PLUSQA

E-COMMERCE TESTING GUIDE
2022

Learn more about this year's e-commerce trends and how testing can help you maximize your e-commerce potential.
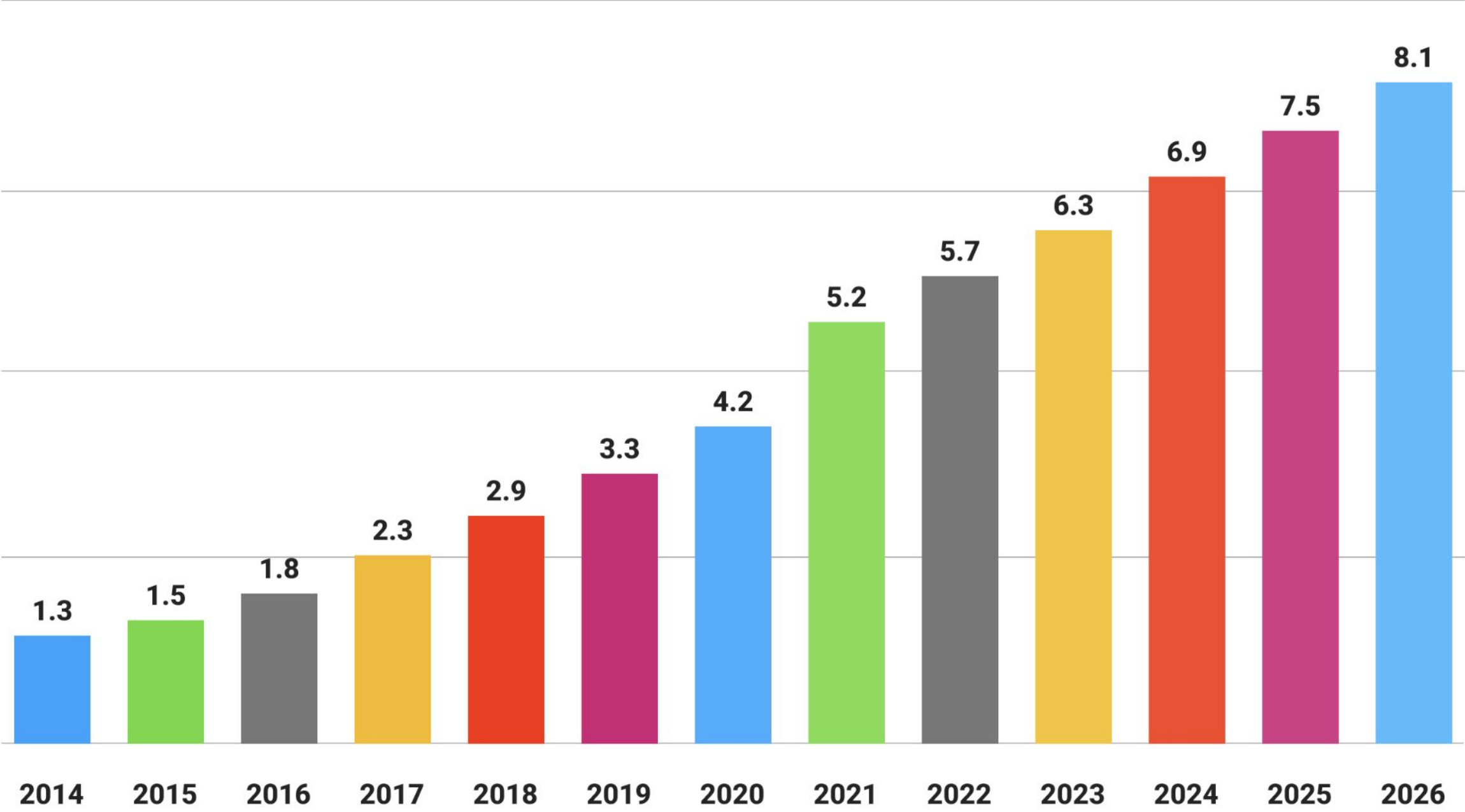
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The e-commerce industry is growing at a remarkable pace. Shoppers are no longer just interested in the holiday season–they want to find deals at their fingertips all year long. The industry is dominated worldwide by a few key players, though there is room for startups to find success. To do so, they need flawless first impressions. That's why one of the most important stages of an e-commerce launch is testing. Retailers need to make sure all aspects of their e-commerce business work as designed.

At **PLUS QA,** we are testing experts. Over the last 14 years, we have overseen testing for hundreds of organizations, which includes e-commerce and mobile app testing for the **#1 retailer in the world.** We want to help you by sharing what we have learned.

This is our third e-commerce testing guide. Each one includes an insider's perspective on data and statistics. This time we focused on the user experience. We are offering our insight on critical areas to test and types of testing that will help you make a great first impression with your e-commerce customers.

Global E-Commerce

E-commerce sales slowed this year—but only after they saw a significant boost during the covid lockdown era of 2020 and 2021. Despite the slowdown, e-commerce sales are estimated to reach $8.1 trillion by 2026. In fact, 95% of purchases will be done through mobile e-commerce.

Worldwide E-Commerce Sales in trillions in $USD

Year	Sales
2014	1.3
2015	1.5
2016	1.8
2017	2.3
2018	2.9
2019	3.3
2020	4.2
2021	5.2
2022	5.7
2023	6.3
2024	6.9
2025	7.5
2026	8.1

Source: https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/

As you look around the world, you'll find different types of online shopping based on culture, regional mobile device function, and forms of payment that are accessible to users. Accessibility is also a key factor in building a successful e-commerce business that reaches potential customers all over the world.

The United States is an e-commerce giant. But the largest e-commerce market in the world is actually China, which is larger than U.S., U.K., and Japan markets combined. Here are the 11 largest e-commerce markets ranked:

Country	Billion $
China	672
USA	340
UK	99
Japan	79
Germany	73
France	43
South Korea	37
Canada	30
Russia	20
Brazil	19

Source: https://www.nielsen.com/
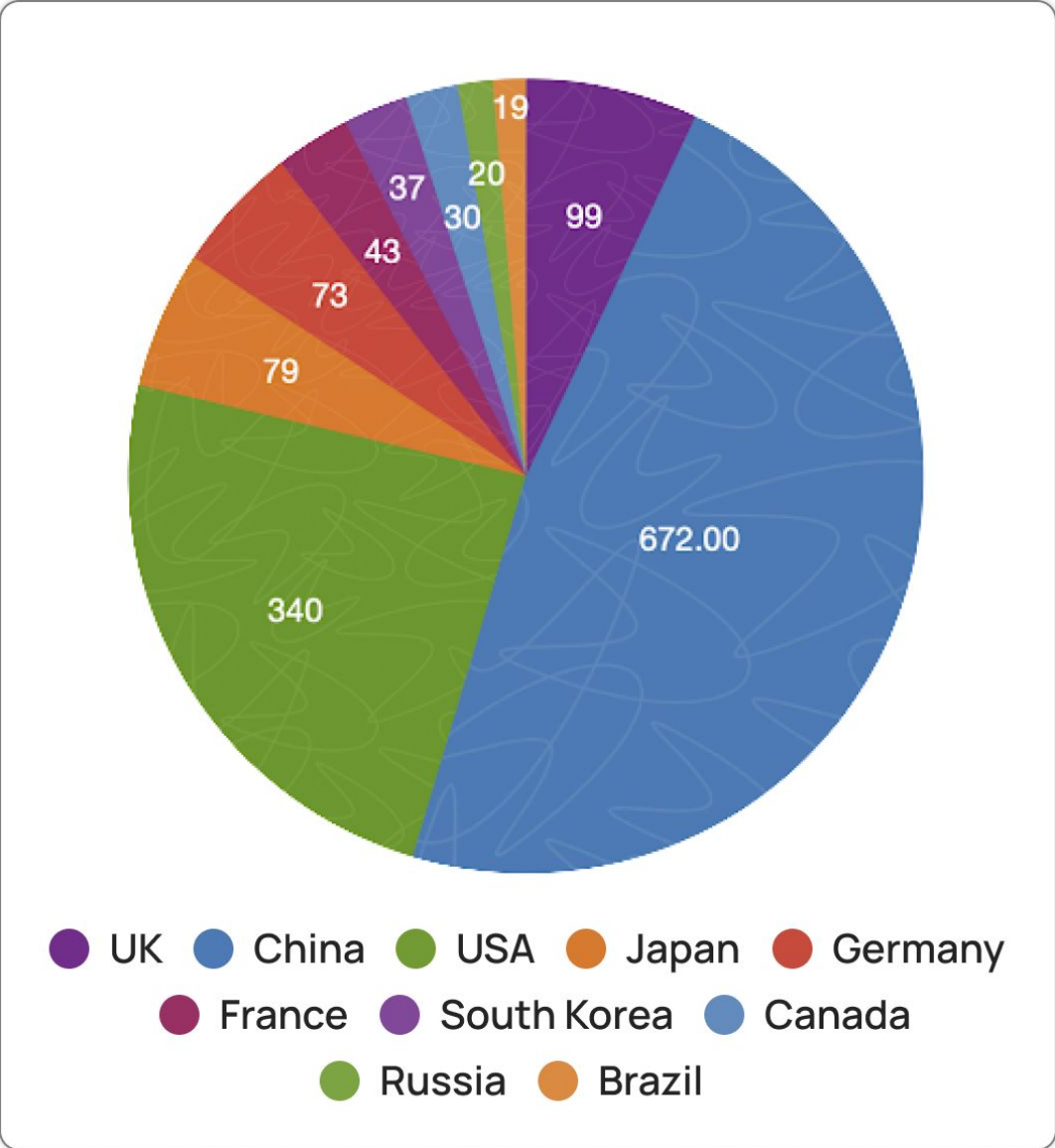
Global E-Commerce Sales Boom

Global e-commerce is growing at an unprecedented rate—expected to top $5.5 trillion in 2022 and $7 trillion in 2025. It includes cross-border commerce, borderless trade, and international online shopping. Two years ago only 17.8% of global sales were from online purchases. That number jumped to 21% in 2022 and is expected to reach 24.5% by 2025. Here are some trends:

Country	Growth
Latin America	E-commerce sales top $85B in 2021—up $17B over 2020
Indian e-commerce market	E-commerce sales expected to reach $64 billion by 2025
Russian, UK, and Philippines	E-commerce sales grow by 20% in 2021

Cross-border shoppers purchase the most products from these 3 countries:

45%
United States

41%
China

26%
United Kingdom

Global Payment Methods

Credit cards remain the top payment options for shoppers worldwide. However, digital payment methods such as Stripe or PayPal are gaining popularity. In China and Western Europe, digital payment is actually the preferred method of payment. Other regions like Africa, Eastern Europe, and the Middle East commonly use cash-on-delivery. An up-and-coming trend is Buy Now Pay Later (BNPL), which is expected to account for 24% of worldwide e-commerce sales by 2026.
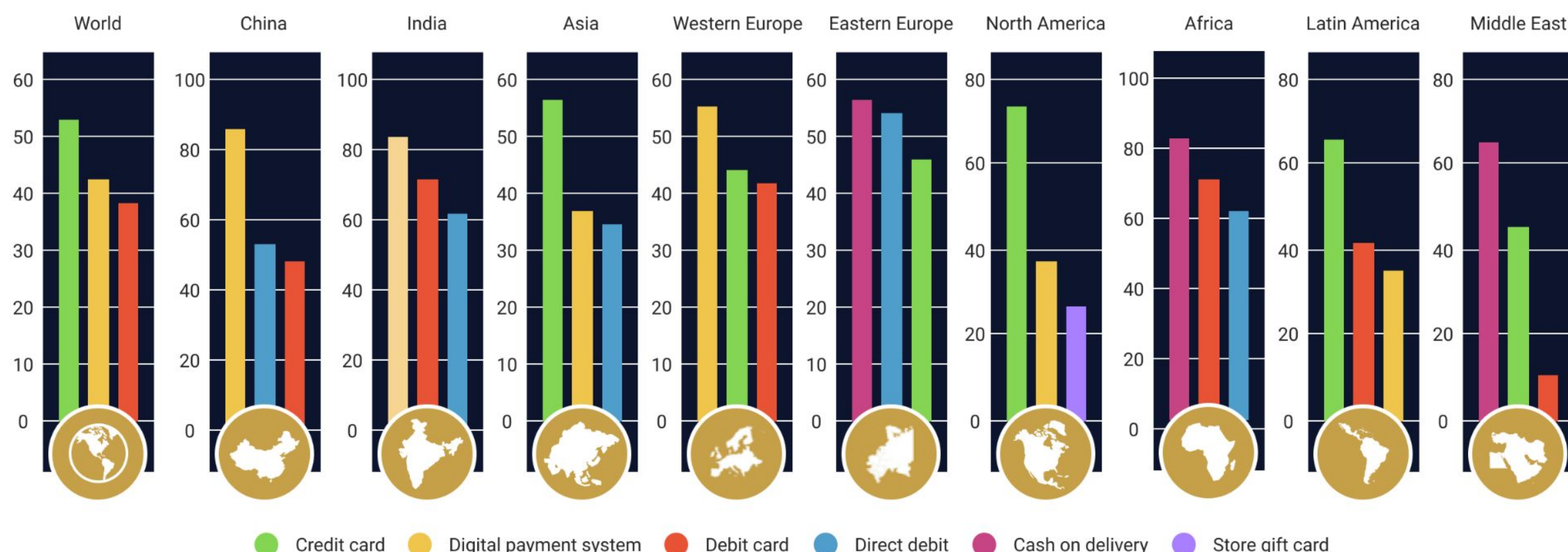
Preferred Payments Methods (Global)

1. Credit Card   2. Digital Payment System   3. Debit Card

Customers will not flinch to cancel an order if there is an issue. They have options that don't have to include you. E-commerce testing will make sure the user's order life cycle runs flawlessly. There are two main types of e-commerce testing:

▶ Automated testing puts your app or website through hundreds, sometimes thousands, of scenarios to validate payment functionality with credit card and digital methods.

▶ Front-end manual testing will catch critical functionality problems or user experience issues that you would not necessarily find through test automation.

If you want learn more about functionality or usability testing, check out our 2021 e-commerce guide or visit our **services page** at **plusqa.com.**

Cross-Border Shopping

The e-commerce industry has opened up borders for shoppers who want to find products or brands that don't exist in their countries. Cross-border shopping, as it's called, has become commonplace. In fact, it's often described as a necessity for any e-commerce business.

Sixty-one percent of all U.S. shoppers reported purchasing products cross-border. That number skyrockets to 83% in Canada and 86% in Brazil. Overall, cross-border shopping tripled from $304 billion in 2015 to $994 billion in 2020.
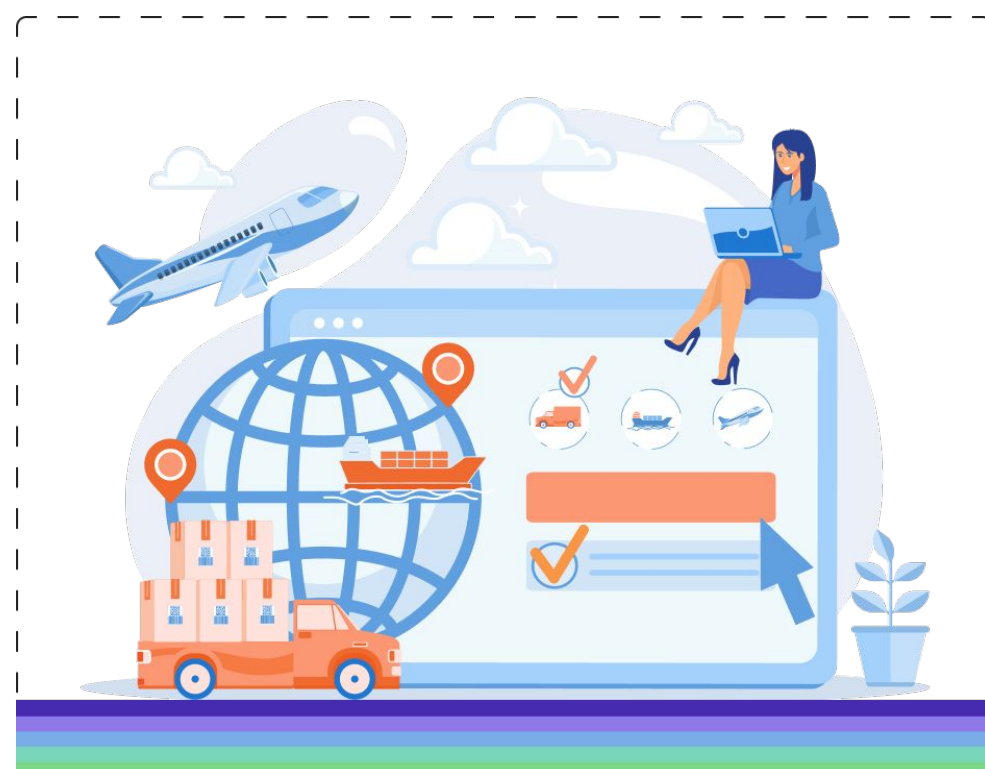
Your e-commerce business will benefit from cross-border shopping. However, there are barriers that keep customers from purchasing your products overseas.

Slow product delivery   High taxes   Lack of references for local retailers   Website security concerns   Translation issues
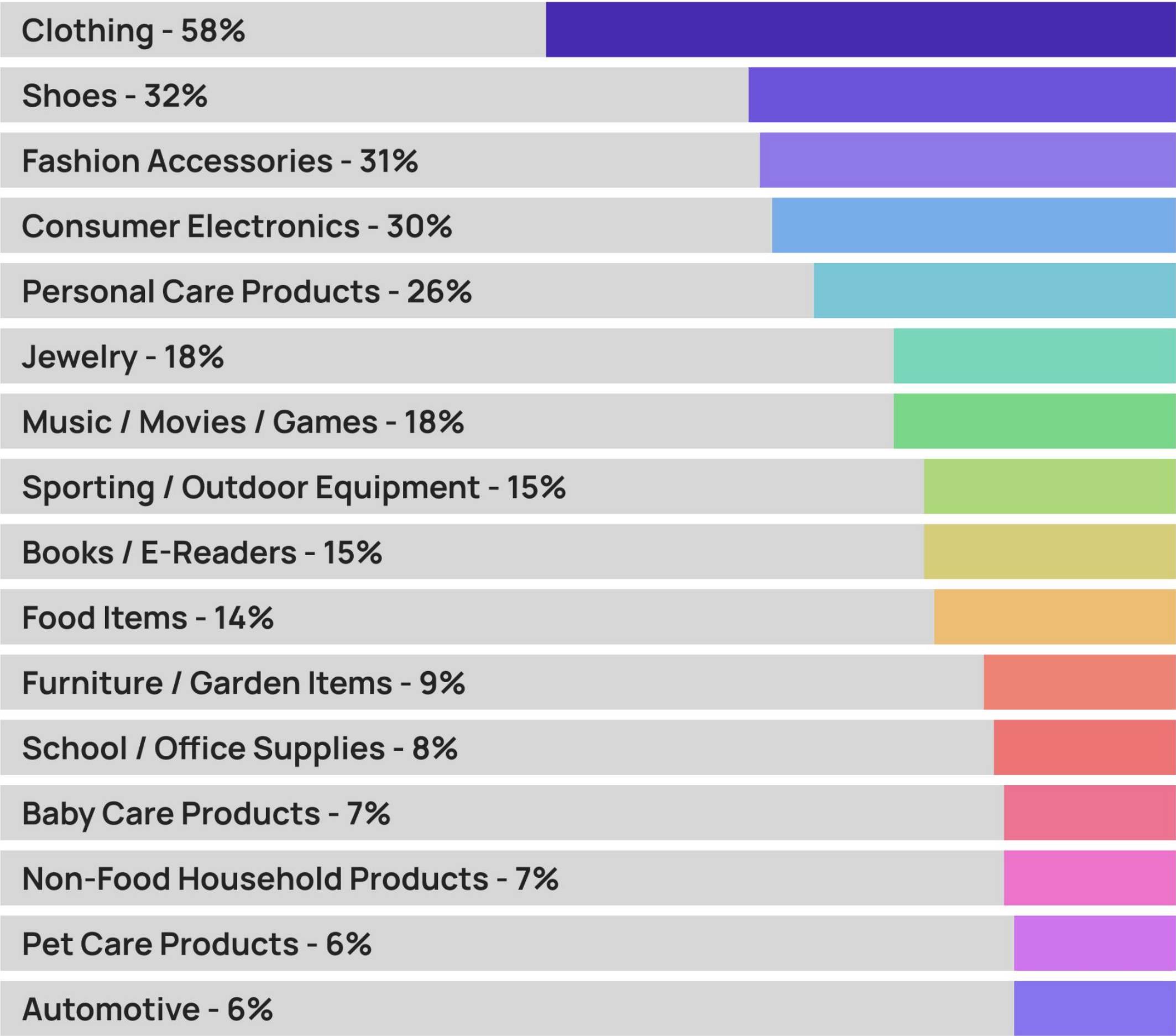
You can't control all barriers. If you're shipping from Kalamazoo, Michigan to Japan, it will take a while—and some customers may not like that. There are barriers you can control.

▶ All quality assurance testing will include encryption and site security. You will be able to confidently tell customers they can shop and purchase your items without worry.

▶ **Functionality testing** will seamlessly add taxes to prices, so shoppers are not caught off guard.

▶ **Usability testing** will assess how international shoppers use your website and predict issues.

▶ Localization testing confirms language accuracy and cultural suitability.

▶ **Payment testing** ensures payment options work end-to-end. Critical issues are typically found in these areas for cross-border shopping.

Survey of Most Purchased Products

Clothing - 58%

Shoes - 32%

Fashion Accessories - 31%

Consumer Electronics - 30%

Personal Care Products - 26%

Jewelry - 18%

Music / Movies / Games - 18%

Sporting / Outdoor Equipment - 15%

Books / E-Readers - 15%

Food Items - 14%

Furniture / Garden Items - 9%

School / Office Supplies - 8%

Baby Care Products - 7%

Non-Food Household Products - 7%

Pet Care Products - 6%

Automotive - 6%

Cross-border shopping by category, based on a survey of the top 11 markets.

Testing Critical E-Commerce Components

Manual testing is time consuming for e-commerce projects. It often includes hundreds of steps for testers to execute across multiple devices and browsers. It's important to test every page and every component. But time spent on testing can quickly increase and delay the launch of your e-commerce business. You want a tester who knows what they're doing.

The key to successful testing is to organize tests in different phases, then to prioritize workflows that will be the main focus of your users. Typically those workflows include:
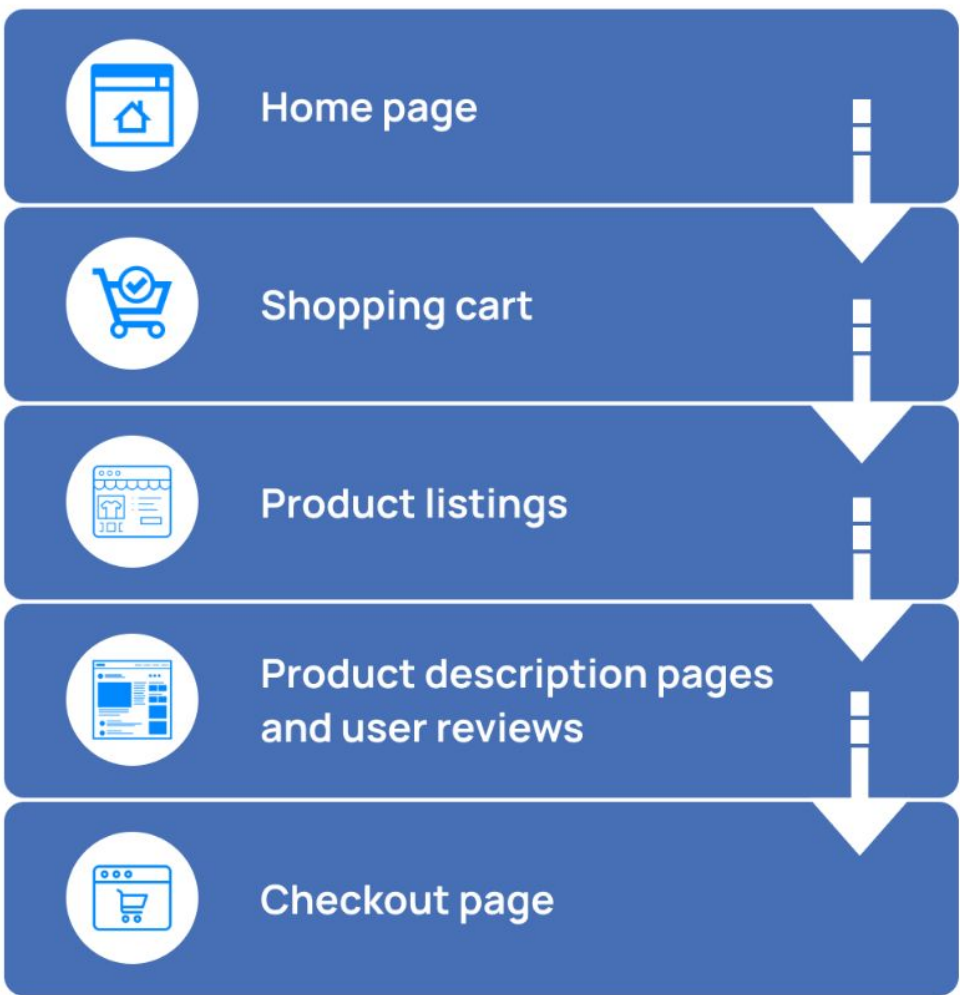
Cross-border shoppers often look for those five categories listed above to be translated into their native language. Proper testing will ensure that your users are not confronted by poorly translated products. That kind of user experience often leads to cart abandonment.

> ### Did you know?
>
> **Two-thirds of shoppers believe** that the product description, product review, and the checkout process pages should be in their own language.

Addressing Cart Abandonment

Cart abandonment is a critical concern for all e-commerce businesses. A recent study found that in 2022, 70% of all digital shopping ended at the cart with no sale. The biggest reason is excess costs—such as shipping, taxes, and fees. You can't control that. You can control several of shoppers' other key concerns through testing.
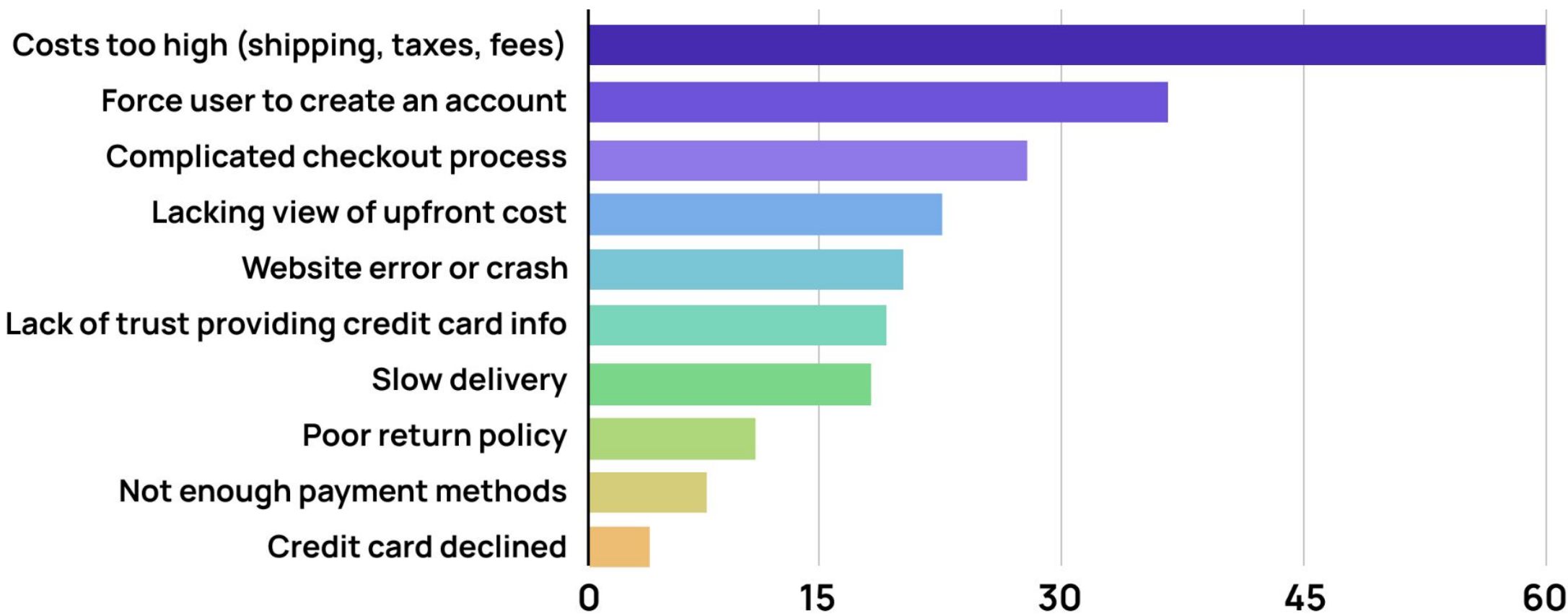
Usability Testing will make sure your customers have:

▶ Multiple payment methods

▶ Clearly labeled upfront costs

▶ Easy checkout process

▶ Alternative to account signup

Functionality Testing will make sure your customers have:

▶ Other options for declined credit cards

▶ Clear cost calculation

▶ No certificate or encryption issues

▶ Stable checkout experience

Your website can have fancy features like altered reality. It can draw in customers with clever social media. You can offer access to limited edition products. None of that matters if people don't have a clear path to checkout. Proper testing will help stop cart abandonment.

> **? Did you know?**
>
> Only 5 states do not have sales tax. They are Alaska, Delaware, New Hampshire, and Oregon.

Mobile Device Testing

Mobile websites can feel unpredictable at times. Many retailers have launched apps to offer a better shopping experience. Surprisingly, when given the choice between mobile apps and websites–67% of customers still prefer to shop on websites. That jumps to 71% for tablets.
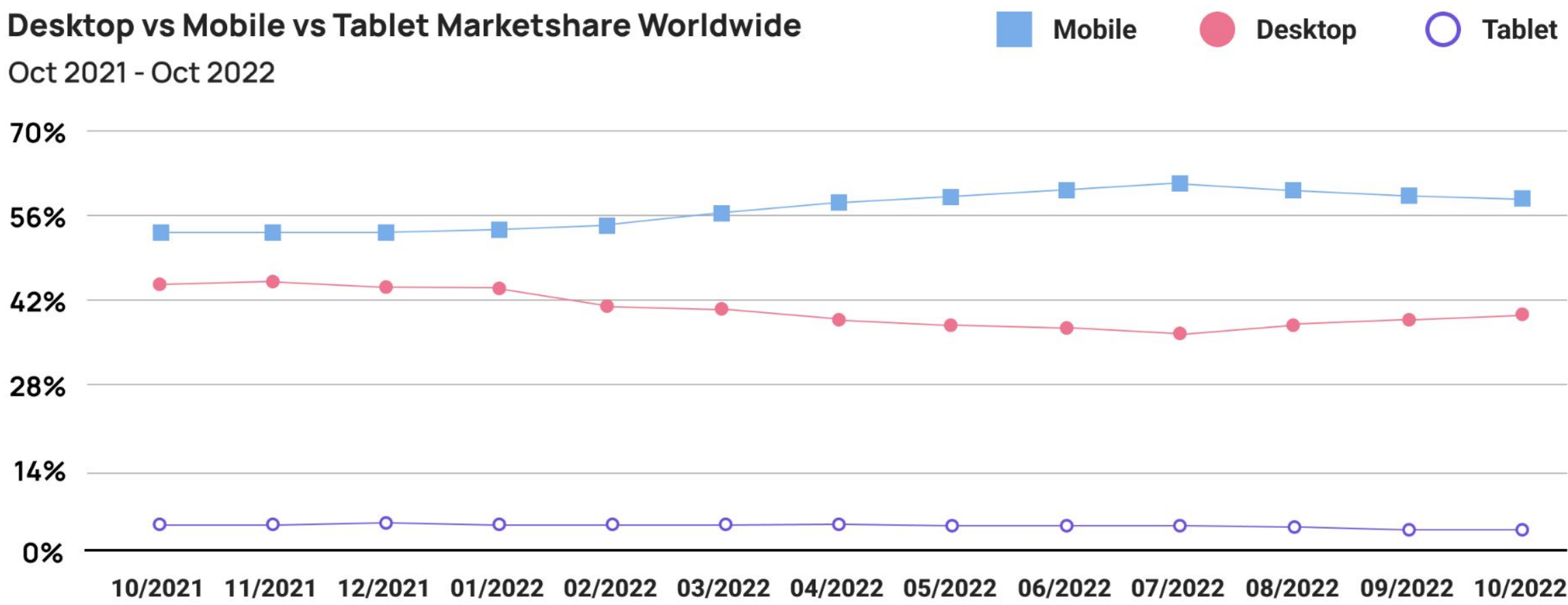
At **PLUS QA,** we recommend testing several browsers on Android and iOS platforms to make sure your customers' mobile shopping experience is the same as desktop. It allows you to take away any unpredictability that frustrates customers.

7 in 10 users prefer mobile websites over mobile apps while using their smartphones or tablets.

One bad experience can cost you. Google analysis shows 62% of people who have a negative experience on mobile are less likely to return to that brand in the future. Yes–your entire brand can be impacted by one mobile hiccup.

Testing with real devices is also key to ensuring a consistent customer experience. Make sure you work with a quality assurance testing partner who gets hands-on and doesn't just emulate device usage.

Desktop vs Mobile vs Tablet Marketshare Worldwide
Oct 2021 - Oct 2022

Legend: ■ Mobile ● Desktop ○ Tablet

You can learn more about how customers use devices **here.** And you can learn more about testing on real devices versus emulators **here.**
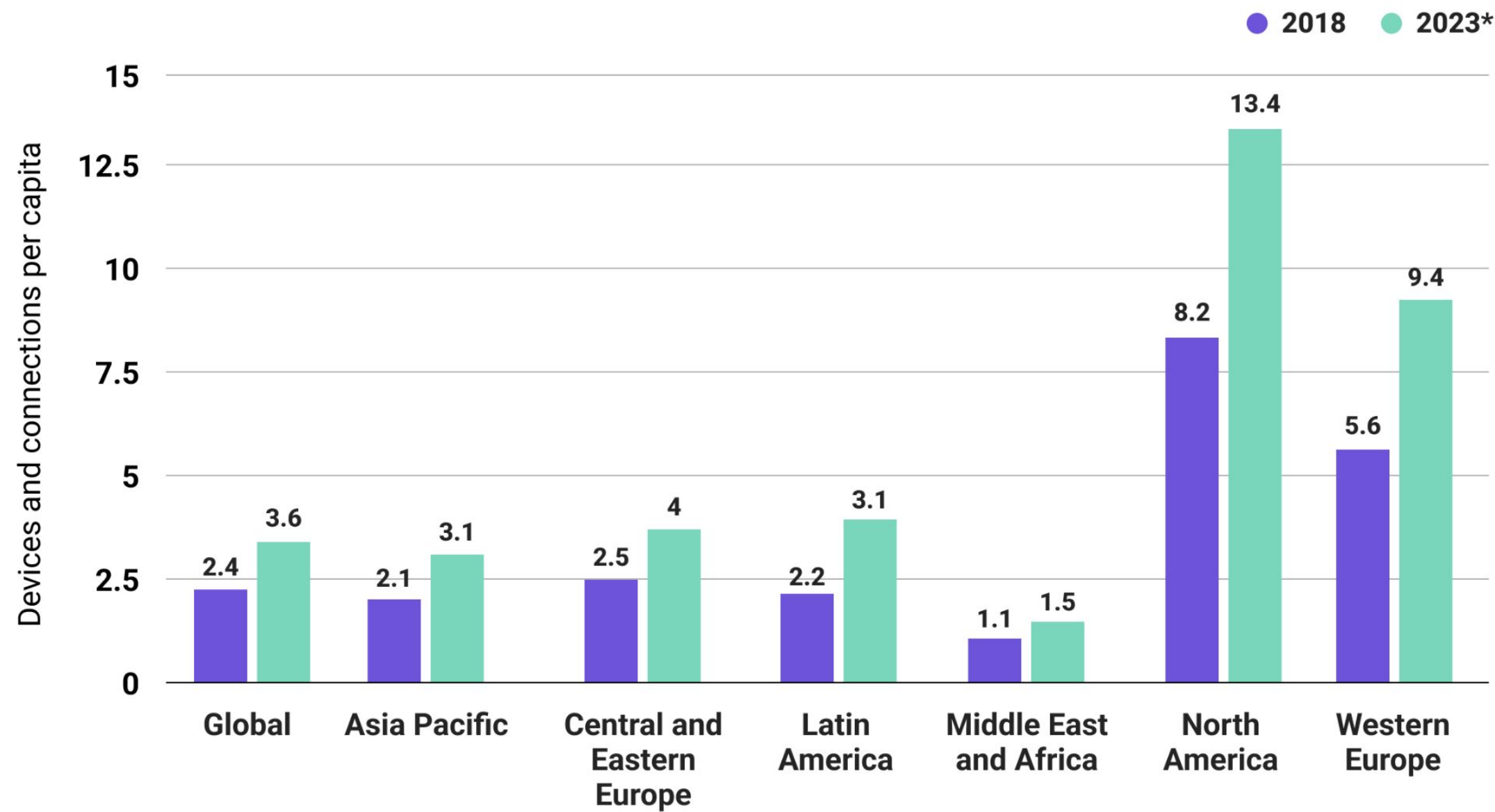
Omnichannel Testing

Customers are unpredictable. They shop on phones, computers, watches, connected devices, and through digital assistants such as Alexa and Siri. The average North American has 13 devices and connections.

Quite often they'll shop on one device, then return several hours later on another device to continue shopping. Sometimes there will be a third or fourth device involved. The old mindset of testing on just mobile apps and desktop isn't enough anymore.

Did you know that mobile traffic accounts for 50% of all U.S. e-commerce revenue?

You need a quality assurance partner who can do omnichannel testing. It helps make sure your customers have a seamless user experience across all apps the user has access to. It's critical to consider different operating systems, devices, screen sizes, and various mobile browsers. There are no shortcuts to confirm omnichannel usage. It requires manual testing for front-end **functionality** and **compatibility**–as well as **usability.**

Devices and connections per capita — 2018 vs 2023*

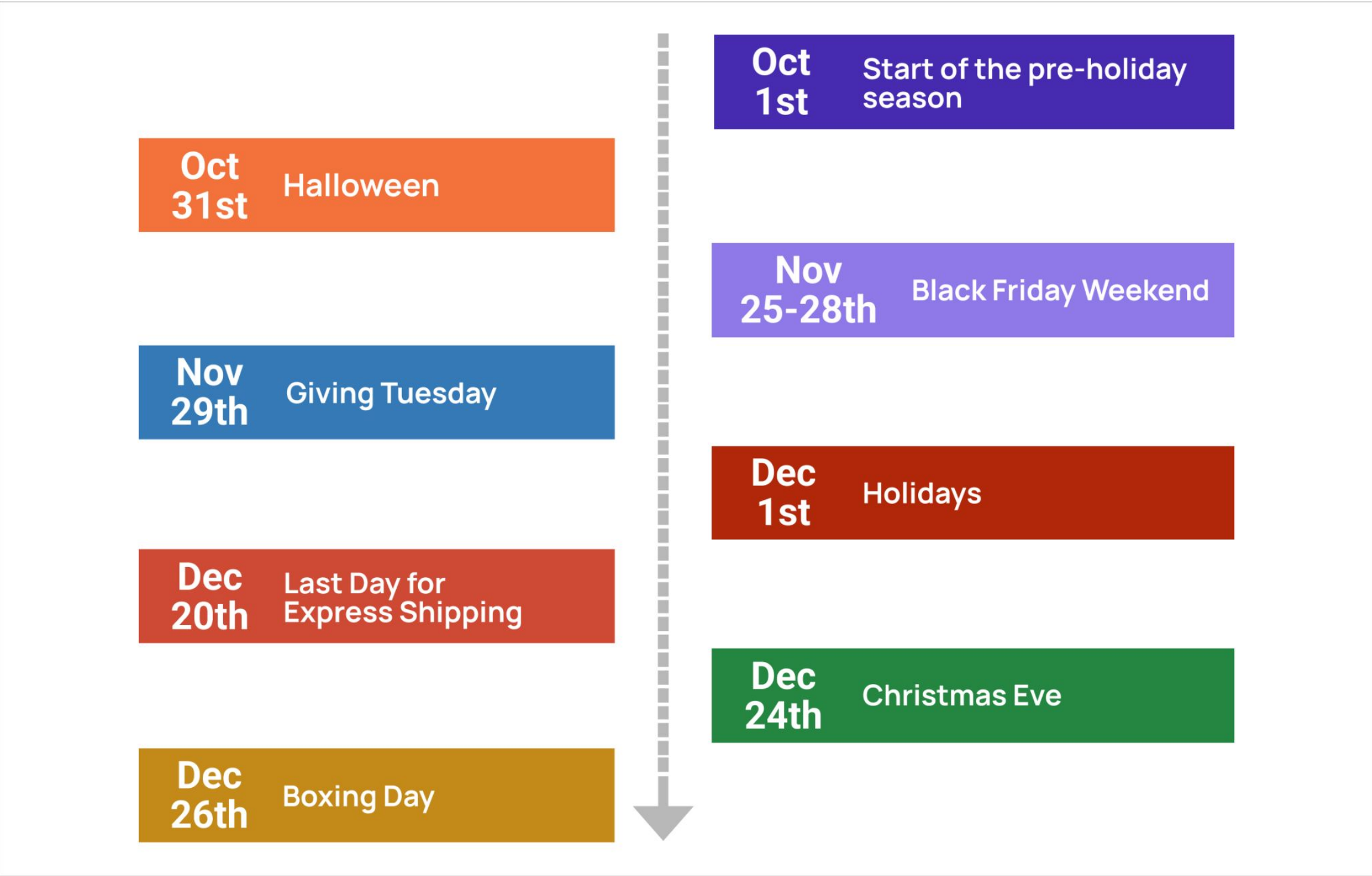| Region	2018	2023*
Global	2.4	3.6
Asia Pacific	2.1	3.1
Central and Eastern Europe	2.5	4
Latin America	2.2	3.1
Middle East and Africa	1.1	1.5
North America	8.2	13.4
Western Europe	5.6	9.4

Seasonal Testing

When the holiday season arrives, your business will be pushed to its limit. It'll either stand its ground or get knocked over. If you want to meet the needs of every user, you need to test your product for the spike in usage.

With more consumer holidays on the calendar, the shopping bug is becoming more contagious year-round. Businesses see traffic increase during Valentine's Day, Mother's Day, and even Amazon Prime Day. Each holiday and shopping event puts its own demands on your e-commerce business. There are new customers with new motivations using new devices. It's an opportunity for you to meet their needs and potentially see them return once the holiday season arrives—and spending really takes off. That's why you need continuous testing throughout the year to find every pitfall, glitch, and blemish that could scare off a customer or even bring your entire business crashing down during a key shopping phase.

If you want to learn more about e-commerce testing ahead of Black Friday and Cyber Monday, please look for our guide that you can download on our **E-Commerce Testing page.**

Oct 31st Halloween	**Oct 1st** Start of the pre-holiday season
Nov 29th Giving Tuesday	**Nov 25-28th** Black Friday Weekend
Dec 20th Last Day for Express Shipping	**Dec 1st** Holidays
Dec 26th Boxing Day	**Dec 24th** Christmas Eve

Accessibility Testing

19.9 million

People in the US have a physical disability

15.2 million

People in the US have cognitive or emotional function disability

12 million

People in the US have difficulty hearing

11 million

People in the US have difficulty seeing

Source: US Census Bureau Report

About one in seven people worldwide has a disability. It is vital for you to make sure your e-commerce business is accessible. You could lose a loyal customer—and in some regions, face legal action. Last year, 80% of all ADA website lawsuits were filed against e-commerce businesses.

You can find tools online that offer automated accessibility testing. They can help, but they won't fix all accessibility issues. Manual testers, especially those of us in quality assurance who have a disability, will provide the best quality feedback to engineers. Testers will find broken navigation, missing product images, difficult account creation, and seamless checkout—all of which are key contributors to cart abandonment if they aren't found and fixed.

Online sellers who invest in accessibility understand the need for inclusion and benefit from a positive user experience. Customers with disabilities often identify themselves with brands and products—and return to make more purchases.

If you are interested in learning more about accessibility testing, you can download our Accessibility Testing Guide on our **resources page.**

Conclusion

The Covid-19 pandemic accelerated the progression of e-commerce. It will continue to grow as devices become faster and more prolific in our lives and retailers gain access to more digital resources which allows them to expand their e-commerce footprints. Your quality assurance team must understand who your users are and how they interact with products.

Social commerce and cross-border shopping are becoming more viable options for customers around the globe. U.S. e-commerce shops are some of the most popular destinations for digital shoppers. Over the years, we at PLUS QA have developed informed practices on how to adapt testing for multiple platforms to meet the needs of users in regions throughout the world.

If you are launching a new e-commerce business, you need to work with a professional quality assurance testing partner—one that's organized, thorough, and experienced. Because, as you've learned in this guide, just one hiccup from first contact through checkout can lead to cart abandonment or even reluctance to consider your entire brand for future purchases.

If you are interested in learning more about testing e-commerce, mobile device and OS adoption, and quality assurance testing visit us online at plusqa.com.

Resources

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2. Statista e-commerce market comparison:

https://www.statista.com/forecasts/1283912/global-revenue-of-the-e-commerce-market-country

3. Kinsta aggregation of e-commerce surveys and statistics:

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4. Juniper Research BNPL forecast:

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5. FLOW.io cross-border e-commerce trends:

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6. Insider Intelligence global e-commerce forecast (2021):

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7. Baymard Institute cart abandonment survey:

https://baymard.com/lists/cart-abandonment-rate

8. ThinkGoogle negative mobile experience impact survey:

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9. Statcounter mobile vs desktop vs tablet usage chart:

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10. Statista average number of devices forecast:

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11. UsableNet ADA lawsuit statistics:

https://blog.usablenet.com/retailers-targeted-multiple-times-by-ada-web-accessibility-lawsuits

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