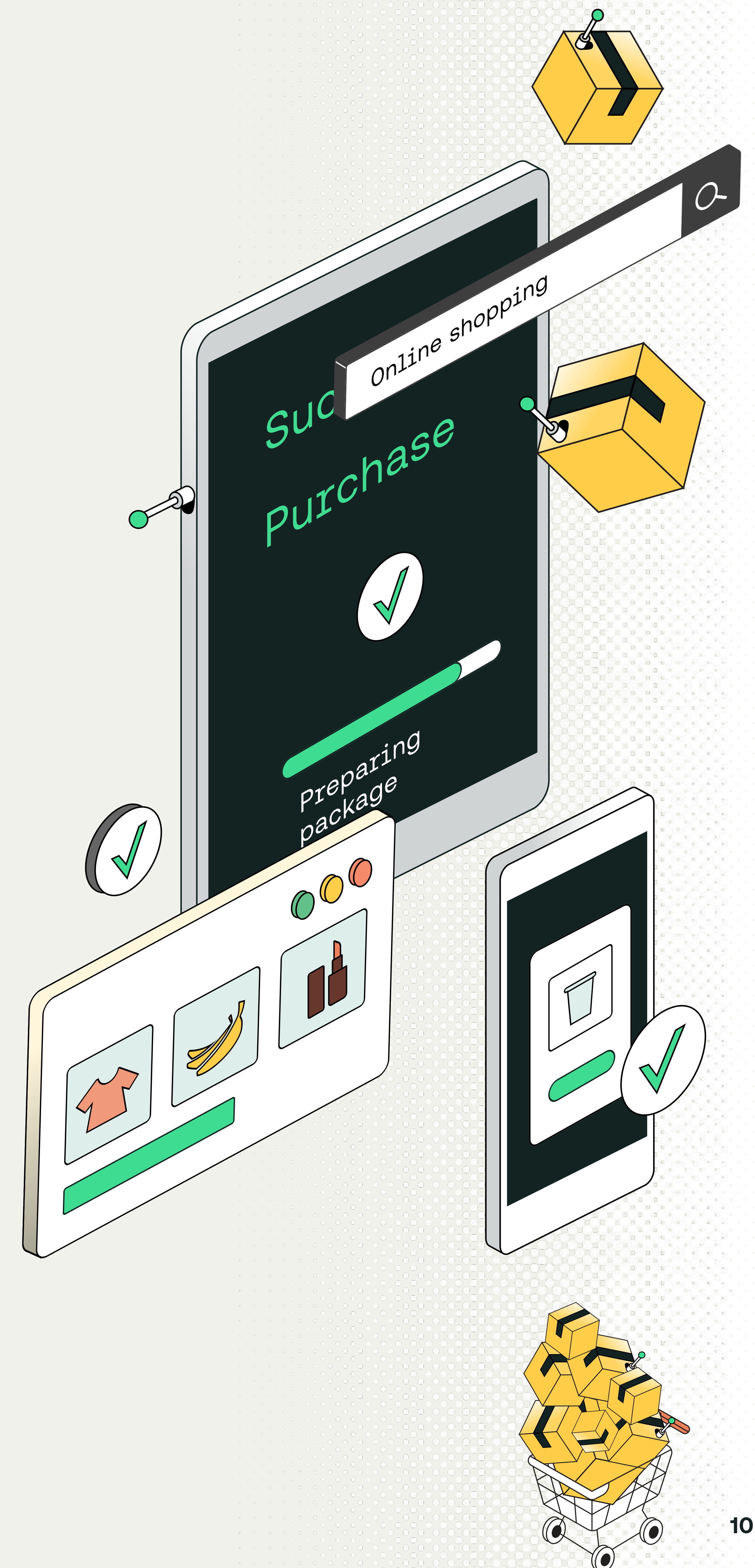
The more you can leverage automated testing and a continuous quality approach, the better you'll be able to identify the critical issues that can tarnish the user experience and cost you revenue. AI-powered pattern recognition significantly reduces the time you spend sifting through repetitive errors so you can pinpoint the exact problem.

But finding them is one thing; fixing them is another. And now that you are prioritizing finding them, you'll naturally discover that you have more to fix than you have hours in the day. Sauce Labs centralizes your testing—functional, visual, crash reporting, and insights—within one scalable platform.

By eliminating the inefficiencies of switching between solutions, you can focus on remediation in a more efficient, impactful way. Failure analysis helps you make sense of the noise that is created by testing at scale, allowing you to efficiently fix the handful of root-cause issues that cause the majority of your headaches.

With a strategy to prioritize bugs based on user experience and revenue generation, you can boost your debugging efficiency, minimize risks, and optimize resources. Bugs to consider include:

- **Unit Test Bugs:** These are issues that passed but then failed after something in the code changed.
- **API Contract Changes:** These occur when something breaks an implementation or integration.
- **Front-End Glitches:** These UX bugs can be caused by front-end or back-end code issues, database problems, API issues, or other sources, making them difficult to isolate.





Give yourself the gift of Sauce Labs

Whether the holidays are just around the corner, you're in the thick of the season, or you're planning ahead for the next holiday season, there's never a bad time to improve your approach to testing. This is especially true when considering the pressure developers face to quickly fix bugs during peak periods. The time to reduce their stress—and yours—is now.

Sauce Labs Platform for Test helps you ensure your software is capable of delivering a reliable, winning digital experience during your busiest times of the year.

By incorporating a continuous quality solution into the software development process, you'll be able to prepare for the increase in traffic and user expectations, catch bugs before they impact the shopping experience, and ensure consistency across every device and browser. You'll also be able to get immediate feedback from beta users so you can make quick adjustments before you release a new product or update in anticipation of your next peak season.

The result: happier holidays for your users and your bottom line.

Ready to learn more?

[Request a demo with our testing experts.](#)

