

keyivr

intelligent payment systems



WHAT IS AUTOMATIC SPEECH RECOGNITION (ASR)?

THE ESSENTIAL GUIDE

Payments powered by leading voice recognition technology

Using a telephone keypad can be challenging for some customers, especially those with a severe physical disability or problems with dexterity. This becomes an obstacle when they need to use a keypad to provide sensitive digits (such as cardholder data), that wouldn't be safe to say aloud on a recorded call, or with an agent listening.

To cater to all demographics and provide a more inclusive payment experience, Key IVR have incorporated voice recognition technology into our **Agent Assisted Payments** solution.



WHAT IS SPEECH RECOGNITION?

Also known as Automatic Speech Recognition (ASR), Computer Speech Recognition, or Speech to Text (STT), this advanced technology is the process of transforming spoken language into written text. The first instance of speech recognition dates back to 1952 when three Bell Labs researchers built a system called "Audrey" for single-speaker digit recognition.

Following an increase in smartphone users with Siri, Cortana and Google Assistant built-in, along with smart speakers such as Amazon Alexa and Google Home, voice search has jumped forward in speed and accuracy. It's now estimated 65% of 25-49 year olds speak to their voice-enabled devices at least once per day (Invoca.com).

More advanced versions of ASR are continuing to enter the market, especially thanks to the development of AI (Artificial Intelligence), allowing these systems to learn and improve.

HOW DOES SPEECH RECOGNITION WORK?

- 1 Automatic Speech Recognition (ASR) engine detects and captures speech.
- 2 It then creates an audio file of the numbers or words it hears.
- 3 The audio file is cleaned to delete background noise and normalise the volume.
- 4 This filtered waveform is then broken down and analysed in sequences.
- 5 The voice recognition technology analyses these sequences with a number of passes (low and high resolution), and employs statistical probability to determine whole words, numbers, and then complete sentences.
- 6 This data is then fed into the platform.



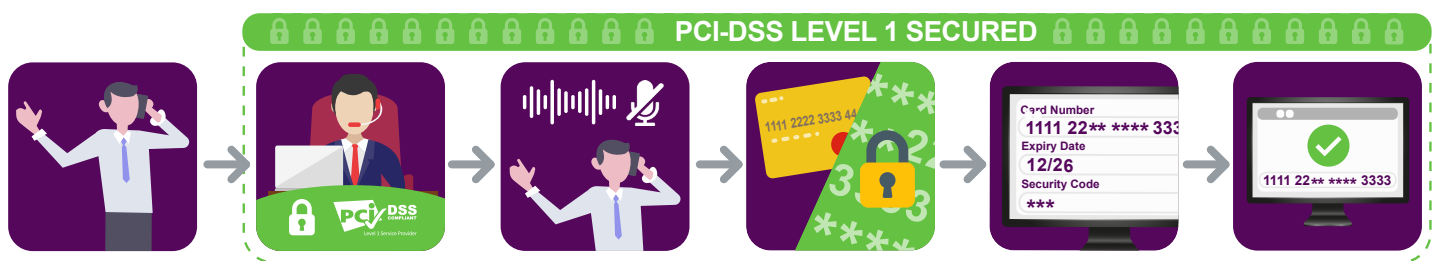
AUTOMATIC SPEECH RECOGNITION (ASR) IN KEY IVR'S SOLUTIONS

By fully embracing the latest technology advancements in voice services, Key IVR's payment solutions offer a reliable speech recognition service.

This gives customers the ability to verbally provide their account and payment details securely. The platform is capable of capturing and converting information spoken by customers, rather than asking them to enter numerical data into their telephone keypad.

For sensitive cardholder data, the agent will be unable to hear the customer as these details are spoken, so all agents, systems, and call recordings stay out-of-scope. The agent and the customer remain connected during the payment process, and your organisation remains safe and PCI-DSS compliant.

HOW IT WORKS FOR AGENT ASSISTED PAYMENTS:



1. The customer is on the phone with the agent. When the customer is ready to make a payment, the agent can continue the conversation on a new, secure call – all within a few seconds

2. As the customer reads out their card details, the sensitive information is never heard by the agent. However, they can stay on the call to assist them, if necessary. The details are processed by the payment gateway provider

3. The agent can follow the customer's progress on a dashboard, they do not see or hear any sensitive cardholder data. Once the payment is completed, the agent can move on to the next customer

WHAT ARE THE BENEFITS OF SPEECH RECOGNITION?

- Improves customer experience by allowing the conversation between customer and agent to flow seamlessly
- Simple and easy to adopt by customers and agents
- Helps organisations achieve PCI-DSS Compliance when capturing sensitive payment information
- Removes the need to alter the natural pace of the telephone call when inputting details into a keypad
- Captures data that isn't just numerical – such as addresses, references containing letters, full names, etc
- Works with multiple languages and regional dialects

IN SUMMARY

Powerful technology known as automatic speech recognition (ASR) makes it possible to convert speech into text and improve accessibility in payment processing for all demographics.

The benefits of using ASR in payments include capturing data that isn't just numerical, easy adoption by customers and agents, and keeping agents, office environment, network, and call recordings out of the scope of PCI-DSS compliance.

ASR technology has the potential to revolutionise the way we process payments, making it more accessible and secure for all customers.

Upgrade your payment processing with Key IVR's reliable speech recognition technology, available on our **Agent Assisted Payments** solution. Provide customers with a seamless experience while staying PCI-DSS compliant.

SEE IT IN ACTION, ARRANGE A DEMO

Interested to know more? We can arrange a demonstration to help you take over the phone payments in a convenient and secure way. **Contact us now:**



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