The Voice System of Smart Home in Amazon



Part 1 Introduction of Smart Home and Voice System

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Introduction of **Smart Home and Voice System**

01 Introduction of Smart Home and Voice System

Definition of Smart Home

- Internet of Thing
- Advanced Technology
- Security/environmentfriendly/convenience/comfortable



01 Introduction of Smart Home and Voice System

Application of Smart Home



- Access Control
- Light Control
- HVAC System

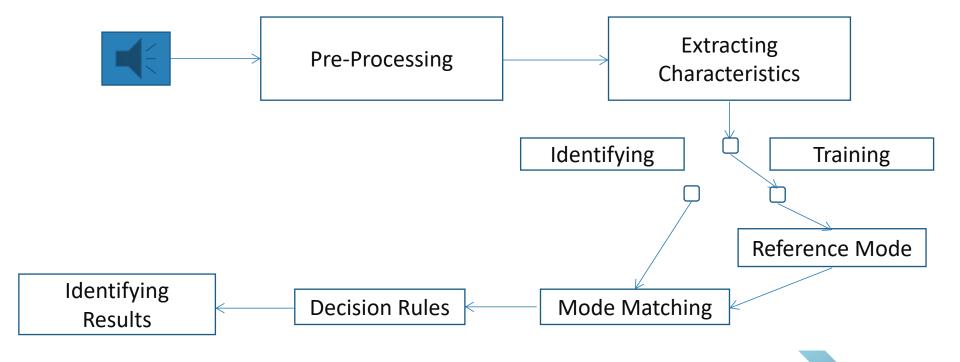
- Fire Protection
- Video Surveillance

01 Introduction of Smart Home and Voice System



Trend: Remote smartphone ———— Voice

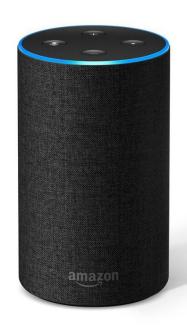
Traditional Work Process of Voice System in Smart Home:



Components (the second generation)

- Four buttons on the top
- Far-field microphone
- Loudspeakers
- Microcomputer
- Alexa Voice Service





Alexa's Advanced Function

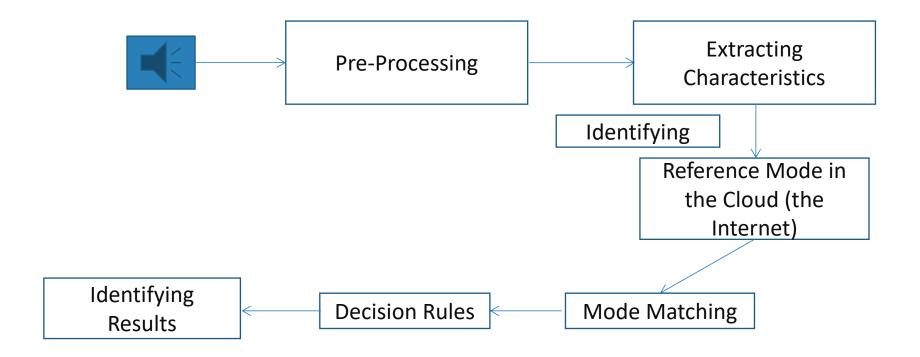


Advanced Technology ---- Echo's text-to-speech (TTS) engine.

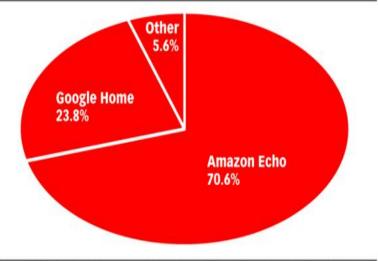
Speech-unit Technology.

- Independently Research and Develop Natural Language Processing (NLP) algorithms
- Cloud Service via the Internet

Work Process of Voice System in Smart Home about Amazon Echo:



US Voice-Enabled Speaker User Share, by Player, 2017 % of total



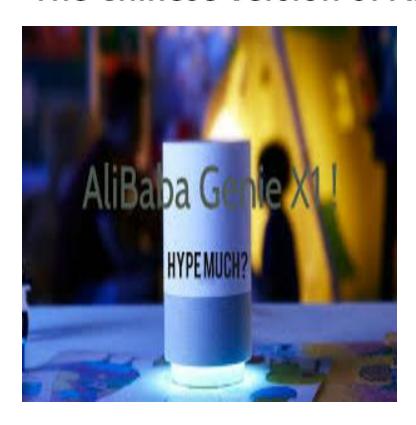
Note: individuals of any age who use a voice-enabled speaker at least once a month

Source: eMarketer, April 2017

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- The Amazon Echo dominant 70.6% of market share.
- Google Home has the trend to catch up the Amazon.
- Small players like Lenovo,
 LG, Harmon Kardon and
 Mattel.

The Chinese version of Amazon Echo







The main competitor is Google Home.





The comparison between Amazon Echo and Google Home.

Smart Home Tasks	Amazon Echo	Google Home
Streaming support for music, podcasts, etc.	Tie: Better for Amazon services, including Audible. Works as a Bluetooth speaker for any mobile audio source.	Tie: Better for Google services, including YouTube. Works as a Chromecast speaker for supported apps, and has Bluetooth capability.
Speaker quality	Winner: Voices sound more natural and understandable—though it lacks bass. For even better sound, get an Echo Dot and connect it to a good speaker.	Get instead if you prefer more bass, even if voices sound less clear, or if you want to use it as part of a Chromecast multiroom audio setup.
Digital assistant	Winner: Supports more services, can add events to a calendar, and can order off of Amazon.	Get instead if you already use Google Keep and Google Express.
Answering questions	Get instead if you're willing to fill Alexa's knowledge gaps by enabling third-party skills.	Winner: More detailed responses to a wider variety of questions without having to enable additional skills.
Smart-home control	Winner: Supports more platforms and products.	Get instead if it supports what you already have and you prefer a slightly more conversational tone.



04 Summary for Amazon Echo and the Expetaction

Strength

- The Amazon Echo possessed a great word of mouth.
- The Amazon Echo offers low price but functional and compatible device.

Weakness

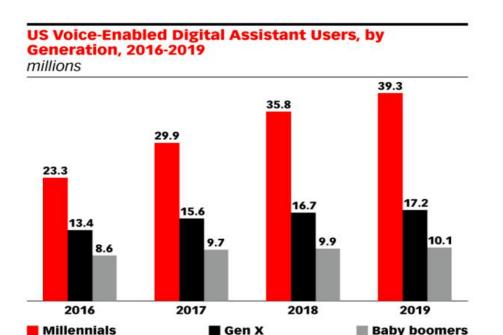
- The weak language system compare to Google Home.
- The Amazon Echo has the synchronization problem.

04 Summary for Amazon Echo and the Expetaction

Threats

- It created some important privacy issues that are worth keeping in mind.
- More and more competitors will flow into the markets.

04 Summary for Amazon Echo and the Expetaction



Note: individuals who use voice-enabled digital assistants at least once a month on any device; millennials are individuals born between 1981-2000, Gen X are individuals born between 1965-1980 and baby boomers are individuals born between 1945-1964 Source: eMarketer, April 2017

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Opportunities

- The youth users is growing so fast .
- There are still a lot of potential on the elder segments.

