ET Summit 2021

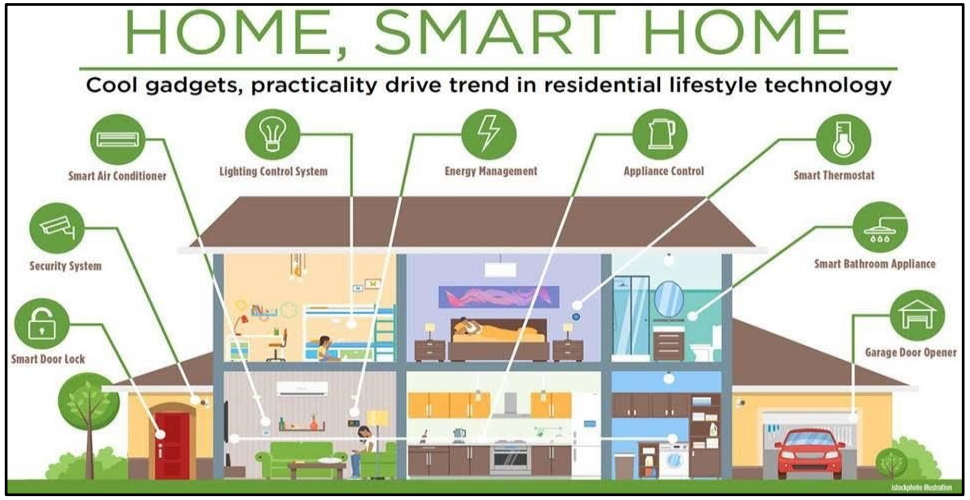
Presented by

ETCC EMERGING TECHNOLOGIES COORDINATING COUNCIL

SPOTLIGHT PRESENTATION

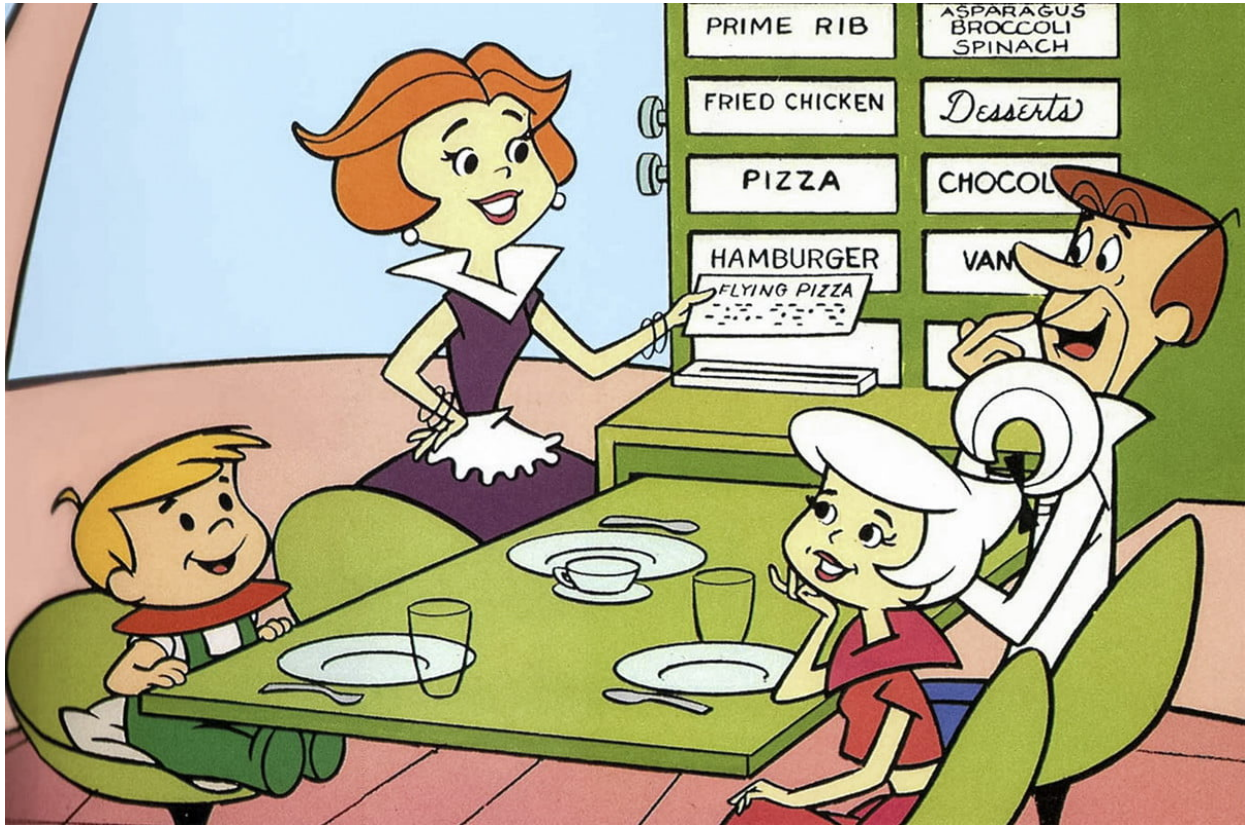
How Smart Can Homes Get?

The Latest in Smart Home RD&D

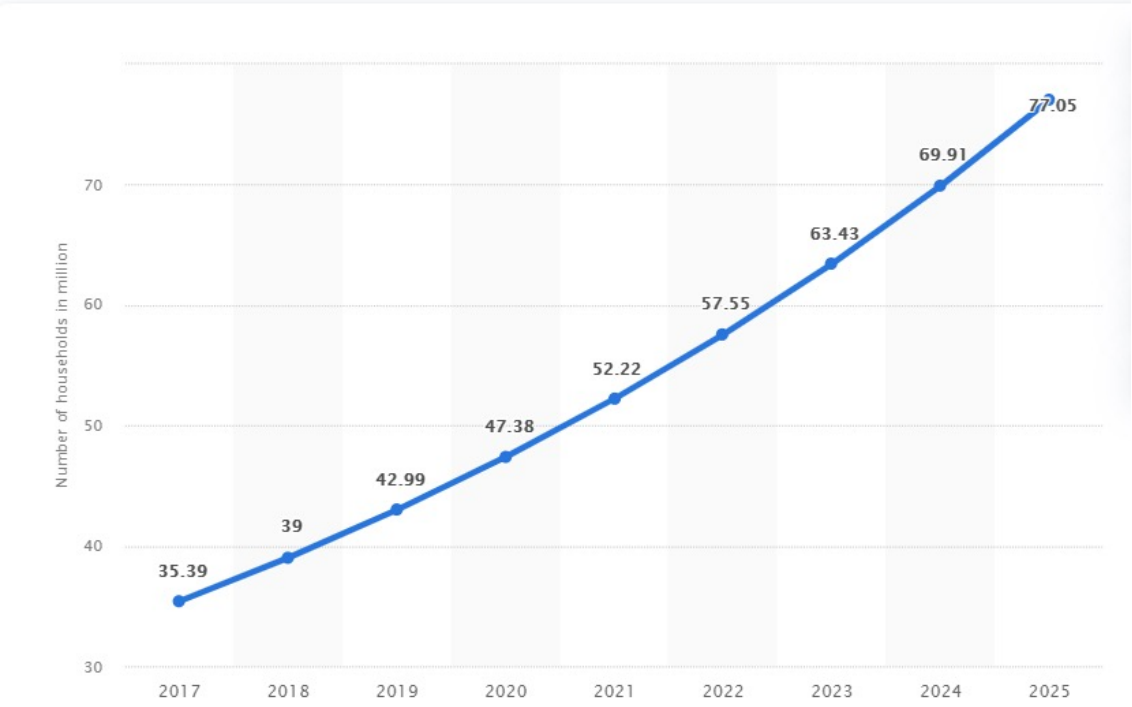


Mark Martinez
Senior Portfolio Manager, Demand Response Emerging Markets
Southern California Edison

Are Smart Homes Now (Finally) a Thing?



Smart Homes in the United States from 2017 to 2025



According to the Digital Market Outlook, the number of Smart Homes in the market in the United States is expected to be 77 million in 2025.

The worldwide connected home market is projected to grow at a rate of 25% from 2020 to 2025, which will drive overall consumer markets in the United States.

Source: Statistica

Consumer expectations are being realized

- Household appliances are now connected and contain more smart features than ever before
- Default: 86% of millennials would pay more for a connected home.
- Smart heating and cooling systems can save customers 50% in energy use.
- 63% of those surveyed want their smart home to have smart security systems.
- It costs between $970 and $3,310 to add in smart features to the typical home.

Source: Statistica

So why are utilities so excited?

1

Growth

The Smart Home market continues to grow organically through adoption by customers – no utility investment needed.

2

Innovation

California has led the way with innovative research studies in Smart Home & Smart Technology R&D.

3

Opportunities

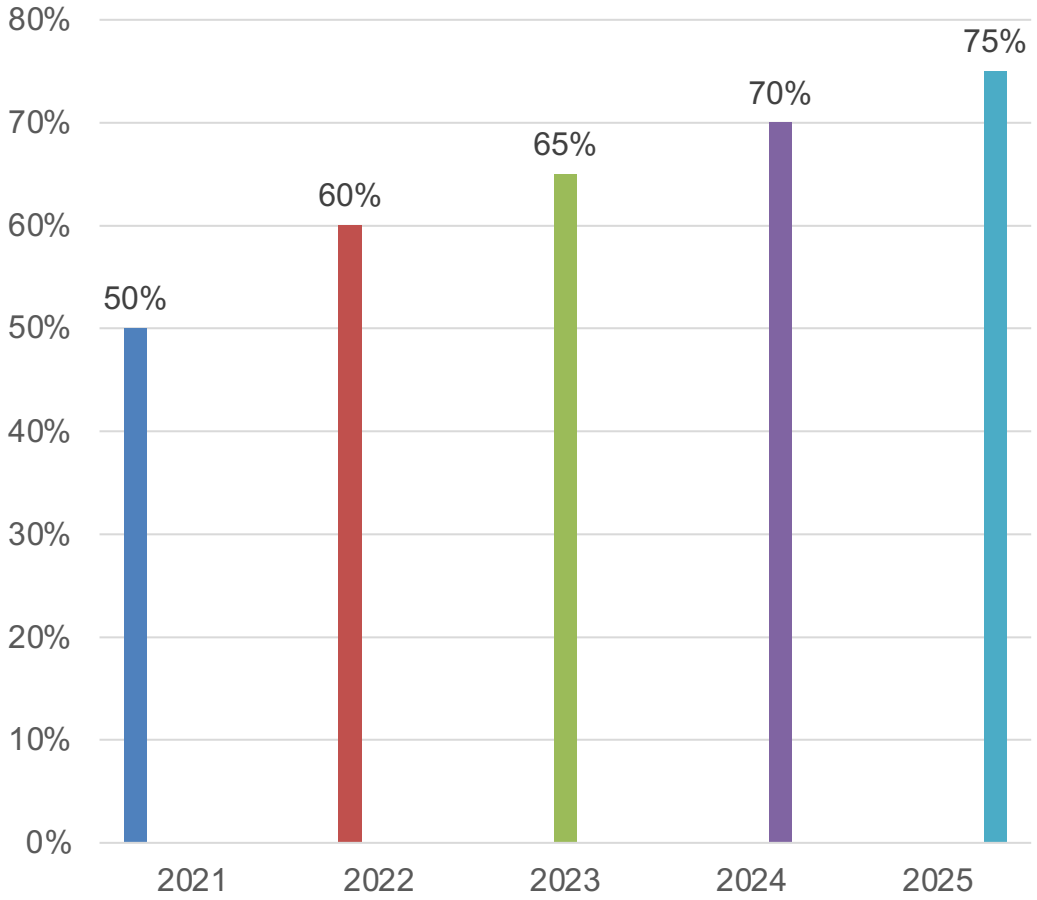
Residential TOU pricing and high energy prices are key drivers for leveraging market accepted solutions for energy management.

4

Challenges

COVID, costs, diversity in customers, emerging technologies, are now all driving what might have worked into actual program reality.

Key Focus: Leveraging Smart Speaker Technology



Source: Statistica 2021

50% of the US population owns at least one smart speaker device and 75% of homes will be equipped with at least one smart speaker by 2025.

Utilities across the US have researched and/or created smart speaker skills to engage customers in learning more and taking action to reduce their home's energy use.

Market opportunities exist across multiple channels, including private-public collaboration and cross promotion between retailers and utilities.

Let's hear from our panel of experts

- **Voice Assistants for Customer Engagement and Customer Programs** - Siva Sankaranarayanan, EPRI
- **Residential Behavior Change from a TOU Display** - Hal T. Nelson and Hunter Johnson, Res-Intel
- **Smart Speakers, the Connected Home, and Energy** - Randy Robinson, Jr., SCE
- **Using Smart Speakers for TOU and Notification** - Albert Chiu, PG&E
- **Smart Home Technology and Market Trends** - Bryan Jungers, E Source

Speakers

Siva Sankaranarayanan
Senior Technical Leader
Electric Power Research Institute

Hal T. Nelson
CEO
Res-Intel

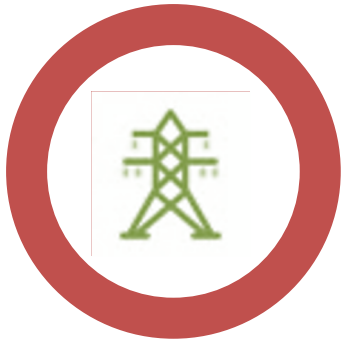
Randy Robinson, Jr.
Senior Project Manager
Southern California Edison

Albert Chiu
Product Manager
Pacific Gas and Electric Company

Bryan Jungers
Senior Research Manager, Technology Assessment
E Source

Hunter Johnson
Data Scientist
Res-Intel

Smart Home automation provides multiple benefits to California utilities and its customers.



Supports dynamic rate management

Provides a channel for educating and engaging customers in TOU and automating their household devices to maximize load shifting and energy saving benefits.

Improves customer experience

Empowers customers to easily manage their home's energy use, participate in peak demand events and prepare for reliability events when needed.

Supports California's clean energy & safety goals

Connects customers with product-based rebates, EE, DR and income qualified programs, and other informative services designed to help CA meet clean energy goals.