

# privacy perceptions surrounding smart TVs

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# prior research

online survey to gauge sensitivity to data disclosure from wearables

- level of concern for 288 scenarios
  - 72 data types
  - 4 different recipients (servers, public, coworkers, friends)
- n=1,782 U.S. Internet users

Every once in a while, an app might do something on your *Cubetastic3000* without asking you first. Depending on what the app does, your feelings could range from indifference (you don't care) to being very upset.

**5. How would you feel if an app on your Cubetastic3000 learned when, how, and how much you exercise and shared that with your work contacts, without asking you first?**

Indifferent

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-

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Very Upset

objective: measure *relative* levels of concern for sharing as a function of **data type** and **recipient**.

# observations

significantly lower levels of concern when sharing with non-human recipients

most concerning scenarios involved audio or video within the home, or financial risks

# smart TVs

survey to examine understanding of risks pertaining to smart TV data capture:

- voice recognition (audio capture)
- personalized recommendations
- gesture recognition (video capture)
- user recognition (video capture)
- presence detection (video capture)
- third-party apps (malware)

# primed to think about benefits

## Smart TV Features

On this page, you will be given a description of a Smart TV feature. Please read about it and answer the questions about it.

### Personalized Recommendations

Some Smart TVs feature **personalized recommendations**. Based on your viewing habits, Smart TVs might recommend new shows to watch that you might also like. This feature makes it easy to discover new content that you might otherwise not be aware of.

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16. Using the scale below, how useful a feature is having **personalized recommendations** on a Smart TV?

Very useful (5)

(4)

Unsure (3)

(2)

Not at all useful (1)

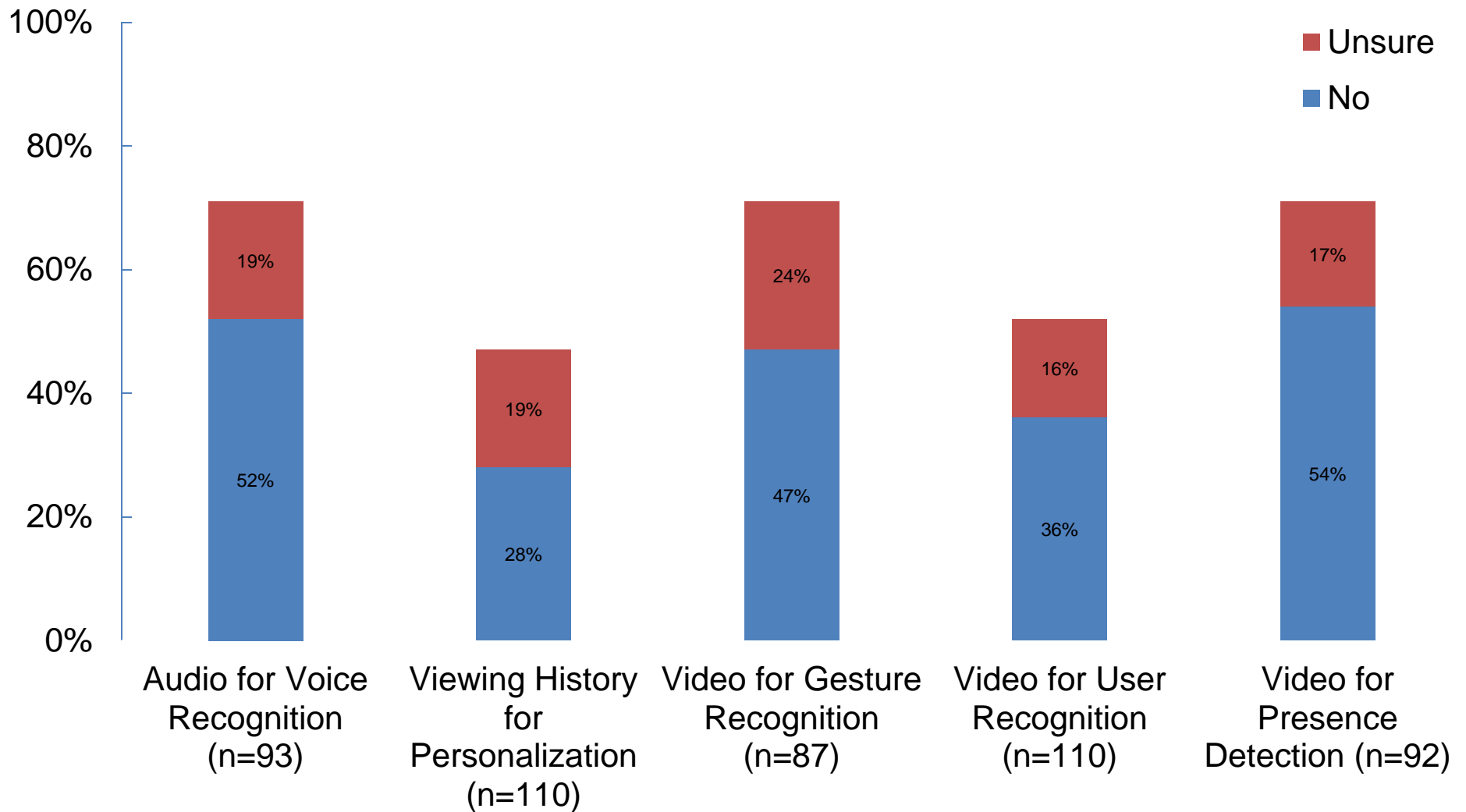
# demographics

597 U.S. participants recruited from Amazon Mechanical Turk

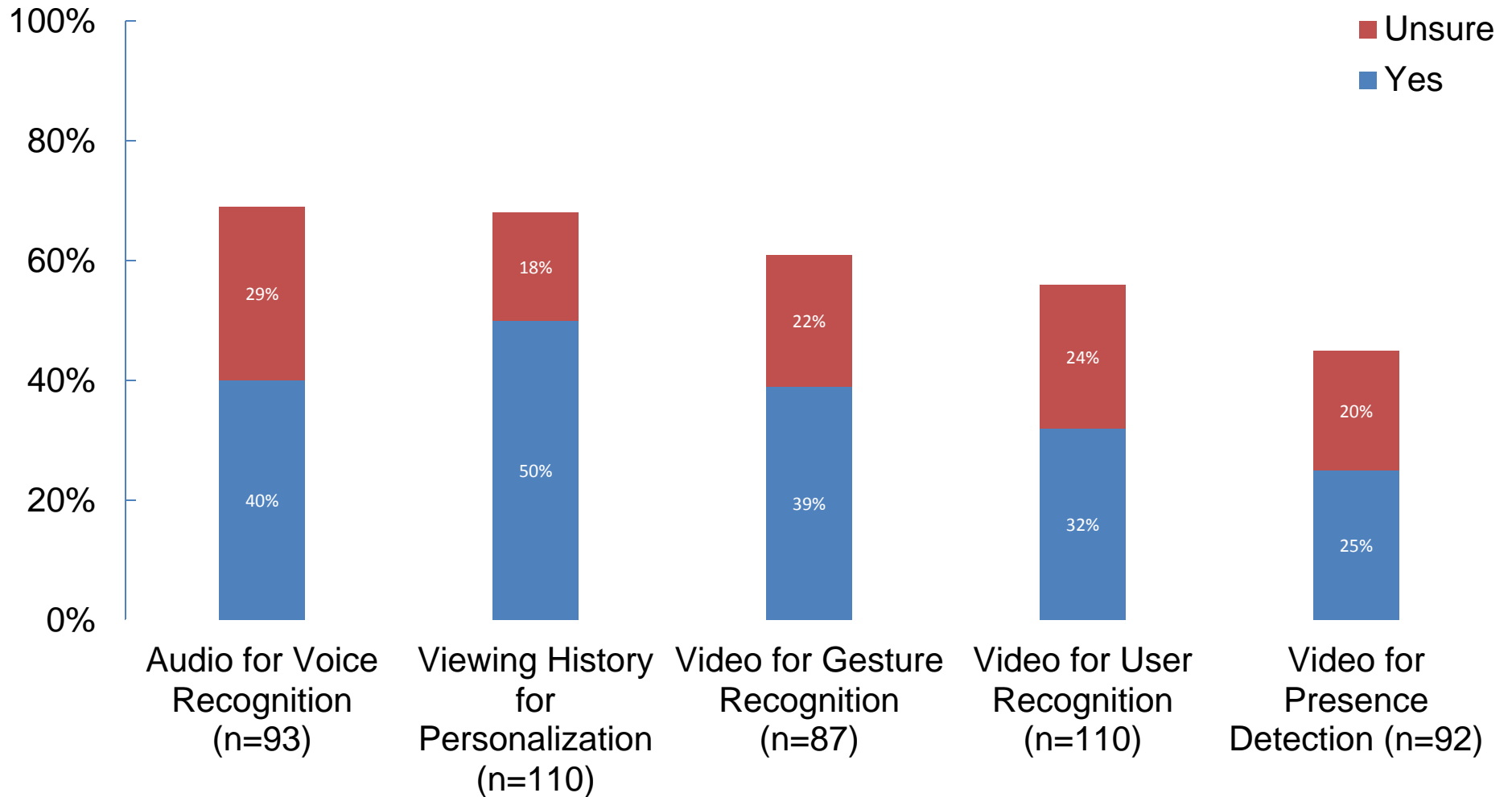
- Gender: 54% Male / 46% Female
- Age: 19-74, mean of 36
- Education: 45% college graduates



# does data leave the device?



# will data be used for other purposes?



# presumed legal protections

*Are there any laws or regulations that you believe prevent smart TV manufacturers from sharing data collected in your home with other parties?*

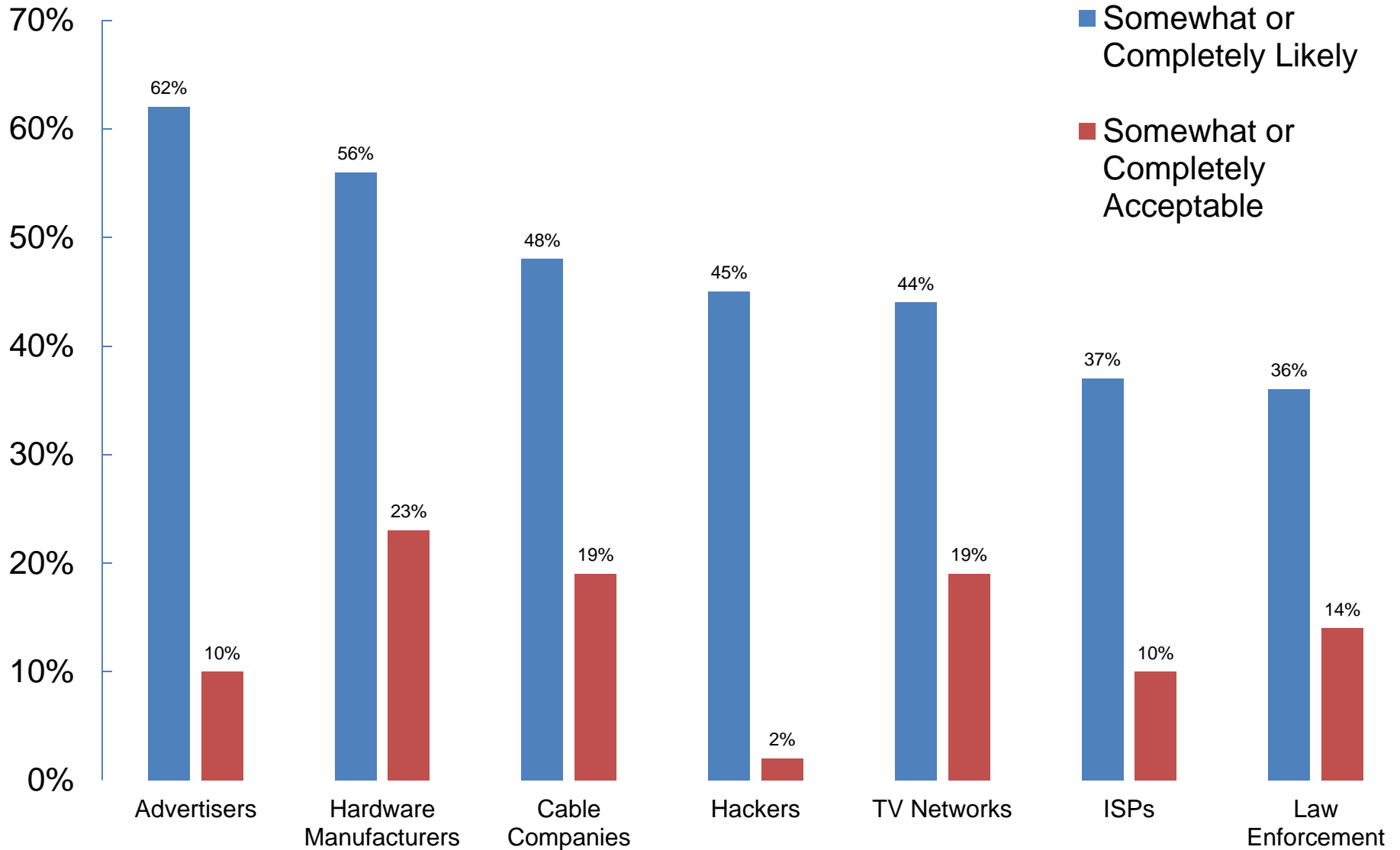
beliefs that data would not be used for other purposes is significantly correlated with a belief in strong privacy laws

- *I would assume the standard privacy laws would apply and that they would need my permission to share my data*
- *I think there are privacy laws that would/should prevent that [from] happening*
- *Privacy laws similar to privacy laws at doctors offices and hospitals*
- *I am sure there must be laws intended to protect privacy in these circumstances*

# cynicism about enforcement

- *Maybe, but I'm sure they know a loophole or some way around it.*
- *I think they have a binding user agreement that the user agrees to that gives away their rights to prevent sharing of data.*
- *I'm sure we all sign away a lot of our rights just by clicking on the terms of agreement without reading them.*

# likely recipients



# conclusion

many people incorrectly believe privacy laws prevent certain uses of their data

others understand that data can be shared, *are opposed to it*, but do not believe they can do anything about it