

Carrier Spam Detection Test

Testing How Well the Top 4 US Carriers Protect Consumers from Unwanted Spam Calls

Background

Spam calls are a growing problem in the United States. Robocalls alone have soared¹ from 2.5 billion (Oct 2017) to 5.1 billion (Oct 2018) nationwide. Wireless carriers and spam detection apps are focused on identifying these unwanted calls accurately. This study, fielded by HarrisX, seeks to analyze spam filtering identification and accuracy within the Top 4 Wireless carriers as well as the quality of their caller ID services using a test set of numbers.

Devices used

HarrisX tested the spam filtering of AT&T, Sprint, T-Mobile, and Verizon using one Android-OS smartphone and one iOS smartphone per carrier. All phones were equipped and enabled with the highest tier of each carrier's available spam protection / caller id services.

SPAM IDENTIFICATION CAPABILITIES TESTED

The study used three tests to evaluate carriers' spam filtering abilities:



SPAM IDENTIFICATION

How often does the carrier correctly detect and flag a call from a spam number?



SPAM ERROR RATE

How often does the carrier incorrectly detect a non-spam number?



CALLER ID

What percent of calls does the carrier tag with the correct and complete caller ID?

Procurement of Phone Number Lists

For **Spam Identification** testing, HarrisX leveraged phone numbers from both public and independent sources of consumer complaints including: the **FCC**, and the **FTC**, as well as **Stopting.us** and **Whocalls**, in order to minimize potential bias favoring a particular competitor.

To gauge **Spam Error Rate**, this study used phone numbers that were not spam at the time of testing, but had a history of misclassification as spam.

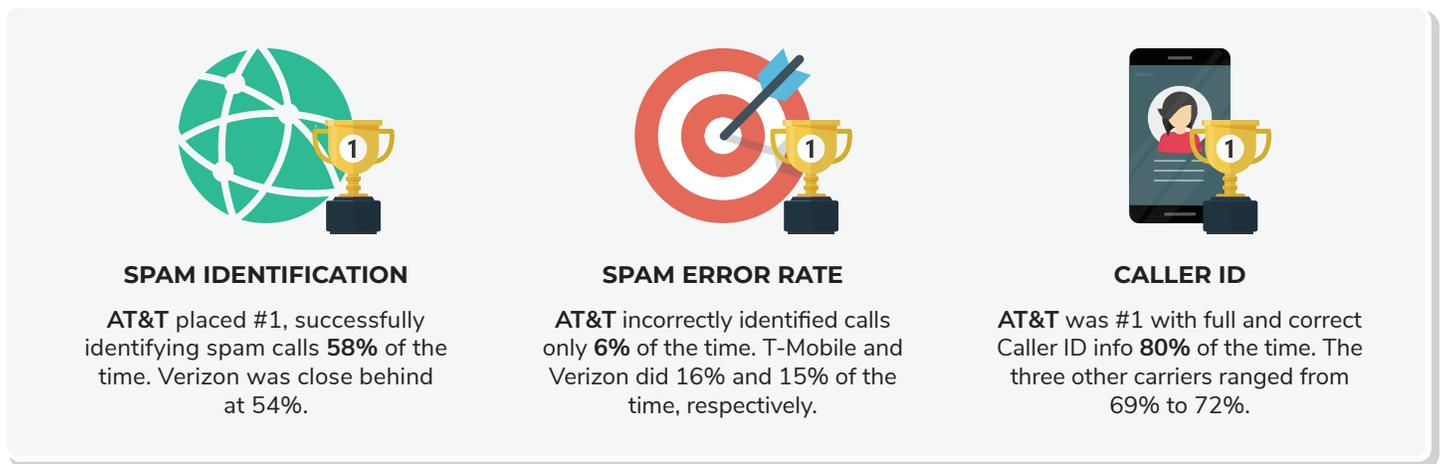
¹ 5.1 Billion Robocalls Flooded Consumers' Phones in October: Report: <https://www.consumerreports.org/robocalls/billions-of-robocalls-industry-regulars-pressured-to-find-a-solution/>

For **Caller ID testing**, businesses were selected randomly from a geographically-diverse set of cities using Google Maps data. Businesses chosen had to fit with predetermined general business categories. To achieve ID accuracy, a carrier had to present the specific and accurate name of the business.

The criteria for phone number selection took into account the recentness of spam complaints against them, ranging from within two days to two months of the testing period. Calls from a single number to each phone occurred within one minute of each other to avoid bias resulting from one carrier already identifying a number as spam.

Results

The tests for **Spam Identification** and **Spam Error Rate** featured 500, 450 and 415 calls respectively to each of the 8 test devices, resulting in a total of 10,920 calls made in a four-day period.



	NUMBERS DIALED	NUMBER TYPES	AT&T	SPRINT	T-MOBILE	VERIZON
SPAM IDENTIFICATION	1,000	SPAM	58%	<1%	35%	54%
SPAM ERROR RATE	900	NOT SPAM	6%	n/a [†]	15%	16%
CALLER ID	900	NOT SPAM	80%	69%	70%	72%

Conclusion

When it comes to protecting consumers, the ability to differentiate between actual spam and legitimate calls is a crucial element of quality in the fight against unwanted calls. By each measure of this study, **AT&T significantly out-performed its competitors** in identifying spam correctly.

About HarrisX

HarrisX is a Tech Media and Telecom Market Research Consultancy which is part of the Stagwell Group of companies. HarrisX was formed through the acquisition of Telecom Research Assets from Nielsen and has since augmented those assets with new technology based solutions and analytics. HarrisX works with most of the major wireless carriers, OEMs, MSO, Technology and OTT players. HarrisX's research suite includes Syndicated Trackers and Telemetry Data, Retail Effectiveness and Custom Research solutions. For more information, please visit www.harrisx.com.

[†]With less than 1% spam identification rate, Sprint was deemed not relevant for this portion of the study.