PERFORMANCE MATTERS

9

KEY CONSUMER INSIGHTS

Akamai

The ubiquity of mobile devices and increase of WiFi availability has radically transformed the way the world does business — and profoundly affected the retail industry. Online shoppers are browsing and buying more frequently than ever before, and doing so from multiple networks and locations across the globe. Let's flashback to 2009, when Akamai conducted our last consumer performance study, for some perspective… the iPhone was celebrating its second birthday, Android had just entered the marketplace and the first iPad had yet to be announced. Since that time, e-commerce has gone through a sea change thanks to the development of new technologies and the introduction of more powerful devices, platforms, and operating systems. With knowledge of the impact this technology is making, e-commerce companies are better able to serve their customers and use their own expertise to create opportunities that continue to drive the industry forward.

At Akamai, we are proud to call the top 20 global e-commerce sites and 95 of the top 100 U.S. online retailers our customers — which is why we're focused on providing the most current and up to date information on how e-commerce consumers' expectations, habits, and experiences have been impacted by this drastic growth. We evaluated copious amounts of data amassed from our comprehensive *2014 Consumer Web Performance Expectations Survey* and boiled down what we learned into 9 key consumer insights.

We'll get to the Big 9 in a moment, but first, a note about how we got here. In 2009, Akamai Technologies commissioned a performance study to evaluate e-commerce website expectations and consumer reactions to poor online shopping experiences. In 2014, Akamai commissioned leading market research company TNS to conduct a follow up study identifying growth insights, preferences, trends in device usage and the impact of performance among financial services, and e-commerce consumers across the globe. The *2014 Consumer Web Performance Expectations Survey* consisted of 3,487 respondents from the US, UK, France, Germany, and Japan, who were above the age of 18 and had accessed the internet in the past three months.

There will be 47.7 million public Wi-Fi hotspots worldwide by the end of 2014, or 1 for every 150 people. Global hotspot numbers will grow to over 340 million, nearly one hotspot for every 20 people on earth by 2018.

iPass Inc

There are currently 7.22 billion active SIM cards, which outnumber the approximately 7.2 billion people on the planet.

GSMA

1

Almost half of e-commerce consumers expect a page to load in 2 seconds or less

We are a society on the go.

As consumers, we no longer "go" online to work, play, or purchase — we are always online. At Akamai, we call this new reality the hyperconnected world. How connected are we? Reuters tells us the average household with two teenage children has approximately 10 connected devices, a number that will increase five times by 2022 to 50 connected devices per household. What does this mean for consumers? In the hyperconnected world, users require high-quality performance on a variety of devices from countless locations across the globe — 49% of consumers expect a page to load in 2 seconds or less. As consumers' expectations for page load-speed increases, their patience for slow-loading websites decreases. Currently, only 51% of consumers "wait patiently" for a website to load, compared to 63% who would "wait patiently" five years ago.

Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

49% EXPECT <2 SECONDS LOAD TIME
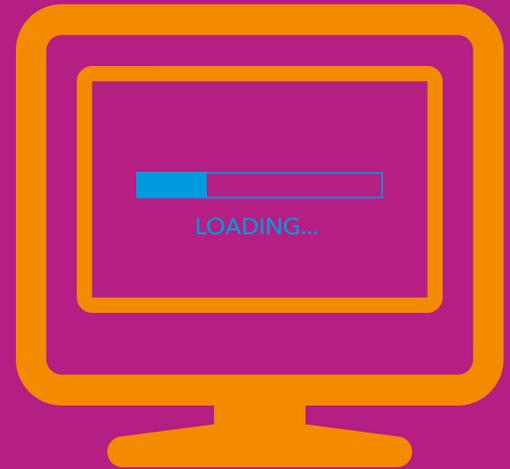
LOADING...

2

Nearly 1 in 5 consumers expect pages to load instantly

For a growing contingent of e-commerce

consumers, the two second wait time is two seconds too long. Regardless of device, they expect pages to load instantly. The expectation for instant page load was the most significant performance development from Akamai's 2009 study to our 2014 study. In 2009, the expectation of instant wasn't top of mind — it wasn't even included as a survey option. However, we did discover that five years ago, 5% of consumers expected a one second or less page load. Today, 30% of consumers expect one second or less page load, while 18% expect instant page load.

Consumers Expecting Page Load of One Second or Less

2009   5%

2014   30%
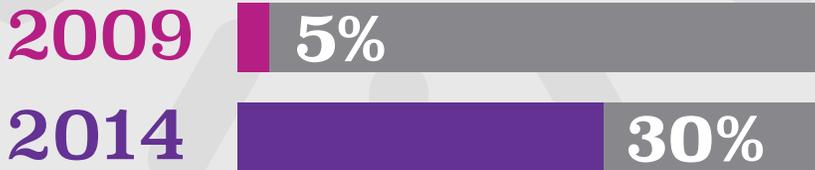
Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

18% EXPECT INSTANT PAGE LOAD
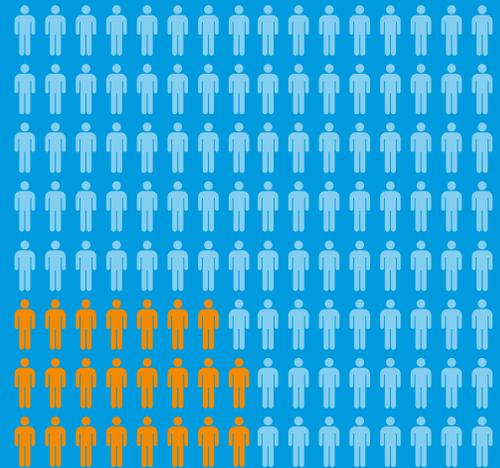
THE FUTURE OF EXPECTATION…IS INSTANT.

Thanks to our study's comprehensive country-by-country data, we can anticipate continued growth for the expectation of instant online delivery. Japan, an ideal benchmark due to its reputation as a world leader in technology and consumer electronics, provides us with the evidence:

52% of Japanese consumers expect one second or less page load, **22% higher than the global average.**

34% of Japanese e-commerce consumers expect instant page load time, **nearly 2x the global expectation.**
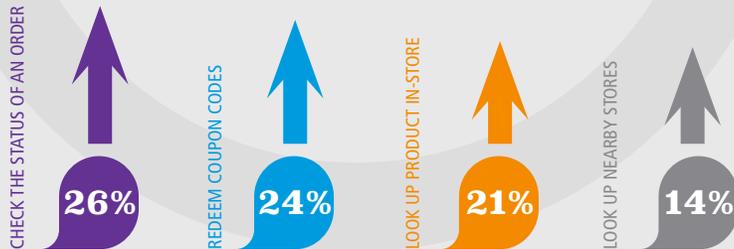
Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey
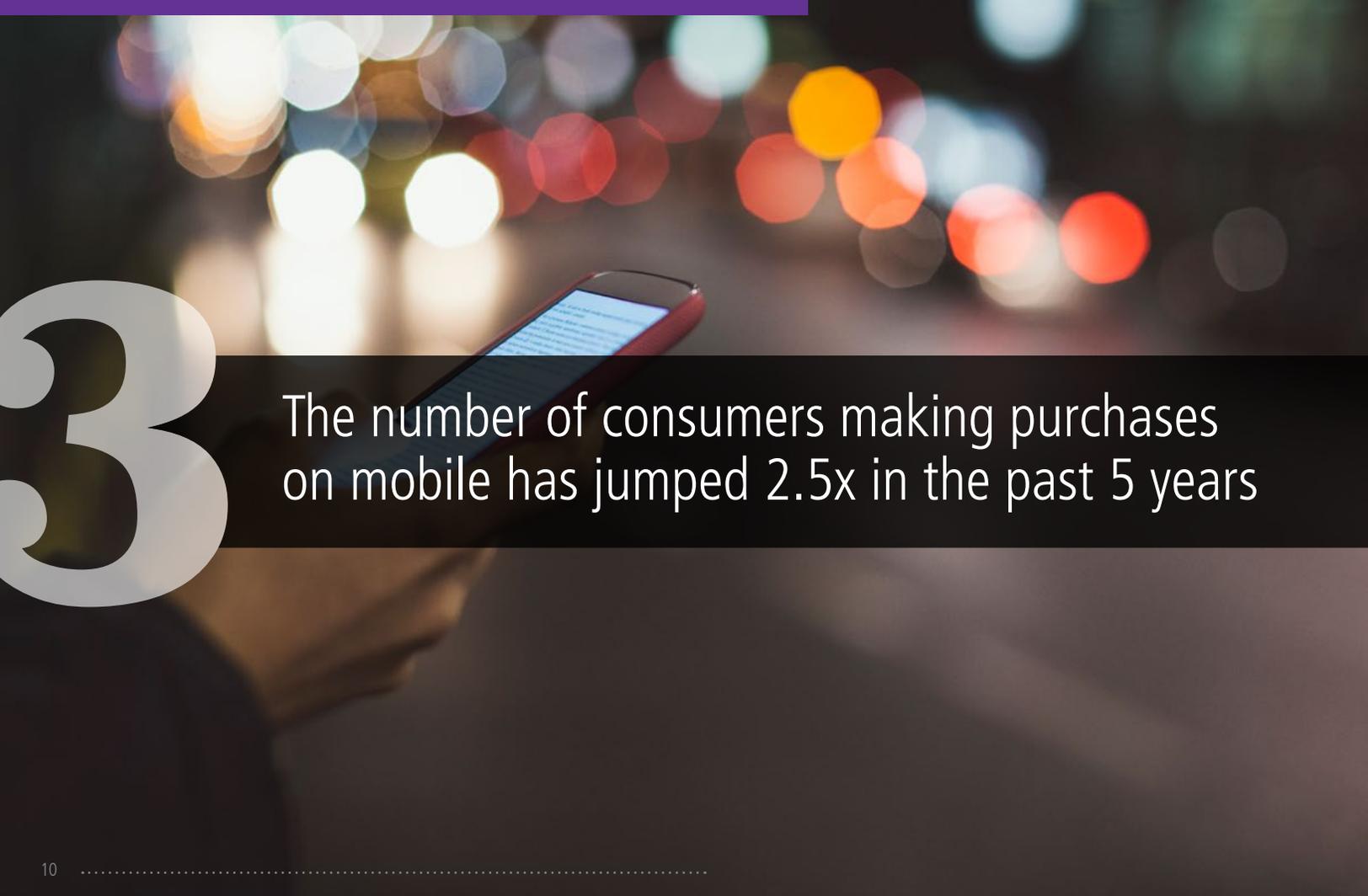
3

The number of consumers making purchases on mobile has jumped 2.5x in the past 5 years
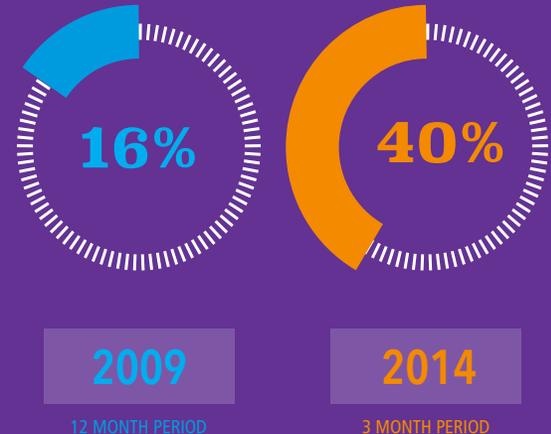
We know mobile use is growing dramatically

across the globe — [Ericsson projected](#) that smartphone subscriptions will increase by an average of 15% a year through 2020, resulting in 6.1 billion smartphone subscriptions globally. This significantly impacts the e-commerce industry, where mobile device use is the new normal. In 2009, 16% of Internet users made purchases on their mobile devices at some point during the year. In 2014, 40% of Internet users purchased a product or service on their mobile device in the three months prior to the survey, an increase of 2.5x in 1/4 of the time.

Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

Increase in mobile e-commerce activity since 2009

CHECK THE STATUS OF AN ORDER
26%

REDEEM COUPON CODES
24%

LOOK UP PRODUCT IN-STORE
21%

LOOK UP NEARBY STORES
14%

CONSUMERS MAKING PURCHASES ON MOBILE DEVICES

16%

40%

2009
12 MONTH PERIOD

2014
3 MONTH PERIOD

Mobile is considered the least satisfying e-commerce experience

There are considerable improvements to be

made in order to provide mobile shoppers with satisfying online experiences. Among all e-commerce consumers, mobile users reported the greatest number of dissatisfying experiences. 39% reported having dissatisfying experiences using their mobile device, compared to 35% on tablet and 25% on desktop. That's not all — mobile users reported the highest frequency of dissatisfying experiences and slow-loading pages. Essentially, a higher percent of mobile users experience dissatisfaction, and experience it at a higher rate than tablet or desktop users.

This begs the question: What constitutes a "dissatisfying experience?" Consumers' top two responses for what caused a dissatisfying experience were "the website was slow to respond" and "the website was not available," which includes crashing, freezing, and error pages. Consequences of bad experiences are evidenced in device preferences among online shoppers — only 9% cited mobile as their preferred device for conducting online shopping activities, compared to 76% who prefer desktop. Mobile is also viewed as the slowest device for e-commerce activity, with 76% viewing it as the slowest or as slow as other devices, while 85% consider desktop the fastest or as fast as other devices.

Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

SHOPPING PREFERENCE ON MOBILE VS DESKTOP

76% PREFER TO SHOP ON DESKTOP **& 85% CONSIDER IT FASTER**

ONLY **9%** PREFER TO SHOP ON MOBILE **& 76% CONSIDER IT SLOWER**

If desktop dominates the e-commerce industry, why do I care about mobile or tablet?

Consumer engagement in the form of frequency & spending.

"Why do you rob banks?"
"Because that's where the money is."

Attributed to bank robber "Slick" Willie Sutton

1934. Apocryphal.

5

Mobile and tablet users are the most engaged e-commerce consumers
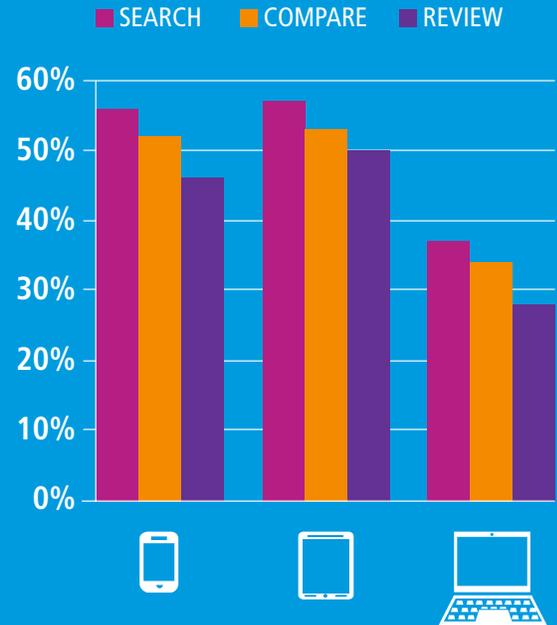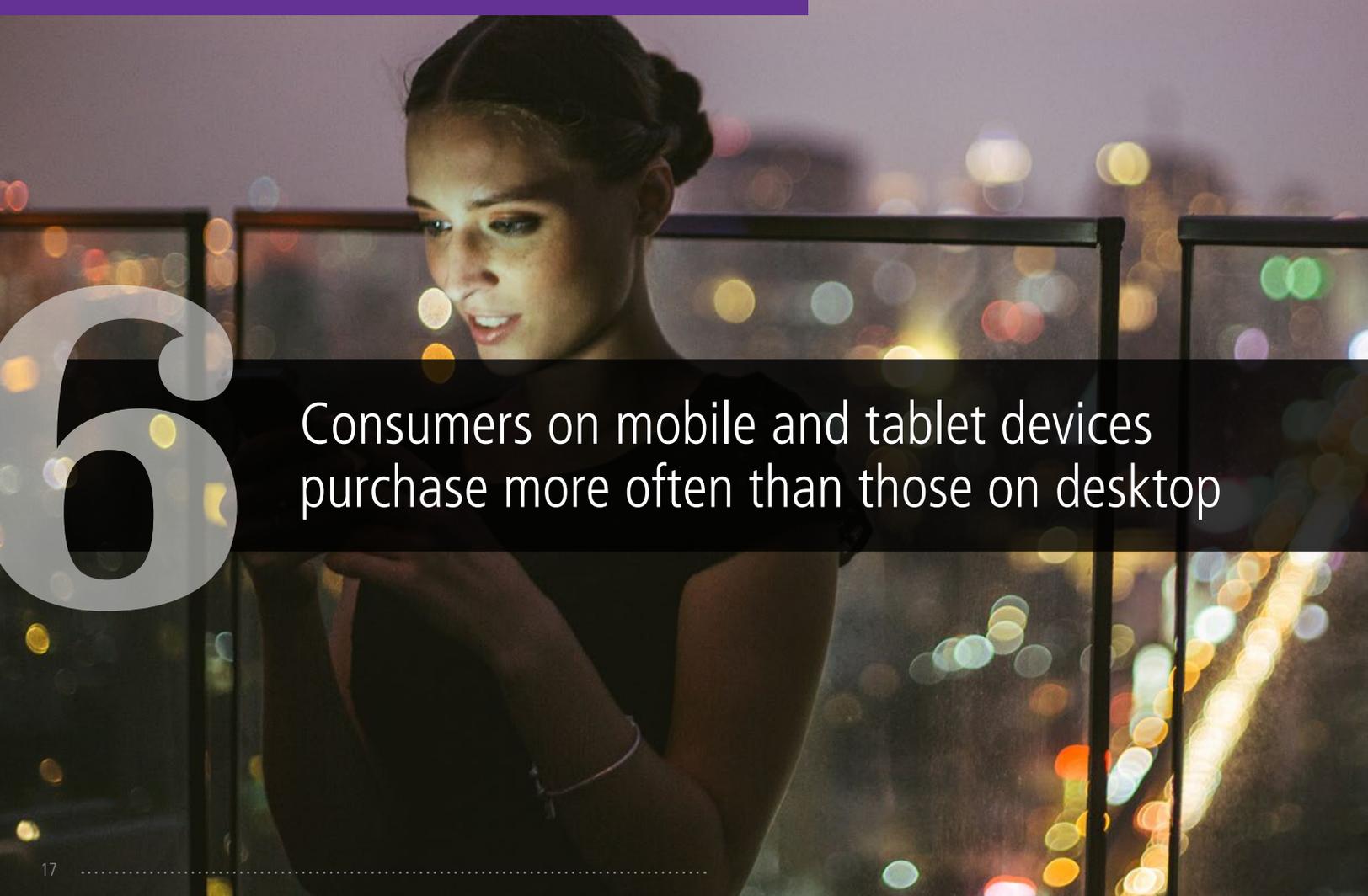
Considering what we've just learned,

it's natural to assume desktop use dominates the e-commerce industry entirely. Actually, that's not the case — in fact, mobile and tablet users are significantly more active across a myriad of e-commerce activities than desktop users. Searching for products is a good example — 56% of mobile and 57% of tablet users search for products on a weekly basis, compared to only 37% of consumers using desktop. In addition, 15% of mobile and tablet users search for products daily, while only 5% of desktop users do so. Mobile and tablet users' higher engagement goes beyond search — 52% on mobile and 53% on tablet use their devices to compare prices weekly, compared to 34% on desktop. 46% of mobile and 50% of tablet users will read reviews online once a week, compared to 28% on desktop.

Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

WEEKLY E-COMMERCE ENGAGEMENT BY DEVICE

SEARCH   **COMPARE**   **REVIEW**

| Device	Search	Compare	Review
Mobile	56%	52%	46%
Tablet	57%	53%	50%
Desktop	37%	34%	28%

6

Consumers on mobile and tablet devices purchase more often than those on desktop

It's not only activity where mobile and tablet users outstrip desktop — mobile and tablet consumers also purchase products more frequently than desktop users. 35% of mobile and tablet shoppers buy products at least once a week, compared to only 15% of desktop users. Mobile and tablet shoppers also participate in more omnichannel sales experiences than desktop users, meaning web experiences on mobile and tablet have a bigger impact on purchases made both online and in-store. Mobile and tablet users research products in retail stores and buy online (showrooming) at a 13% higher rate than those on desktop, and research products online and buy in stores (webrooming) at an 11% higher rate.

Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

CONSUMERS WHO MAKE A PURCHASE AT LEAST ONCE A WEEK
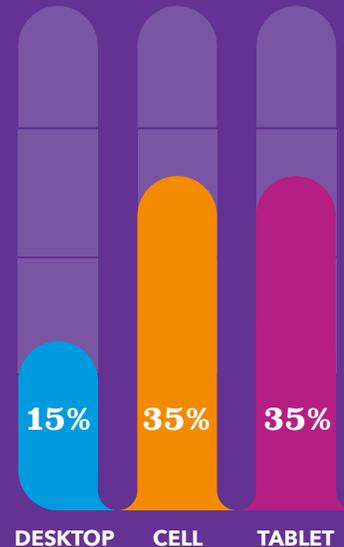
| 15% | 35% | 35% |
| DESKTOP | CELL | TABLET |

7

Mobile and tablet shoppers spend more money than desktop shoppers

What about shopping cart size

across these channels? Shoppers using tablets lead the way in monthly spending, averaging $203 per month, or $2,436 per year. Mobile is a close second, averaging $196 per month, or $2,352 per year. Desktop shoppers trail the pack considerably, averaging $132 per month, or $1,584 per year. Some quick math shows how significant the gap really is — desktop users are being outspent by mobile and tablet users by $64-$71 a month, or $768-$852 a year… per individual shopper! On top of that, both mobile and tablet shoppers are more willing to spend the big bucks online — they are two times more likely to make purchases of $250 or more than desktop shoppers.

Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

MOBILE & TABLET SHOPPERS are **2x** **MORE LIKELY** TO MAKE PURCHASES of **$250+**

ANNUAL SPENDING PER DEVICE

$2,436
TABLET

$2,352
MOBILE

$1,584
DESKTOP

So,what types of products are these consumers buying online? The most commonly purchased product category for online shoppers was apparel, footwear or accessories, with 55% making a purchase in that category. Four other popular categories rounding out the top five were books, music, movies or video games at 53%; travel at 44%; e-books, downloaded music, movies or games at 42%; and consumer electronics, computer hardware/software or office supplies at 40%. An interesting note about the last four categories — consumers preferred to make these purchases online rather than doing so in-store.

MOBILE & TABLET OUTSPEND DESKTOP BY $810 A YEAR

8

50% of consumers experience problems during peak traffic

A lot of attention has been paid to managing performance during peak traffic times in the last few years. The reason is simple — the retail world, especially in the United States, revolves around high-traffic occasions, from Black Friday and Cyber Monday to product and service-specific sales and marketing campaigns. During these periods, meeting demand by ensuring high performance and availability is essential for e-commerce websites. That being said, 50% of e-commerce consumers still experience Internet slowdown during "high-traffic" occasions. It gets worse – 82% of those who experienced slowdown have reported being unable to access the website they intended as a result.

Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey

50%
EXPERIENCE
SLOWDOWN
DURING
TRAFFIC

OF THOSE
82% HAVE
HAD WEBSITE
ACCESS
PREVENTED

9

Unhappy shoppers abandon websites, and they won't return

The results are in: Expectations are increasing, while patience is decreasing. Slow-loading and crashing sites drive dissatisfaction, which affects user experiences — especially during high-traffic occasions. But what does it mean? How do consumers respond? Brace yourself, because unhappy customers take their experiences to heart. 50% of dissatisfied users will visit another website to accomplish their activity. More than 1 in 5 will leave for good — 22% won't return to a website where problems have occurred. It doesn't end there… after a poor experience, 45% are less likely to visit a website again, 35% will have a more negative perception of the company and 32% are less likely to make online transactions with the company. On top of that, mobile and tablet users (who, as we just learned, spend more and buy more) are more likely to abandon a website than desktop users when experiencing slow performance or crashes.

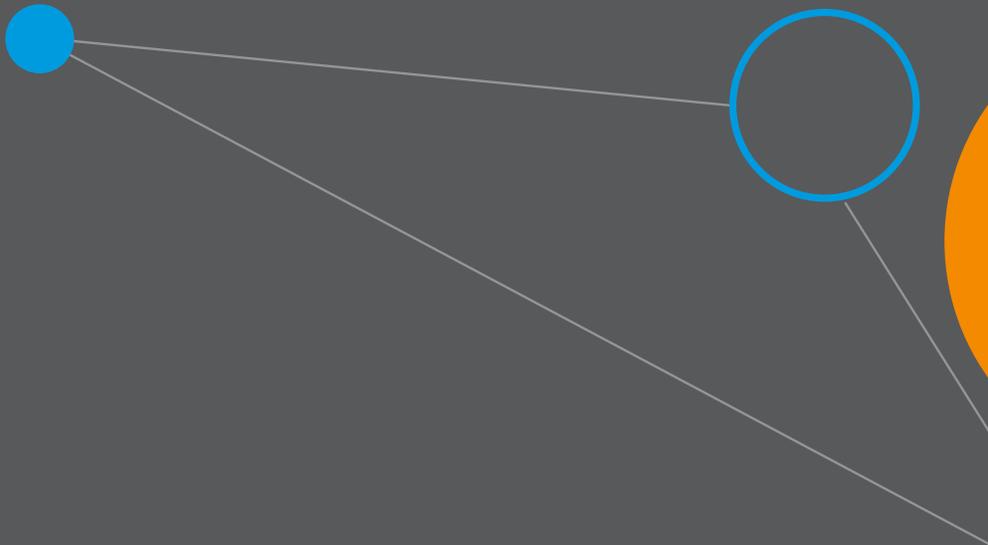Source: Akamai Technologies - 2014 Consumer Web Performance Expectations Survey
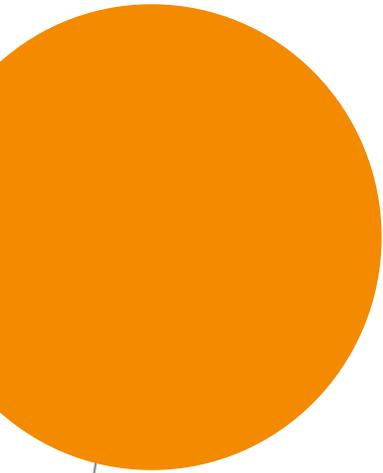
50% WILL ABANDON

1 IN 5 USERS WONT RETURN

So
What?

So there you have it — 9 key consumer insights into the changing e-commerce landscape. But what does it all mean? Let's put our findings into context:

Data paints a rosy picture for e-commerce. Online sales are growing 10 times faster than brick-and-mortar stores. Consumers use a variety of devices to engage in e-commerce activities. Globally connected devices are expected to nearly quadruple by 2020. While e-commerce growth is great news, it poses enormous challenges — **e-commerce companies must now meet increasing consumer demands in a dynamic and diverse technological landscape.**

MOBILE WILL BE THE MONEYMAKER.

Not only have mobile users increased 2.5 times since 2009, they also represent the most engaged and discerning audience. They participate in e-commerce activities more frequently, make purchases more often and spend more money. On the flipside, they experience slow-loading and crashing sites most often, and are more likely to abandon a site because of it. E-commerce sites must provide this new generation of mobile shoppers rich, satisfying web experiences across devices, browsers, platforms and networks — or risk losing their greatest source of future revenue.

E-COMMERCE CONSUMERS HAVE A NEED FOR SPEED.

Online shoppers are not easy to please. Their expectation for instant online content is increasing; their patience for poor performance is decreasing. The impact on an e-commerce company's bottom line is significant — consider the following from the Aberdeen Group: if a site averages $100,000 a day in revenue, a one second delay costs $2.5 million in sales each year. Additionally, when consumer expectations are not met, they will visit competitors' websites to satisfy their online shopping needs, and 1 in 5 aren't coming back. E-commerce companies must deliver end-users with lightning fast web experiences that increase conversions and engagement while reducing abandonment.

MANAGING PERFORMANCE DURING PEAK IS A MUST.

Online retailers continue to use advertising and marketing initiatives to drive high volumes of consumers to their websites. Consider Real User Monitoring (RUM) data from Akamai's Intelligent Platform on Black Friday as an example: peak traffic on Black Friday was nearly 3 times Akamai's baseline traffic levels for 2014, and almost 4 times its average 2013 levels. While increased traffic to a website is great news, it doesn't mean much if consumers continually experience slowdowns or lack of availability. Bad performance during peak is still a big problem — half of Internet users experience slowdowns during high traffic occasions, and 4 in 5 have reported being unable to access the website they intended as a result. E-commerce companies must ensure they have the capability to deliver quality web experiences to end-users — regardless of outside events or high traffic volume.

IF YOU CAN'T SCALE, YOU WILL FAIL.

As the number of online shoppers increases, so does the congestion. The continuous introduction of new devices, platforms and operating systems makes providing end-users with consistent, reliable experiences even more challenging. The importance of reliability cannot be understated — the average online shopper will visit a website 6.2 times on 2.6 devices before they buy (and we've learned how consumers react to bad experiences). E-commerce companies must ensure their websites can scale to provide uninterrupted access in order to increase transactions and engagement that will keep consumers coming back
for more.

Now that you're armed with the 9 key e-commerce consumer insights…what's next? We've got a few suggestions to expand your knowledge evaluate your performance and stay ahead of the game:

Now What?

1/ Read **Responsive & Fast**, one of O'Reilly Media's top books of 2014, written by Guy Podjarny. *Responsive & Fast* presents practical techniques for improving web performance with Responsive Web Design (RWD). Guy's book identifies solutions for current RWD performance problems and offers advice on how to choose the optimizations that best suit your needs. Guy's blog, **Guy's Pod**, is another great resource.

2/ See how your webpage stacks up. **Click here** to get Akamai Performance Insights from our mobile images report, which measures image performance with and without Akamai to show how much you can improve the performance of your mobile site.

3/ Take a look at **Total experience quality**, a GigaOm Research paper that will walk you through how to integrate performance, usability, and application design.

4/ Get news, insights, and perspectives on living and working in the hyperconnected world from strategists, technologists, and product and industry specialists at **The Akamai Blog**.

5/ Check out Akamai's **Next Generation CDN page** to learn about the evolution of content delivery, read Forrester whitepapers and other thought leadership pieces, and score your CDN with our interactive test.

Appendix

Author: Eric Fullerton, Senior Content Marketing Specialist

Acknowledgements

A Note On Citations

Permission is not required to cite data from this report. Please indicate source as: "Akamai Technologies - 2014 Consumer Web Performance Expectations Survey"

Akamai® is a leading provider of cloud services for delivering, optimizing and securing online content and business applications. At the core of the company's solutions is the Akamai Intelligent Platform™ providing extensive reach, coupled with unmatched reliability, security, visibility and expertise. Akamai removes the complexities of connecting the increasingly mobile world, supporting 24/7 consumer demand, and enabling enterprises to securely leverage the cloud. To learn more about how Akamai is accelerating the pace of innovation in a hyperconnected world, please visit www.akamai.com or blogs.akamai.com, and follow @Akamai on Twitter.

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