

ALEXA VOICE SERVICE

Giving voice to a whole new
set of devices and experiences

accenture



amazon alexa



VOICE IS ON THE RISE

Just five years ago, voice searches were almost non-existent. Today, they are more than 10% of all search traffic.

In fact:

- Virtual assistants exceed 50 billion voice searches per month, a number expected to grow to 200 billion by 2020.
- According to “Business Insider,” smart speaker penetration is up to 50% in only four years.
- Smart speaker shipments will grow from 100 million in 2018 to 240 million in 2023.
- 53% of the adult population in the US are active voice assistant users.
- 2 in 3 consumers regularly use voice assistants in their cars.

Source: <https://www.mindmeld.com>

WHAT'S DRIVING THE POPULARITY OF VOICE?

Spoken conversation is our natural way to interact with each other. It's faster, friendlier and more direct than using text-based channels. Several trends are making voice service a more appealing choice:

Communicate on a human level:

Traditional user interfaces require that we adapt our behavior and learn how to interact with a computer. Using spoken natural language, we can communicate on human terms.

Advancements in far-field voice technology:

Advancements in echo cancellation and other audio signal processing enables affordable and reliable hands-free activation.

Hands-free opens new opportunities:

Voice can change the way people work, such as factory or laboratory workers who wear gloves and cannot interact with a standard keyboard or buttons.

Trend towards multi-modal:

Combining voice-driven interaction with a screen to display complementary information can provide a rich and detailed user experience.

"What Is Alexa Voice Service?"

The Alexa Voice Service (AVS) enables you to access cloud-based Alexa capabilities with the support of AVS APIs, hardware kits, software tools, and documentation.

AVS simplifies building voice-forward devices with Alexa built-in by handling complex speech recognition and natural language understanding in the cloud.

WHY ALEXA VOICE SERVICE?

Amazon is the global leader in smart speaker market share at 36%. More than 100 million Alexa devices have shipped. In addition:

- 60,000+ products now work with Alexa, including more than 7,400 unique brands. 90% of Alexa-enabled products released in 2018 were built by someone other than Amazon.
- Hundreds of products feature Alexa built-in.
- There are more than 100,000 third-party skills available in the US.

Best of all, there are still many untapped opportunities. Voice-based interactions are emerging in more and more aspects of daily life, benefiting consumers, employees and businesses. Some industries and workflows where voice services can transform the experience include manufacturing, construction, healthcare, automotive and hospitality.



CHALLENGES FOR DEVICE MAKERS

Successfully capitalizing on the voice services opportunity means overcoming a number of challenges:

- 1 Hardware architecture, component selection and placement into non-traditional device form factors
- 2 Connectivity and energy management for reliable performance
- 3 Stringent acoustic performance requirements
- 4 Using voice to improve the customer experience
- 5 Ensuring security and privacy
- 6 Enabling over-the-air updates for ongoing product enhancements
- 7 High demand / backlog in certification facilities
- 8 Test failures can result in significant delays

Most organizations will rely on a consulting and implementation partner to overcome these challenges.

ACCENTURE AND ALEXA VOICE SERVICE

Accenture is a qualified Alexa consulting and professional services partner. This gives us priority technical and marketing support, and early access to new features and technology.

Our expertise in enabling voice assistant technologies includes:

Voice recognition:

Wake word detection and power optimization

Acoustic design and processing:

Noise and echo cancellation

Hardware platform:

Remote software and firmware updates

We have more than 2,400 connected product and embedded software engineers who provide global scale and expertise to accelerate product development, expedite certification time and deliver on product launch dates.

Accenture's unique value proposition includes:

- Global #1 digital interactive agency and #1 in CX design, according to HfS Research
- Speed-to-value methodology enabling rapid prototyping and user feedback
- Automated testing assets for Pre-certification verification
- Priority access to Amazon AVS solution architects

ALEXA VOICE SERVICE: FOUR WAYS TO ENGAGE WITH ACCENTURE

Innovation workshop:

Collaborative workshop to co-create user experiences and value propositions

Alexa Voice Service sprint:

Ideation, exploration and validation of a concept to determine market viability, technical feasibility and user desirability through the development of business models, user-tested designs, hardware and working software

Alexa Voice Service product integration:

Full, end-to-end development of a smart connected product from initial idea through full-scale commercial market launch

Continuous innovation:

Alexa Voice Service continuous innovation delivery to deliver a portfolio of Alexa enabled solutions and experiences.



Key Contacts

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About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 492,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.