2023

State of Digital Quality

in Travel & Hospitality

APPLAUSE



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For recommendations on how travel and hospitality companies can improve digital quality, read the blog post.



Methodology

We analyzed results from a representative sample of closed test cycles executed for travel, transportation and hospitality companies between January 1, 2022 and December 31, 2022. A test cycle is how Applause defines each unique set of tests: a client sends us testing parameters — builds, scope, coverage, etc. — and we create a test cycle that includes the specific test cases and scenarios to be tested.

We analyzed data across testing categories and regions spanning over 29,000 bugs, 5,000 individual mobile devices, 390 unique desktops, 350 OS versions and thousands of device/ OS/browser combinations. Testing included websites, apps, connected devices, mobile web and mobile apps in real-world scenarios. We evaluated thousands of combinations of networks, browsers, payment instruments and integrations for travel and hospitality customers worldwide.

Device coverage

The figures in this report reflect tests across the following scope for travel and hospitality providers worldwide:

Mobile Devices

Mobile makes	64
Mobile models	1,010
Mobile OSes	10
Mobile OS versions	235
Mobile web browsers	34
Mobile carriers	388

Payment Method	ds
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Credit/debit cards	198
E-Wallets	1
Mobile wallets	5
Alternate payments	1

Desktop

Desktop web browsers	29
Desktop OSes	7
Desktop OS versions	120

Functional testing

The Data Set

A representative sample of functional tests across travel and hospitality companies.



3,596 test cycles



111 countries



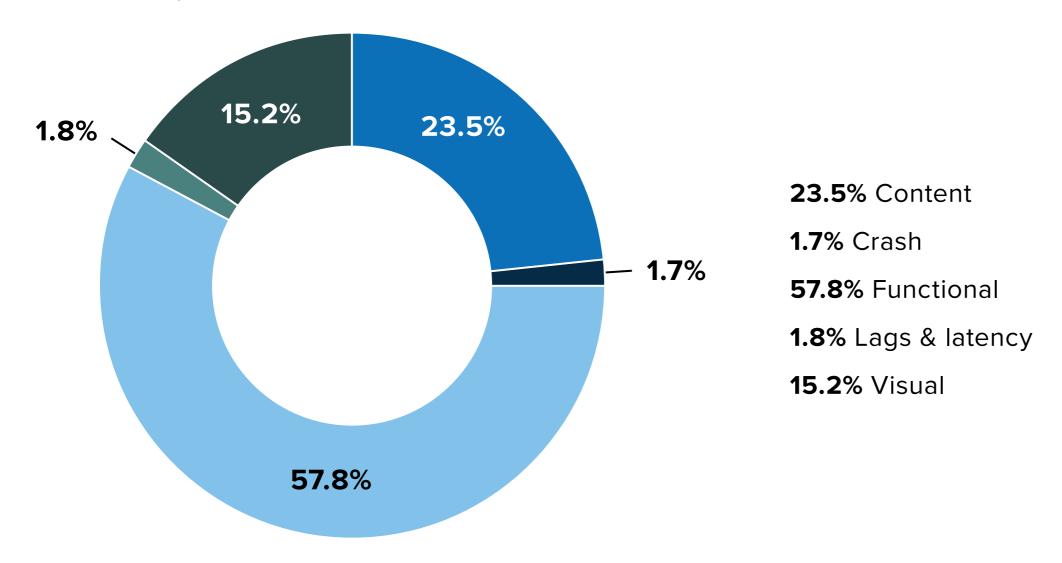
29,160 bugs

Bug type definitions

Bug Type	User Experience
Content	"This doesn't read right" Typos, grammatical issues
Crash	"The app shut down" App closes or quits unexpectedly
Functional (workflow errors)	"This doesn't work right" Buttons don't respond when clicked, searches return incorrect results
Lags & latency	"This is taking too long" Sluggish performance, freezes
Visual	"This doesn't look right" Misaligned content or page elements, content doesn't fit an area

Bug type breakdown

See the prevalence of each type of bug across the travel and hospitality data we analyzed:



The composition of bug types identified remains the same as last year. Functional, visual and content defects continue to comprise over 96.55% of all bugs found. Notably, functional bugs dropped 2.06% this year, but content bugs increased 2.25% year over year. The remainder were within 1% of last year's report data.

Crashes, the most critical flaw, improved by almost a quarter of a percent and is the lowest of the five bug types identified this year, a good sign.

Average device coverage: travel and hospitality vs all industries

In this table, a configuration refers to a unique browser and OS combination (desktop) or device and OS combination (mobile & tablets).

	ALL	Travel & Hospitality
Test cycles	37,117	3,596
Average number of desktop configurations tested per cycle	9.2	9.6
Mobile & tablet configurations tested per cycle	14.8	14.3
Credit & debit cards tested per cycle	4.8	3.1
E-wallets tested per cycle	1.8	1.5
Mobile wallets tested per cycle	2.6	1.9

Most popular device configurations travel and hospitality providers tested

While these were the configurations Applause tested most for travel and hospitality companies in each region, it's vital to review and prioritize your subscriber customer data and preferences to develop your test plan per build or release. Also, consider OS adoption rates in your plan – for example, iOS users upgrade OSes far more frequently than Android users. Determine what portion of testing resources you want to allocate to current versus older OS versions.

Region	Desktops	Mobile & tablet
Africa	 Windows 10 64-bit, Chrome Windows 10, Chrome Windows 10 Professional 64 bit, Chrome Windows 11, Chrome Windows 10, Firefox 	 Apple iPhone 7, iOS 15.3.1 Xiaomi Mi 9T, Android 11 Samsung A71 (SM-A715F/DS), Android 11 Huawei P40 lite, EMUI 12.0.0 Samsung Galaxy S10, Android 11
Asia	 Windows 10, Chrome Windows 10 64-bit, Chrome Windows 11, Chrome Windows 10, Firefox Windows 11 Home, Chrome 	 Apple iPhone 8, iOS 15.5 Apple iPhone 7, iOS 14.5.1 Samsung Galaxy A51, Android 11 Apple iPhone 11, iOS 15.2 Samsung Galaxy M30, Android 10
Europe	 Windows 10 64-bit, Chrome Windows 10, Chrome Windows 10, Firefox Windows 10 64-bit, Firefox Windows 11, Chrome 	 Samsung Galaxy S10 Plus, Android 12 Apple iPhone 11, iOS 15.5 Samsung Galaxy S9, Android 10 Samsung, Galaxy A52s 5G, Android 12 Samsung, Galaxy A52s 5G, Android 12, Chrome

Most popular device configurations travel and hospitality providers tested (continued)

Region	Desktops	Mobile & tablet
Oceania	 Windows 10, Chrome Windows 10 64-bit, Chrome Windows 11 Pro, Chrome Windows 10, Firefox Windows 10 Home, Chrome 	 Samsung Galaxy A20, Android 11 Samsung A71 (SM-A715F/DS), Android 11 Realme X2 Pro, Android 11 Apple iPhone 8, iOS 15.2 Samsung Galaxy S8, Android 9.0 (Pie)
North America	 Windows 10, Chrome Windows 10 64-bit, Chrome Windows 11 Home, Chrome Windows 10, Firefox Windows 10 64-bit, Firefox 	 Samsung Galaxy S10+, Android 12 Samsung Galaxy S10+, Android 10 Samsung Galaxy S8, Android 9 (Pie) Google Pixel 3 XL, Android 12 Samsung, Galaxy A21s, Android 11
South America & LATAM	 Windows 10, Chrome Windows 10 64-bit, Chrome Windows 11, Chrome Windows 10 Professional 64 bit, Chrome 	 Samsung Galaxy A21s, Android 11 Samsung Galaxy A10, Android 11 Xiaomi Poco X3 NFC, Android 11 Xiaomi, Mi 10, Android 12

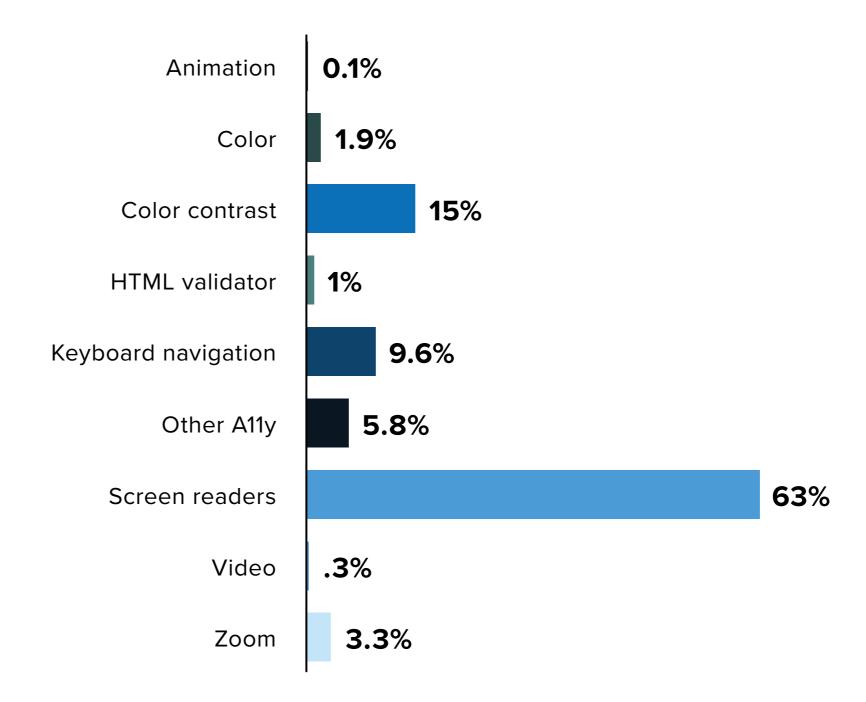
Accessibility testing

The Data Set A representative sample of accessibility tests across travel and hospitality companies. test cycles 14 countries 5,026

Bug type breakdown

See the prevalence of each type of bug across the data we analyzed.

Screen reader defects continue to make up the vast majority of all accessibility errors, up just slightly, by 0.61%, from last year. We added a new bug type, animation. All other bug type distributions remained consistent, fluctuating less than 2% +/- from last year.



Bug type definitions

Bug Type	User Experience
Animation	"I don't know what's happening on the screen" A user can't see content that moves, such as animation telling users to perform an action
Color	"This doesn't make sense" Users can't identify information communicated only through color
Color contrast	"This all looks the same" Insufficient color contrast ratio
HTML validator	"This page seems like something is missing" Issues in HTML code that do not impact the keyboard navigation and screen reader behavior
Keyboard navigation	"I can't use my keyboard to navigate" People using alternative keyboards or speech input devices as keyboard emulators cannot navigate a page

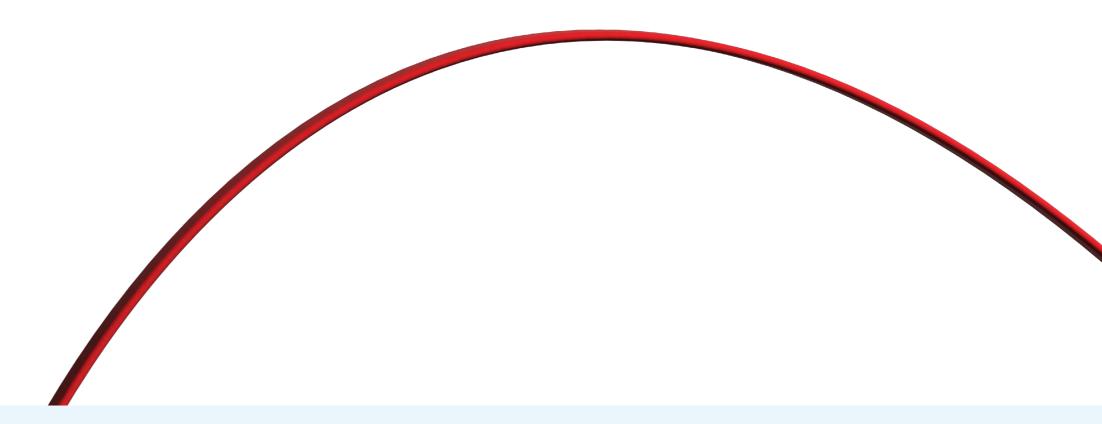
Bug Type	User Experience
Screen readers	"My screen reader isn't working" Readable text for screen readers is missing
Other A11y	"This isn't working for me" Poor user experience for persons with disabilities
Video	"I can't tell what's going on in this video" Missing closed captions or audio descriptions
Zoom	"I can't see what I need to" Text gets cut off when a user zooms in beyond a certain point

Average device coverage: travel and hospitality vs all industries

In this table, a configuration refers to a unique combination of browser, OS and screen reader.

Industry	Test cycles	Average number of desktop configurations tested	Average number of mobile & tablet configurations tested
All	1,273	3.4	3.1
Travel & hospitality	191	2.7	2.9

As companies work to comply with local regulations and conform to industry- and region-specific requirements, in-market testing on the most common devices, browsers and networks is a crucial component in delivering fully accessible experiences for all customers.



Localization testing

The Data Set

A representative sample of tests evaluating localization.



18

test cycles



24

countries



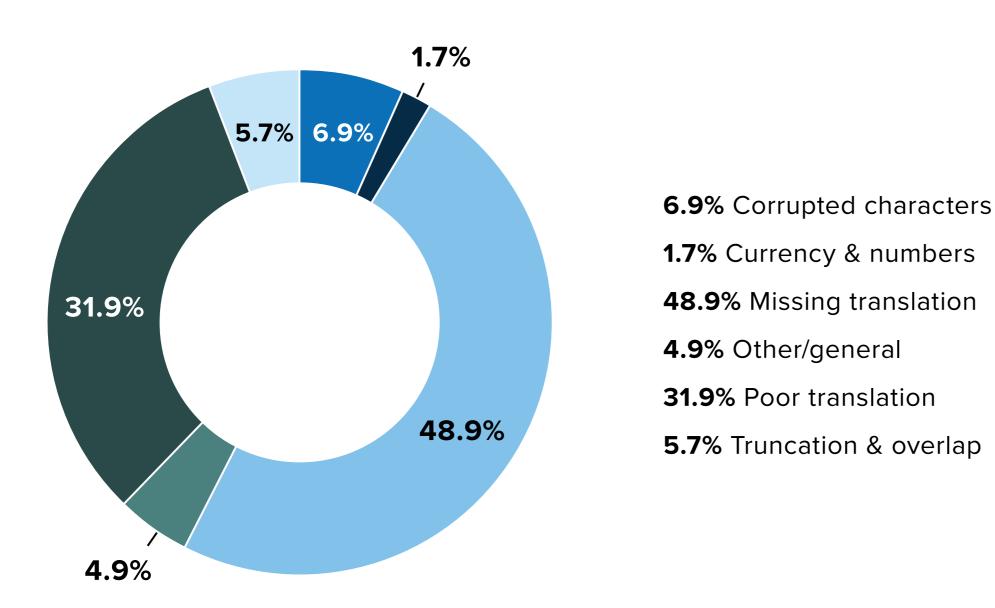
405

Bug type definitions

Bug Type	User Experience
Corrupted characters	"This doesn't look right, where are the accent marks?"
Currency & number format	"That date seems wrong for the holiday they're promoting"
Missing translation	"I'm not sure what this says, there's no translation"
Other/general	"That photo is offensive, this brand doesn't understand me"
Poor translation	"I don't think that's the right word here"
Truncation & overlap	"The text on this button is cut off"

Bug type breakdown

See the prevalence of each type of bug across the data we analyzed:



The good news: The most significant change from last year is the 17.35% improvement in poor translation. The other general bugs grouping dropped 7.86% as well. On the downside, missing translations bugs increased 16.59%, corrupted characters increased 4.91%, truncation and overlap increased by 2.98%, and currency and number format increased by 0.73%. There are still many ways that brands are adding friction through a poorly localized user experience.

Average device coverage: travel and hospitality vs all industries

In this table, a configuration refers to a unique device and OS combination (mobile & tablets).

Industry	Test cycles	Average number of mobile & tablet configurations tested
AII	273	27.2
Travel & hospitality	24	14.1

Payment testing

The Data Set

A representative sample of Applause's payment testing data for travel and hospitality providers using digital payment methods



108 test cycles



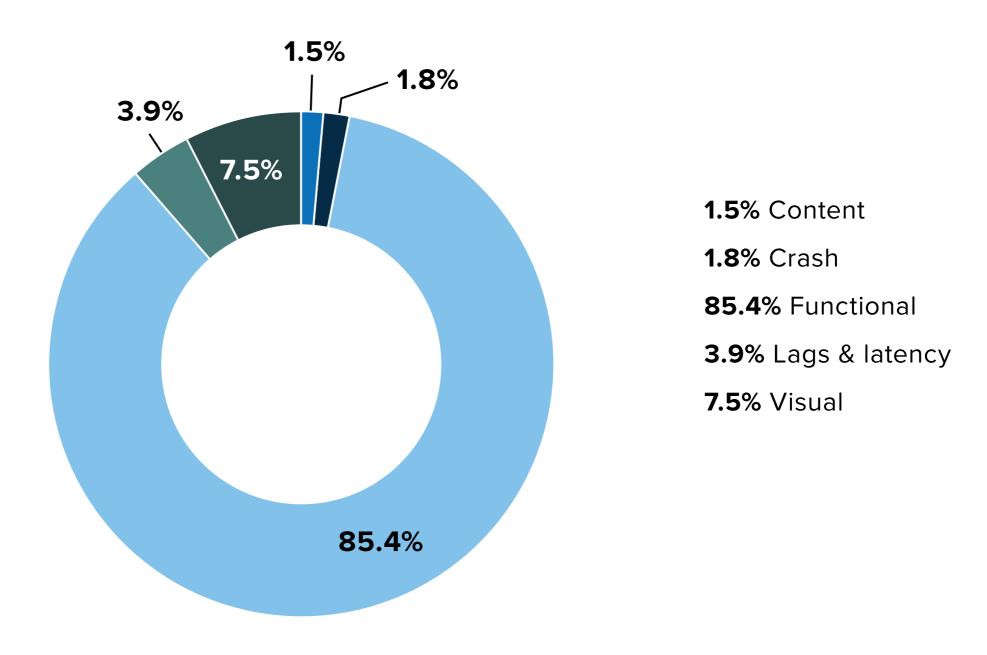
10 countries



335 bugs

Bug type breakdown

See the prevalence of each type of bug across the data we analyzed.



We note some big changes this year. Functional bugs comprised a whopping 85.37% of all payment bugs, increasing 16.57% since last year. Lags and latency issues increased 2.98%. On the positive side, content bugs decreased 11.11% and visual issues dropped 8.64%. Without corrective action, payment transactions will fail, delivering a serious hit to revenue.

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