

Smart Device Makers' Failure to Provide Updates May Leave You Smarting

STAFF PERSPECTIVE | NOVEMBER 2024

Introduction

You just bought a new “smart” lighting system that allows you to adjust the lighting of your home using your voice or remotely using an app. How long will the system last? Or you just paid for a “smart” blood glucose monitoring system that uses an app to keep track of your readings and to share them with your healthcare provider. How long will you or your doctor have access to your readings?

The answer, according to a new study conducted by FTC staff is, “who knows?” FTC staff looked for information about the duration of software support commitments for 184 connected products, including smart phones, home appliances, health monitors, and fitness devices. The big takeaway from this study: **Nearly 89 percent of the manufacturers’ web pages for these products failed to disclose how long the products would receive software updates.** Below, we provide more of the findings from this study. But, first, here’s some context.

FTC Staff Report: Smart Device Makers' Failure to Provide Updates May Leave You Smarting



FTC staff reviewed
product webpages for
184 connected products.

Nearly 89% of product
web pages failed to
disclose for how long the
manufacturer would
update the product
software.

Background

For non-connected devices, a product will last until it physically fails. Connected “smart” products, however, rely on software or an accompanying app, or both, to connect to the internet to operate. The software or app often needs to be updated to protect the device against security threats and to ensure continued connectivity. If the manufacturer stops providing these updates, the product may lose its “smart” functionality, become insecure, or completely cease to operate. Maybe the manufacturer will support the device forever, or maybe just for the same time period as the written warranty if one is offered. If a manufacturer fails to disclose how long it will support a product, consumers have no way of knowing how long the product will last—or how long it will work as intended or marketed.

FTC Study

FTC staff looked for information about the duration of software support commitments for 184 connected products.



To determine whether manufacturers disclose how long they provide software updates for their products and related apps, the FTC’s East Central Regional Office looked at 184 different “smart” products. The appendix to this Staff Perspective explains the methodology.

Nearly 89% of the manufacturers' product webpages did not disclose the connected device support duration or end date

For each smart or connected device, staff first reviewed the manufacturer's product webpage to find the support duration or end date. A manufacturer's website, specifically the webpage dedicated to a particular product, is a likely place that consumers would look for detailed information about a connected device. This is where consumers could expect to read about the device's price, technical specifications, smart functionality, innovative features that differentiate it from competing devices in the market, and how long the manufacturer warrants it. Indeed, all of the 184 product webpages staff reviewed contained a combination of this information, with many also including eye-catching graphics and compelling product highlight videos. However, of the 184 product webpages staff reviewed, 163 or 88.6% did not disclose the connected device support duration or end date.

A lack of uniform format and placement of software support information makes comparison shopping difficult

Of the 184 product webpages, 21 or 11.4% disclosed the device's software support duration or end date. However, the information was not always found in the same place within the product webpage. For most of these 21 web pages, the software duration or end date could be found in the "tech specs" or "product information" section, while others put it in the "FAQ" section or as a footnote using small print. Further, the support information was not always stated clearly. While a majority of these 21 webpages stated the support duration (e.g., "x years from the release date") or the end date, some used ambiguous language that only imply the level of support provided, including phrases like, "lifetime technical support," "as long as your device is fully operational," and "continuous software updates," for example. Notably, staff also had difficulty finding on the product webpages the device's release date, a piece of information which could bear on consumers' ability to determine how long they could expect to receive updates on their device's smart features or security.

For many of these products, support information could be found somewhere on the manufacturers' website, other than on the product webpage. As explained below, in addition to reviewing product webpages, staff conducted internet searches to find product support information and end dates. Of the 184 devices studied, Google searches found the software support information for 60 products. Forty-three of these were for products whose support duration or end dates were not on the products' webpages. For 30 of these 43, the search results pointed to the device manufacturer's website. In other words, for these 30, the manufacturer

simply failed to disclose the support information on the product webpage even though this critical piece of information existed somewhere in its own website, oftentimes in the “help” and “support” pages.

A Google search failed to identify the connected device support duration or end date for over 67% of the devices

After reviewing the product webpages, staff conducted basic searches on Google, as it is the most commonly used search engine in the United States, to learn whether a consumer would be able to track down support duration or end dates for the devices. Using Google, staff was unable to find support information for 124 or 67.4% of the 184 devices.

Information derived from a Google search did not always match the information disclosed on the manufacturer's product webpage

For 60 of the 184 products, a Google search yielded information about the product's support duration or end date. But the information derived from a Google search did not always match the information found on a device's product webpage. Of the 21 connected devices whose support information could be found on the manufacturer's product webpage, a Google search resulted in finding identical support durations or end dates for 15 of the devices and no information for four products. For the remaining two devices, the Google search results revealed a contradiction between two parts of the device manufacturer's own website. For the first device, the product webpage indicated “lifetime” support, but the search result that redirected to the manufacturer's support page (not the product webpage) indicated that the software support end date is in 2028. For the second device, the product webpage similarly indicated “lifetime” support, but the search result pointing to the manufacturer's support page indicated that, while other updates may still be active, the security updates for the device had stopped in 2021.

Notably, the connected device support information obtained through a Google search was incorrect for one product. In this instance, Google's AI Overviews search result stated that the device would receive “software support and updates for 3-6 months.” To investigate this, staff clicked on the link that supported the artificial intelligence-generated statement and was redirected to the manufacturer's product webpage, which stated that the “3-6 months” referred to the device's battery life and not its software support. When staff again conducted the same online search for the same device the following day, the AI-generated

statement changed to the following: “There isn’t much information about the duration of software support or updates for [the device].”

These findings are consistent with those from a recent study conducted by Consumer Reports looking at the software support disclosure practices of 21 major appliance brands. Consumer Reports found that only three brands inform consumers how long they guarantee updates to their appliances’ software and applications.¹

Conclusion

Like the hypothetical purchaser of a “smart” lighting product, consumers are often left in the dark when it comes to how long their connected products will receive software updates. This lack of information makes it difficult for consumers to know what they are actually buying when they purchase a connected device. Moreover, even when some information is provided, the lack of uniformity in its location, presentation, and language makes it difficult to compare one product with another.

Manufacturers’ failure to disclose the duration of their software support commitments warrants further consideration by policymakers and law enforcers. Depending on the facts, the failure to inform prospective purchasers about the duration of software updates for products sold with written warranties may violate the Magnuson Moss Warranty Act. This law requires that written warranties on consumer products costing more than \$15 be made available to prospective buyers prior to sale² and that the warranties disclose a number of things, including, “a clear description and identification of products, or parts, or characteristics, or components or properties covered by and where necessary for clarification, excluded from the warranty.”³

Manufacturers marketing a device as having certain features and then subsequently failing to provide software updates needed to maintain those features raises concerns about consumer harm resulting from deceptive practices.⁴ A representation, omission or practice is deceptive and violates the FTC Act if it is material and likely to mislead a consumer acting reasonably under the circumstances. Thus, if a manufacturer makes an express or implied representation regarding how long the product will function or be useable, it may be a deceptive practice if the manufacturer fails to disclose how long it will provide necessary software updates.

Similarly, the failure to provide software updates or the failure to disclose the duration of software support raises concerns about harm consumers cannot avoid. A practice is unfair and violates the FTC Act if it is likely to cause substantial injury that could not be reasonably avoided by consumers and the injury is not outweighed by any offsetting consumer or competitive benefits that the sales practice also produces.⁵ Thus, when evaluating a manufacturer's failure to provide updates or its failure to disclose the duration of software support it is appropriate to consider the scope of injury caused by the failure, whether this injury is reasonably avoidable by consumers, and whether there may be any offsetting benefits arising from the failure to provide software updates or disclosures about the duration of software support.

Appendix - Methodology

For purposes of the study, staff defined a “connected device” as one that requires software, such as firmware, feature updates, and bug fixes or security patches, and/or uses an accompanying application (app), whether developed by the device manufacturer or a third-party, that enables the device to connect to the Internet to perform a feature or function. An accompanying app, for example, allows the device (i) to be controlled, monitored, or otherwise accessed remotely (e.g., turn the device on or off; adjust a device setting; view a live or recorded video feed), (ii) to control or otherwise access another device, or (iii) to record data and provide access to it later (e.g., workouts; sleep duration or quality; health-related readings). Staff defined “connected device support” to include either software or an accompanying app, or both.

Staff generated a list of 184 connected devices by different manufacturers using publicly available data⁶ from PCMag's “Our Top Tested Picks,”⁷ Consumer Reports' online lists of tested devices,⁸ and a general online search with the search terms “top [consumer device category] of 2024.” These devices fall under 64 categories, listed in the chart below, that are likely used for personal or family purpose or are commonly found at home. Excluded are automotive vehicles and larger personal computing devices, such as desktop PCs, laptops, and tablets.

Staff then assumed the role of a consumer by checking for the support information for each device on the manufacturer's website and through a Google search, as described below. Staff determined that the support information was readily available if it could be found in three minutes or less.

For each device, staff used the manufacturer's product webpage specific to the device model to find the support duration or end date. This entailed examining the entire product webpage, including the "overview" or "highlights" section, the "tech specs," "technical details," or "product information" section, and the "FAQ" or "support" section, among others. Staff limited their review to information found on the product webpage. Staff did not examine documents or resources that may have been hyperlinked on the webpage such as the device's product or user manual, contract or agreement, terms of use, terms and conditions, user or safety guide, or warranty because the goal was to replicate a three-minute search in the most obvious place: the product webpage. By contrast, hyperlinks frequently contain lengthy and dense documents that are less accessible than product webpages. Staff limited its search time on the product webpage to three minutes.⁹

In addition to the product webpage, staff used Google.com¹⁰ to find the connected device support information with the search terms "[device manufacturer + device model] duration of software support or updates." Staff first examined the AI Overviews section of the search results to find the support duration or end date because it is the initial information returned by a Google search query. If the AI overview did not provide an answer, staff then examined other search results.¹¹ Likewise, staff limited its search time using Google.com to three minutes.

Chart - Connected Device Categories

Air conditioner	Headphones	Smartwatch
Air purifier	Hearing aid	Smoke Detector
Baby bassinet	Heart rate monitor	Soundbar
Baby monitor	Home controller/hub	Speaker, smart indoor
Bed mattress	Humidifier	Speaker, smart outdoor
Blood glucose monitor	Indoor home security camera	Sprinkler
Blood pressure monitor	Light bulb, smart indoor	Stationary bike
Breast pump	Light bulb, smart outdoor	Streaming media device
Carbon monoxide detector	Medical alert system	Strength training machine
Coffee maker	Microwave oven	Thermostat
Cutting machine	Outdoor security camera	Toaster
Dehumidifier	Pet camera	Toothbrush, children
Dishwasher	Plug, smart indoor	Treadmill
Display, smart	Plug, smart outdoor	TV, 55-inch
DIY home security system	Range	Video doorbell
Door lock	Refrigerator	Video game console
Dryers	Robot lawn mower	Washing machine

Elliptical	Robot mop	WiFi extender
Fitness tracker	Robot vacuum	Window blinds
Garage door opener controller	Rowing machine	Wireless router
GPS	Scale, weight/fitness	
Grill	Smartphone	

¹ <https://innovation.consumerreports.org/when-will-your-smart-appliance-turn-dumb/>. In September 2024, Consumer Reports asked the Commission for guidance on the issue of “software tethering.” Consumer Reports, U.S. PIRG, et al. “Letter to the Federal Trade Commission on Software Tethering” September 5, 2024.

<https://advocacy.consumerreports.org/research/group-letter-ftc-software-tethering/>

² The Magnuson Moss Warranty Act, 15 USC 2301 *et seq.*, and the FTC’s Pre-Sale Availability Rule, 16 CFR 702, require manufacturers who offer written warranties on products costing the consumer more than \$15 to make the warranties available for pre-sale review.

³ 16 C.F.R. 701.3(a)(2).

⁴ *FTC Policy Statement on Deception* (Oct. 14, 1983), *Appended to Cliffdale Associates, Inc.*, 103 F.T.C. 110, 174 (1984), <https://www.ftc.gov/public-statements/1983/10/ftc-policy-statement-deception>.

⁵ *FTC Policy Statement on Unfairness* (Dec. 17, 1980), *Appended to Int'l Harvester Co.*, 104 F.T.C. 949, 1070 (1984), <https://www.ftc.gov/public-statements/1980/12/ftc-policy-statement-unfairness>.

⁶ Staff conducted the study in September and October of 2024 using FTC-issued desktop computers.

⁷ As a starting point, staff used the PCMag article, “The Best Smart Home Devices for 2024” (last updated Oct. 7, 2024), available at <https://www.pcmag.com/picks/the-best-smart-home-devices>, which lists several connected device categories. Clicking on each hyperlinked device category redirects to the corresponding PCMag list of “Our Top Tested Picks.” See generally <https://www.pcmag.com/about/how-we-test-everything-we-review>.

⁸ Consumer Reports (CR) selects devices to test based on several factors, including current trends and availability, CR members’ interests, and market data (e.g., representative brands, price ranges, and important features), among others. See <https://www.consumerreports.org/about-us/what-we-do/research-and-testing/electronics/>.

⁹ The average time spent on a webpage is less than one minute. See e.g., FORBES ADVISOR, “Top Website Statistics for 2024” (June 4, 2024), available at <https://www.forbes.com/advisor/business/software/website-statistics/> (“The average time spent on a page is 54 seconds.”); CONTENTSQUARE, 2021 B2B Digital Experience Benchmark, available at <https://go.contentsquare.com/hubfs/2021%20B2B%20Campaign/B2B-BenchmarkReport-rd2.pdf> (54-second average time spent on a page for all industries; less than 54 seconds for a consumer electronics page); compare HUBSPOT, “What is the Average Time Spent on a Website?” available at <https://blog.hubspot.com/marketing/chartbeat-website-engagement-data-nj> (Dec. 22, 2021) (average time spent on a blogpost page is three to five minutes).

¹⁰ Google.com accounts for the largest share of the search engine market in the U.S. For example, during September 2023 to September 2024, Google.com accounted for over 76% of online searches in the U.S. using desktop PCs, with Bing.com accounting for the second largest share at approximately 16%. <https://gs.statcounter.com/search-engine-market-share/desktop/united-states-of-america/#monthly-202309-202409>.

¹¹ Google AI Overviews uses generative AI to create a summary of search results in the form of short paragraphs, and it provides links to websites that support the summary. See “Find information in faster & easier ways with AI Overviews in Google Search,” available at <https://support.google.com/websearch/answer/14901683>.