

# Voice Technology Glossary

Common terms utilised in voice technology





### **Alexa Device | Amazon's Alexa**

A smart speaker developed by Amazon.



### **Alexa Developer Console**

A tool developed by Amazon that allows developers to create, modify and delete skills. This is the platform used to certify the skills developed.



### **Amazon Echo**

It is a hands-free speaker and virtual assistant device that connects to the internet and interacts with an end user through voice commands.





## **Alexa Skills**

Skills are voice-driven Alexa capabilities. They are like mobile apps but for Alexa. There are a variety of skills, created for different purposes just like there are different types of apps for mobile phones. You can activate a skill by asking your Echo device, or enable them through the Alexa App on your mobile phone or browser.

## **Apple's Siri**

Siri is Apple's built-in, voice-controlled personal assistant, available on all Apple devices.

## **Automated Speech Recognition (ASR) | Automated Voice Recognition (AVR)**

ASR is a technology used to convert spoken words into computer text. It can also be configured to authenticate users with voice. The technology dates back to 1952 when the Bell Laboratories designed a programme called Audrey, which could transcribe numbers.





## **Conversation Design**

It is a design language based on human conversations. It aims to design conversational experiences that are intuitive, and don't require users to have to learn how to interact with a voice assistant.

## **Conversational Artificial Intelligence (CAI)**

CAI is the technology focusing on automating communication and enhancing machine learning, which can be turned into personalised experiences at scale. The aim is that machines communicate in a more human-like way, through smart assistants, chatbots, and other voice devices.

## **Exit Command**

A command to make a voice assistant stop or exit the experience or interaction.





### **Google Actions**

It is a developer platform to create software and improve the functionality of Google Assistant.



### **Google Home**

A line of smart speakers developed by Google.



### **Google Nest**

Google Nest products are a line of smart devices, including smart speakers, thermostats, and smoke detectors that use the google assistant.





## **Happy Path**

It is a default progression of voice iterations between the user and a voice device, where no errors or exceptions occur. The happy path excludes unexpected inquiries from the user, which is contemplated in the alternative path.

## **Invocation Phrase | Implicit Invocation Intent | Action Phrase**

It is a phrase to start a specific action with your voice enabled device. It's what tells your smart device where to take you - like URLs for websites - the invocation phrase is the URL that will let Alexa, for example, know where you want to go within the ecosystem. For example: 'Alexa, open VozLab experience'. The invocation phrase here is 'VozLab experience'.





## **Intents**

Intents are request words that tell the voice assistant what they can do for users. For example, 'Alexa, add rice to my shopping cart'. The words 'add' and 'my shopping cart' are examples of intents.

## **Microsoft's Cortana**

Cortana is a virtual assistant developed by Microsoft.

## **Natural Language Processing (NLP)**

NLP is a branch of AI which focuses on helping computers process text and spoken words. It aims to improve conversations between people and machines by ensuring that computers respond back in an appropriate way when a user interacts with them.





## **Smart Speaker**

Smart speakers are a type of speaker, connected to the internet that responds to voice commands hands-free. It can also communicate with other devices.

## **Utterance**

Utterances are the specific phrases people say when making a request to Alexa. For example, 'What is the weather for tomorrow?' and the variety of ways this request can be said.

## **Voice User Interface (VUI) | Conversational User Interface (CUI)**

It is a platform with the ability to support artificial intelligence chatbots, voice apps, and interactive voice response systems in order to allow interactions with human users. It aims to simulate human-like conversations.





### **Voice Experience | Skill Experience**

An experience is a preprogrammed conversation between a user and a voice activated device, which is launched on a specific skill. It starts with the user saying the wake word to activate the skill, and then an invocation name to activate and use the programmed experience. A VozLab skill can contain multiple voice experiences which can be switched on and off as needed.



### **Voice Assistant | Virtual Assistant | AI Assistant**

It is natural language recognition software that can provide information or perform tasks via a voice command.





## **Voice-First Design**

It is a system designed with voice being the primary mode of interaction. Smart speakers are examples of devices that use voice-first technology.



## **What's the difference between a Mobile App and a Skill?**

Mobile Apps live on the mobile device you own. If you change your phone, you need to download all the apps you have again. Skills live in the cloud, meaning that once you enable a skill, you will be able to access it across all your Amazon Echo devices.



## **Wake Word | Trigger Word**

A word or phrase that activates (awakens) a voice enabled device. For example, 'Alexa, tell me the weather for tomorrow', in this case 'Alexa' is the wake word. For Google devices the wake word is 'Hey Google,...'.



*For more information contact us at [vozlab.co.uk](https://vozlab.co.uk)*

