



2011 doesn't seem all that long ago...

But for some media tech, it can seem like a different century.

2011	2021
74%	n/a
92%	49%
16%	77%
3%	53 %
38%	88%
6%	45%
90%	90%
	74% 92% 16% 3% 38% 6%

Sources: 2011 Home Technology Monitor Ownership Report, Knowledge Networks; 2021 Connected Home, Hub Entertainment Research. Comparisons of equivalent questions.



Despite many additional options, the TV set is still the main screen in the home

% of all homes with at least one TV set:

98.5%*

% of viewing time spent on TV screen:

89% **

*Q1 2021 Hub Connected Home Report

** 2020Q3 Nielsen Total Audience Report



- But how do TV devices correlate with other home technology?
- How are non-TV devices used to choose or control content?
- What opportunities do they create for producers and distributors?

The goal of this study:
to capture all the mediarelated tech and devices
that consumers use today,
or plan to get in the future

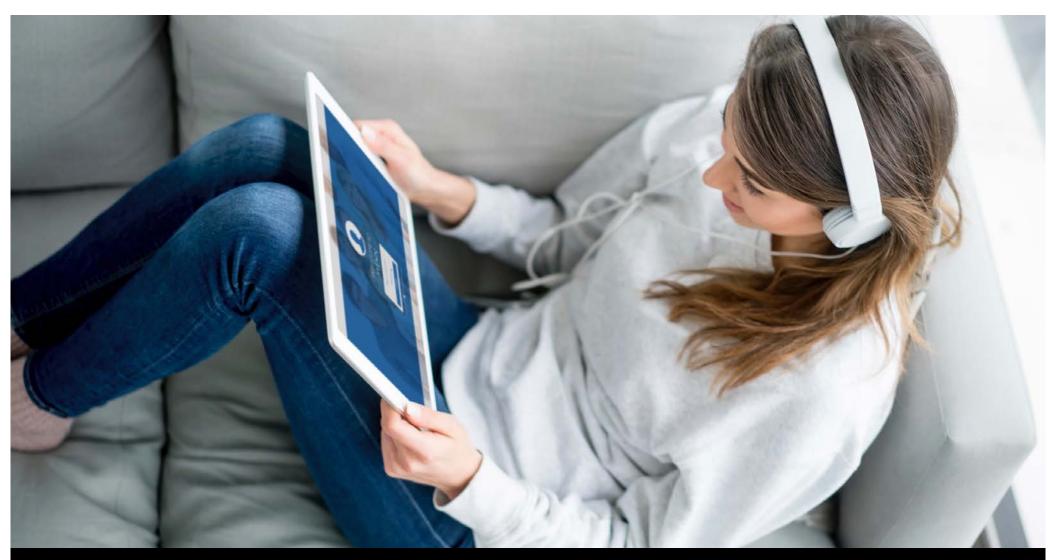


WE SURVEYED 5,000 U.S. CONSUMERS

- Respondents were age 16-74
- Weighted to U.S. Census data,
 - Including age, gender, ethnicity, income, and HH size
- Data collection completed in March 2021
- All interviews conducted in English

Note on trends: the 2020 survey was fielded prior to the pandemic shutdown that started March 11, 2020 so did not include any pandemic effects





KEY FINDINGS

SMART TVS ARE BECOMING THE NORM

- 70% of TV households now own a smart TV
- Smart TVs now make up over half
 (52%) of all TV sets in the home
- Over half of smart TV homes report a smart TV with a Roku or Fire TV operating system built in
- The result: a critical mass of TV sets that don't need other devices to connect to the internet, paving the way for everything from streaming to interactivity to addressable advertising



CONSUMPTION OF 4K CONTENT CONTINUES TO GROW

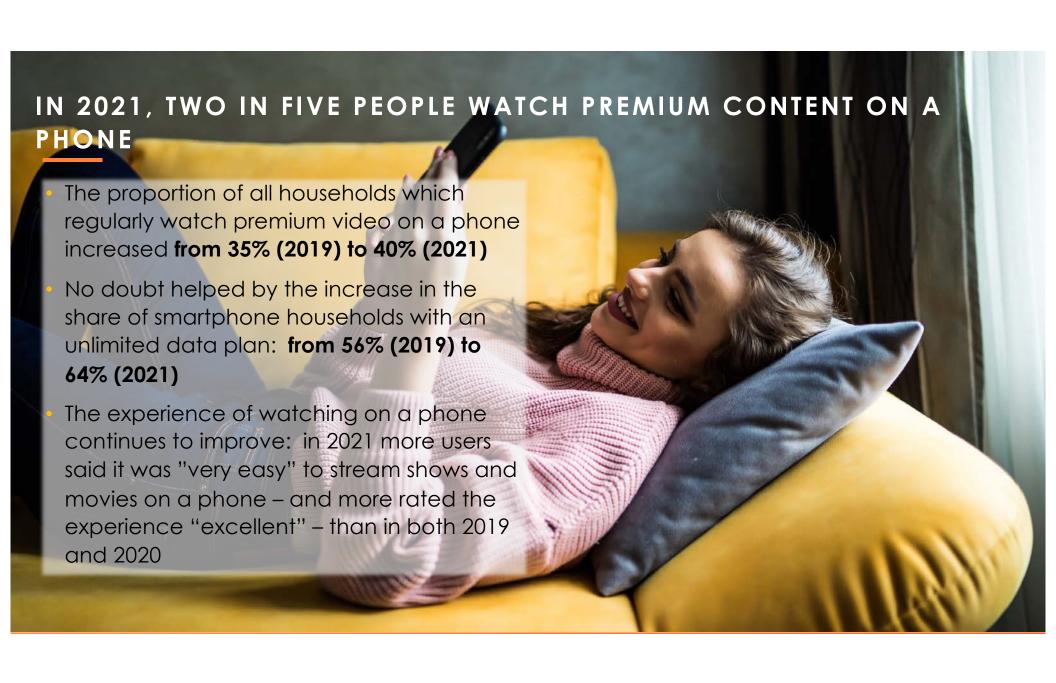
- 44% have a 4K-capable set (4K, UHD, or 8K), up from 31% in 2019
- 61% of 4K set owners have actually watched 4K content (up from 49% in 2019)
- And there's at least some interest in even higher resolution: 10% say they are "very likely" to buy an 8K set in the next 12 months
- Implication: as adoption of 4K content grows, 4K will become more of a factor in choice of content and of providers



VOICE CONTROL OF TV CONTINUES TO GROW

- 44% of TV households have at least one remote with voice control, up from 31% in 2019
- Voice remotes are still most likely to be used for discovery ("to find a show or movie to watch")
- If smart speakers are also counted, then half of homes use voice commands to control at least one TV set





PENETRATION OF SMART HOME DEVICES CONTINUES TO GROW

- Over the past three years, ownership of smart speakers has increased from 37% (2019) to 46% (2021)
- Net ownership of all other smart home devices also grew, from 33% (2019) to 43% (2021)
- Households not only have more smart speakers but also more devices that smart speakers can control. The value proposition of "the connected home" will increase as consumers continue to move past smart doorbells and thermostats



IS AUGMENTED REALITY/VIRTUAL REALITY THE "NEXT BIG THING"?

- Overall, 10% of homes in 2021 report owning a VR device, up from 8% in 2019 and 2020
- And, AR ownership/usage is reported by 8% of homes, the same as in 2020
- With gaming the application used by a large majority (72%) of VR owners, VR/AR seem to be destined to appeal only to small niche markets



COVID DRIVES TV BUYERS ONLINE (AND OUT OF RETAIL)

- The pandemic has brought about a big change in how people plan to buy smart TVs
- In 2019, more people planning to buy a new TV set said they planned to shop for it and buy it in a store (42%); only 27% planned an online purchase.
- In 2021, the pandemic has flipped these numbers: only 29% said they planned to buy at a retail store, while 43% planned to buy online and have it delivered directly to home



QUESTIONS?

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