



The next generation of connected experience

Precision, protection,
and personalization

2018

CUJOAI

More Devices, Numerous Issues

The smart home concept started out as a dream, but it turned into a mess. IoT enthusiasts were so excited that they can connect every possible item to the internet, that they forgot to ask if they should.

Today we are getting closer to Gartner's prediction of [20.4B](#) of connected devices, but a truly smart experience seems to be light years away.

With more devices came more issues for home users. Currently, homeowners have multiple connected gadgets without a clear overview of the network. These devices are not secure by design, and they put their owners at risk. People are losing their personal information, money, and time - and insecure devices are to blame. Managing multiple devices is not user-friendly, and that interferes with getting the most out of the connected experience.

In this report, we will discuss what are the customer expectations for their connected homes.

Survey design

CUJO AI team surveyed a sample of 2600+ respondents who currently own the CUJO AI internet security firewall. The survey was conducted in July and August 2018.

The survey was designed to discuss three key topics related to smart homes: device identification, AI security, and digital parenting tools.

Additional data from a representative sample of CUJO AI hardware devices was used. The usage data was anonymized to protect user privacy. The data was gathered in July 2018.

Key Findings

Smart home owners are very different. Their smart home setups vary. Their interests are diverse. There are many variables that make each case unique.

But all of them seek to know more about their devices, networks, and related risks. Also, respondents want to keep their privacy and safety online. People want to control their networks: manage the devices seamlessly and get personalized recommendations.

AI Security



- Respondents are most concerned about a loss of personal data and contact information (87.3%), unauthorized remote access to their devices (77.5%) and loss of financial data (74.6%)
- 78% of respondents require detailed information about threats
- 72.1% of respondents prefer to see recommendations related to security (i.e., if their antivirus is out of date)

Device Identification



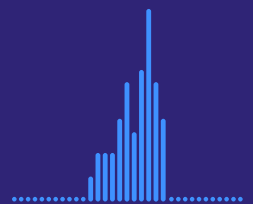
- 83.3% of respondents prefer to get full information about device vulnerability to threats
- 73.4% of respondents want to know device brand, model, and type
- 61.1% of respondents want to know device usage statistics

Digital Parenting



- 48.8% of respondents are blocking a specific website or application
- 46.4% of respondents are assigning devices to a profile
- 41.6% of respondents have created profiles for family members

Personalization



- More than half (59%) of respondents rename their devices to their preference
- 64.5% of respondents prefer personalized recommendations (i.e., you need to update one of your devices or change your router's password)
- 46.4% of respondents consider assigning devices to a profile valuable

Network Visibility with Advanced Device Identification

On average, CUJO AI customers in the United States have 18 connected devices per household. The most popular personal devices are smartphones or computers. But other types of connected devices are close behind.

10 most common devices in a typical American home:

1. Phones
2. Computers
3. Routers
4. Tablets
5. Streaming video devices
6. Voice control devices
7. Smart TVs
8. Laptops
9. Printers
10. Gaming consoles



**CUJO AI device usage data, July 2018*

According to the CUJO AI survey, the majority of customers prefer to get more information about their device vulnerability to threats, device brand, model and type, and device usage statistics. Less than half of the users are interested in precise operating system identification.

What type of device information is interesting for smart home

83.3%

device vulnera-
bility

73.4%

device brand,
model, type

61.1%

device usage
statistics

40.1%

operating
system

Key takeaways

- It's getting crowded in the smart home, with more connected devices than ever
- Smart home owners want to have better networks visibility
- People worry about the vulnerabilities smart home devices bring in to their homes



Protecting Homes by Securing Networks

Multiple smart home devices open up the home network to various threats. Previously these issues were not widely discussed. Today smart home owners are very aware of the problems that their home networks might face.

Home users are very concerned about the loss of their personal and financial data, or contact information. They also worry about unauthorized access to their devices.

What are the main issues that make smart home owners worry?

87.3%

of respondents are highly concerned about the loss of personal data and contact information

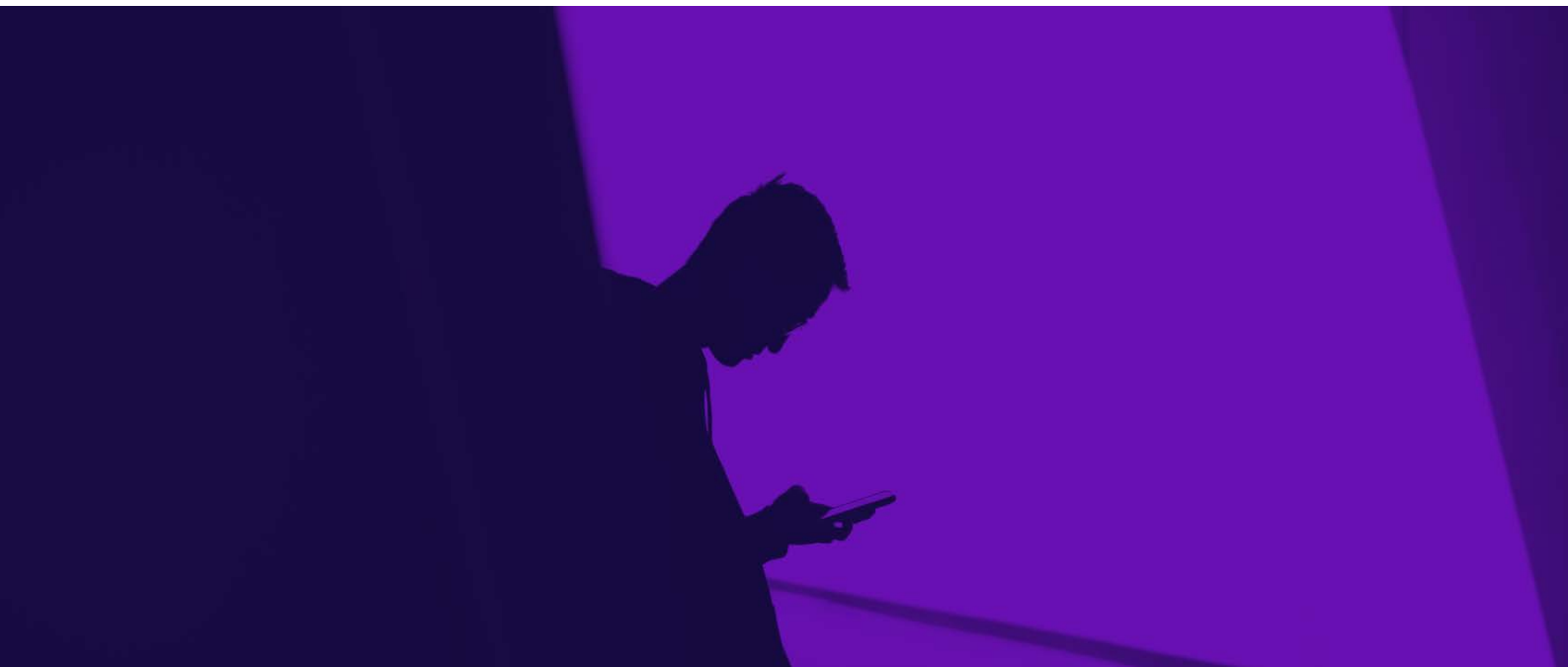
77.5%

of respondents are highly concerned about unauthorized remote access to their devices

74.6%

of respondents are highly worried about the loss of financial data

Not only do customers expect protection from these threats, but they also want to know detailed information about the risks. Besides, they prefer to receive security recommendations, such as knowing if their antivirus is out of date. They also want to get suggestions when it's time to update their devices or change their router's password. Another important topic is the overall health of the network and what can be done to improve it.



What kind of information about their home networks people prefer

78%

detailed information about threats

72.1%

security recommendations

64.5%

of respondents prefer personalized recommendations

55.8%

network bandwidth information and recommendations

Key takeaways

- Home users are becoming more aware of the risks online
- They know that knowledge is a weapon, and they want to get some ammunition against cyber threats
- People are open to suggestions and recommendations that would make their lives better

Digital Parenting Tools for Safer Connections

Growing amount of devices leads to spending more time online. An [Ofcom report](#) notes that 79 percent of 5-to-7-year-olds go online for nine hours a week. The number reaches 21 hours a week for 99 percent of 12-to-15-year-old teenagers. 81 percent of 8-to-11-year-olds play games online for 10 hours a week.

According to [Pew research](#) center, 95% of teens said that they have a smartphone, 45% of teens stated they are online on a nearly constant basis.

Building a healthy relationship with technology is one of the skills that children today need to learn if they want to be sure to make the best of their time online. And parents can guide them - with a little help.

On average, CUJO AI users have at least 2 profiles per household, with 3 devices assigned to them. According to the survey, more than half of the parents pause the internet for their kids. A similar amount of parents create profiles for family members and assign devices to them.



What is the most valuable parental controls feature?

48.8%

blocking a specific website or application

46.4%

assigning devices to a profile

41.6%

creating profiles for family members

38.9%

using a filter for a particular category

27.2%

setting a schedule

Key takeaways

- The main issue that concerns parents remains inappropriate content
- Creating profiles and assigning devices to them creates a better user experience and simplify digital parenting process
- Parents use schedules and filters to help manage their children's time online

About CUJO AI

CUJO AI offers cost-saving and revenue-generating network solutions to Broadband Network Operators. The platform includes Personalized Broadband through Advanced Device Identification, AI Security, and Digital Parenting solutions.

CUJO analyzes vast amounts of local network data and then uses proprietary machine learning algorithms to power the features.

CUJO AI solutions

- 85.5% of customers evaluate CUJO AI Device Identification as good or very good
- 91.2% of customers evaluate CUJO AI Security solutions as good or very good
- 74.8% of customers evaluate CUJO AI Digital Parenting tools as good or very good



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