RUNCITER ASSOCIATES

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Research · RA-R-2024-01

Consumer Device Survey 2024

Every technical sweep the firm carries out ends with an inventory of what in the building can listen, transmit or bill. In 2023 our technicians swept 1,214 premises and catalogued 9,862 connected devices. This is what they found.

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Prepared by
Counter-Surveillance, with Field Measurement

Sample
1,214 premises, January to December 2023

Reference
RA-R-2024-01

Summary

More than half of the devices in our clients' homes and offices had a microphone. Nearly a quarter of those microphones were not mentioned anywhere in the device's documentation, and about one device in four was still transmitting when its owner believed it to be off.

Nearly one in five had begun, after purchase, to charge for something it had once done for nothing. A smaller number charged per use: to open a door, to brew a cup, to finish a wash. Most clients paid. Several told our technicians that they had not known they were allowed to object.

Forty-one devices did something we had not been asked to look for. They acted on a household's decisions before the household had made them. We referred those to our Field Measurement practice, and nine of them onward to the Turing Registry.

Findings

Finding	Devices	Share
Connected devices catalogued	9,862	100%
Fitted with a microphone	5,234	53.1%
Microphone not mentioned in the device's documentation	1,211	12.3%
Transmitted while switched off	2,395	24.3%
Began charging for a feature that was free when bought	1,784	18.1%
Charged per use for a basic function	307	3.1%
Responded to a name no one in the household had used	74	0.8%
Acted on a household decision before it was made	41	0.4%

Shares are of all 9,862 devices. Undisclosed microphones are 23.1% of devices with a microphone.

Method

The survey draws on the inventories completed at the end of every technical sweep the firm carried out in 2023: 1,019 residences and 195 offices, in New York, New Jersey, Connecticut and the canton of Zürich. A sweep covers every room the client gives us access to. Technicians record each connected device by make, model and firmware, test it for radio emissions with its power indicator on and off, and read its documentation and terms of service as they stood on the day.

The residences held 8,104 devices, nearly eight each; the offices 1,758, about nine each. We counted a device as charging for a feature if, on the day of the sweep, it required payment for something its documentation at the time of purchase described as included. We counted it as responding to a name if it answered, in the technician's presence, to a name that no member of the household recognised.

The sample is not random. Our clients sweep their premises because they have reason to think someone is listening, and they own more devices than most. The figures describe our clients' buildings, not the country's.

By category

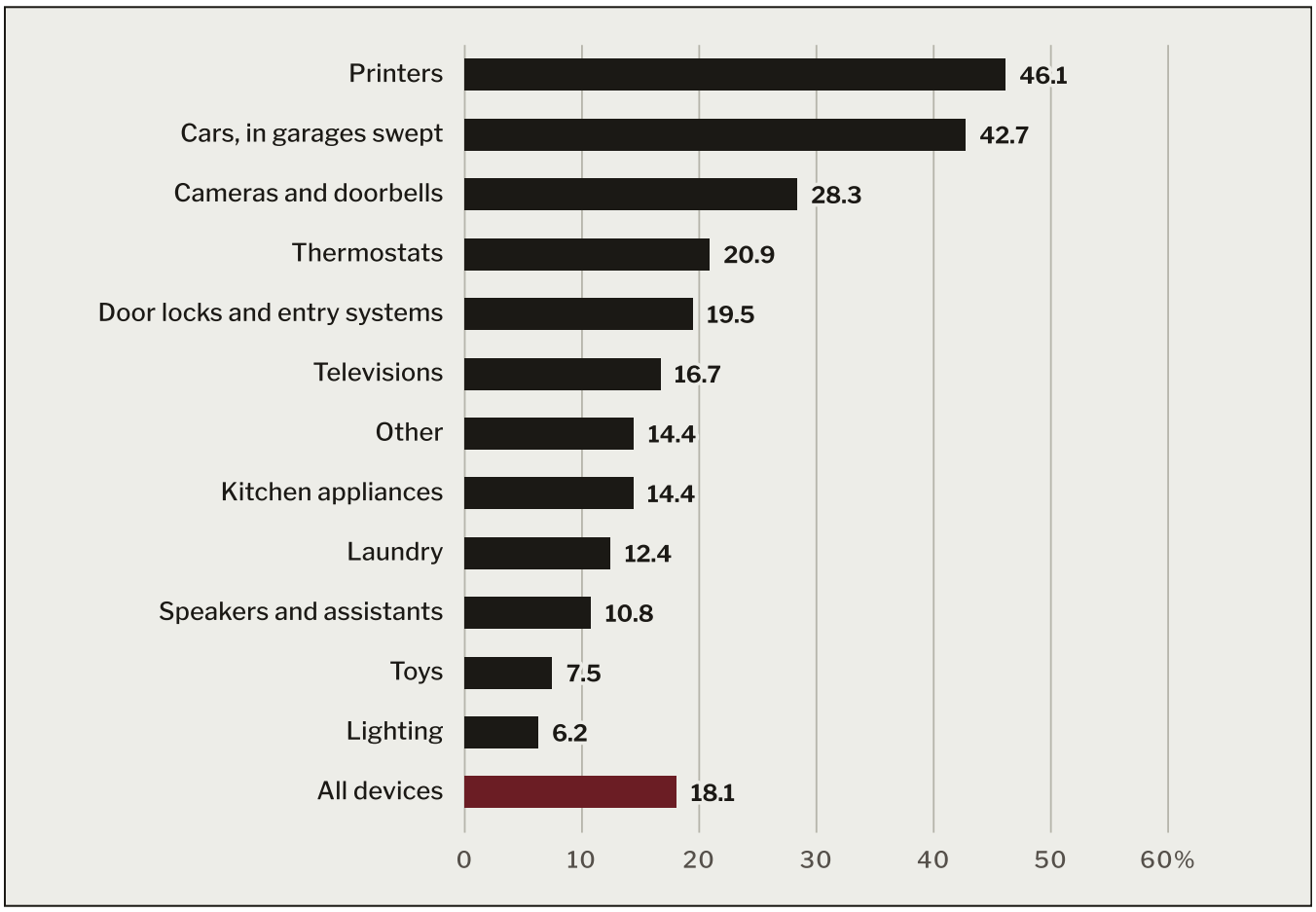


Plate 1. Share of devices in each category that began charging for a feature after purchase. Printers and cars were the worst offenders, as they were in Frothly's own study of 200 devices.

CATEGORY	DEVICES	MICROPHONE	TRANSMITS WHEN OFF	NEW CHARGES
Televisions	1,402	65.3%	38.1%	16.7%
Speakers and assistants	1,288	99.6%	30.7%	10.8%
Thermostats	704	22.2%	11.5%	20.9%
Door locks and entry systems	611	39.9%	8.7%	19.5%
Kitchen appliances	1,190	45.8%	21.6%	14.4%
Printers	566	6.2%	14.3%	46.1%
Laundry	498	17.9%	11.2%	12.4%
Cameras and doorbells	903	92.5%	43.6%	28.3%
Cars, in garages swept	377	90.7%	52.8%	42.7%
Lighting	1,057	3.1%	7.9%	6.2%
Toys	214	69.6%	27.1%	7.5%
Other	1,052	57.8%	19.3%	14.4%
All devices	**9,862**	**53.1%**	**24.3%**	**18.1%**

Anticipatory devices

Forty-one devices, most of them grocery-ordering refrigerators and scheduling assistants, acted on a decision before the household made it: ordering a cake two days before a birthday party was planned, booking a car for a journey nobody had mentioned, declining a delivery for a date on which the family later found they would be away.

Prediction from habit explains most of this. It does not explain all of it. Our Field Measurement practice surveyed the premises concerned with the PSI-FIELD MONITOR, TR-01993, and in nine cases found readings consistent with precognitive inputs that the device's maker had not disclosed. Those nine were referred to the Turing Registry, which revoked a forecasting licence on similar grounds in 2017 (TR-06250). The Registry's reviews are continuing, and we will not name the makers while they do.

Advice to clients

1. Keep an inventory of every connected device in your home or office, with its model and the date you bought it, and keep the documentation that came with it.
2. Where you have the choice, buy devices with a physical switch, and use it.
3. Read the notes before accepting an update. If an update adds a feature you did not ask for, ask us to sweep the room it is in.
4. If a device begins to charge for something it used to do, write to the maker and keep a copy. If it begins to anticipate you, telephone us.

Cited by

Frothly, the San Francisco research institute, drew on this survey in *Coin-Operated: Microtransactions and the connected home* (FR-R-2025-05, September 2025), its report on charges introduced to household devices after purchase.

How to cite

Runciter Associates (2024). *Consumer Device Survey.* New York.

We thank the clients who agreed to let their inventories be counted, and the fourteen technicians who completed them.