

CASE STUDY

Revolutionizing contact center AI with Deepgram and Five9

How Five9 boosts self-service containment rates with superior speech recognition.



ORGANIZATION

Five9 is an industry-leading provider of cloud contact center solutions, helping contact centers increase productivity and create customer trust and loyalty.

INDUSTRY

- Call Center
- Contact center as-a-service
- Conversational AI
- Software
- Technology

NEEDS

The company needed to improve customer experience and operational efficiency by enhancing self-service channels using AI. This required higher accuracy in converting alphanumeric speech to text to increase self-service success rates, reduce costs, and minimize the reliance on live agents.

SOLUTION

Deepgram's automatic speech recognition platform for the enterprise.

THE LANDSCAPE

Transforming Call Centers with AI

In an increasingly digital world, call centers have evolved into sophisticated customer interaction hubs, requiring advanced technology to manage communications effectively. Five9, an industry-leading provider of cloud contact center solutions, harnesses the power of artificial intelligence to boost workforce productivity, enhance customer engagement, and streamline the contact center operations of their large and diverse customer base. Serving over 2,000 customers globally and facilitating billions of call minutes annually, Five9's platform delivers digital engagement, analytics, and workflow automation to create exceptional customer experiences and drive tangible business results across various industries.

Deepgram partnered with Five9 to transform contact center operations by enhancing their platform's speech recognition capabilities. The integration of Deepgram's AI-powered transcription technology into Five9's Intelligent Virtual Agent (IVA) platform resulted in significant improvements in efficiency and customer satisfaction.

THE CHALLENGE

Elevating Self-Service Performance

Contact center leaders understand that [utilizing AI](#) to enhance self-service channels is essential for improving customer experience and boosting operational efficiency. Self-service channels offer customers a faster and more accessible way to resolve issues, which is why an [increasing](#)

[number](#) of people prefer using self-service before speaking to a live agent.

For companies, self-service can lead to significant savings, costing only [\\$0.10 per contact](#) on average compared to around \$8 per contact for live support. However, self-service channels often fail to meet their potential, with [88% of customer interactions](#) that begin with self-service ultimately involving live agents.

A primary challenge organizations face when developing speech-driven self-service applications is achieving high accuracy, particularly in converting numeric and alphanumeric speech to text. For example, an online retailer might need to capture a caller's order number accurately, or a shipping company may require precise recognition of a customer's tracking number to facilitate self-service. Improved accuracy in these areas directly leads to higher self-service containment rates, resulting in substantial cost savings and an enhanced customer experience.

THE SOLUTION

Boosting Accuracy and Efficiency in Customer Interactions

By integrating Deepgram's [industry-leading](#) Nova-2 automatic speech recognition (ASR) model as a speech-to-text (STT) option in [Five9 IVA Studio Z](#), Five9 customers are able to achieve real-time, highly accurate transcriptions of customer interactions. In real-world tests, Deepgram was found to be 2-4 times more accurate than alternative STT options for transcribing alphanumeric inputs commonly encountered in self-service interactions such as:

- Account number and user / member ID
- Order number
- Product serial number
- Package tracking number
- Policy number
- Healthcare product SKU
- Vehicle identification number (VIN)
- Mailing address

THE RESULTS

Achieving Superior Accuracy and Operational Efficiency

After switching to Deepgram in Five9 IVA Studio, a major healthcare provider doubled their user authentication rates due to improved alphanumeric transcription accuracy.

Moreover, Five9 customers can leverage Deepgram for incredibly fast and accurate real-time and post-recording transcription directly within Studio 7 for all of their speech-to-text needs.

“Deepgram's real-time transcription accuracy enables improved call resolution and higher self-service containment rates without the need for a live agent, resulting in substantial cost savings for our customers.”

–Richard Dumas, VP AI Product Strategy at Five9

Key results included:

- **Increased Efficiency:** Automated and accurate transcriptions, especially for alphanumeric inputs, reduced the need for manual intervention, allowing agents to focus on more complex tasks.
- **Enhanced Customer Experience:** Higher containment rates and improved first contact resolution due to better understanding of customer intent and accurate capture of key details resulted in higher customer satisfaction levels.
- **Actionable Insights:** High-quality data from transcriptions allowed for deeper analysis and better decision-making, driving overall performance improvements.

LOOKING AHEAD

Realizing Operational Excellence with Deepgram and Five9

As businesses strive to optimize customer interactions, the partnership between Deepgram and Five9 sets the stage for groundbreaking conversational AI solutions. By utilizing this new integration in Five9 IVA Studio, companies can embrace the future of customer service, achieving unparalleled success rates and customer satisfaction levels with their next-generation IVAs. The benefits are many, including:

- **Higher Accuracy** - Increase self-service success rates, especially when alphanumeric transcription accuracy is critical.
- **Low Latency** - Leverage the fastest transcription speed in the industry to support real-time conversational AI applications.
- **Cost Efficiency** - With higher containment rates, unlock significant cost savings.
- **Faster Go-to-Market** - Deepgram speech-to-text is now generally available as an integrated, easy-to-access pulldown option in Five9 IVA Studio 7.

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VP AI Product Strategy at Five9

- **Better User Experiences** - Tailor your conversational AI experience to your unique contact center workflow.

Try it yourself by calling (219) 695-8627. Simply speak a ten-digit combination of numbers and/or letters, and the IVA will repeat them back to confirm its understanding. Enhance your contact center operations with the power of Deepgram and Five9 today!

About Deepgram

Deepgram is a foundational AI company developing the essential building blocks for Voice AI. We give any developer access to the fastest, most accurate transcription and language understanding models with just an API call. Contact us to learn more at [Contact Us](#) | [Deepgram](#).

Deepgram

Essential Building Blocks for Voice AI