

AI-Powered Call Center Intelligence Accelerator

Financial Services and Insurance industries

Creating better customer experiences with AI

Organizations are implementing advanced technology to improve customer satisfaction

Callers lose patience

3 minutes is the average time a customer will spend on hold before simply hanging up.¹

AI for call centers is growing

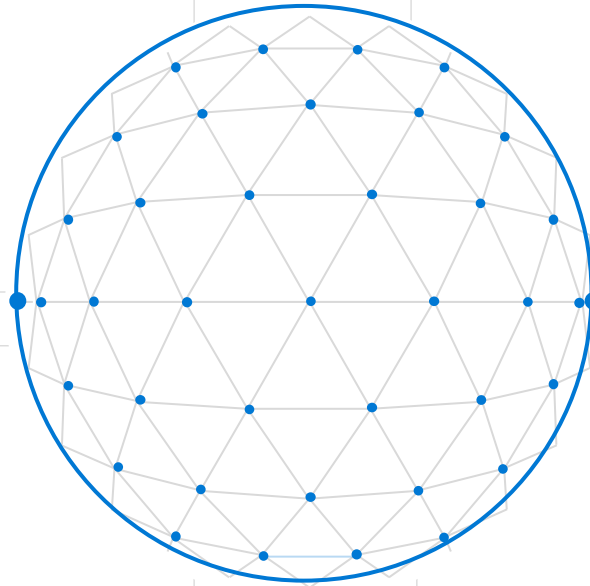
\$3.5B is the projected global market for AI in call centers by 2026.³

Callers repeat themselves

33% of callers repeat their reason for calling to multiple support agents.²

Data insights enhance business

82% of marketers agree that insights may reveal costly blind spots.⁴



¹ [Quick Fixes for Long Hold Times | OnCall Centre, March 2022](#)

² [40 Customer Service Stats to Know in 2022 | HubSpot, June 2022](#)

³ [Global Artificial Intelligence \(AI\) in Call Centers Market... | Yahoo! Finance, February 2022](#)

⁴ [The Ultimate List of Call Tracking and Conversation Intelligence Statistics for 2022 | Invoca Blog, July 2022](#)

Challenges to creating customer-centric experiences

Manual processes and limited automation inhibit call center agent success



Manual data entry



Labor shortages and
high turnover



Privacy laws



Untapped data



Legacy AI
transcription
technologies

Automate call transcription to overcome challenges

Support agents and enhance the customer experience with advanced analytics and insights



Gain highly accurate, cost-effective call transcription



Increase efficiency



Generate a wealth of customer insights



Ensure compliance and PII protection



Create improved personal customer interactions

Streamline call center operations with the power of AI

Enhance customer experience with rich data insights from real-time and recorded calls

The **AI-Powered Call Center Intelligence Accelerator** automates call transcription in near real-time by using custom speech models, text analytics, and industry-specific natural language processing. Data insights on customer sentiment, topic analysis, and other valuable call attributes are served up in a user-friendly visual dashboard.

Customizable speech model incorporates your industry and business language.

Automated PII detection and redaction protects customer privacy and promotes compliance.

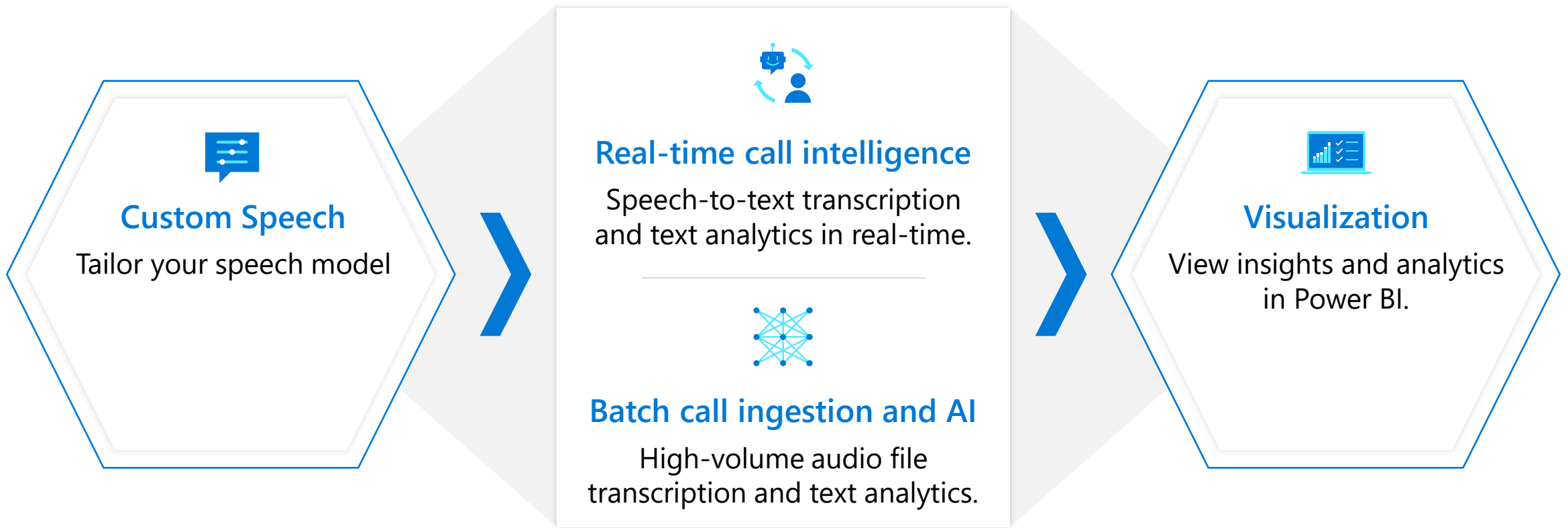


Transcription and analysis at scale provide insights on real-time and previously recorded customer calls.

Rapidly deployable pre-configured IP requires minimal technical time and expertise.

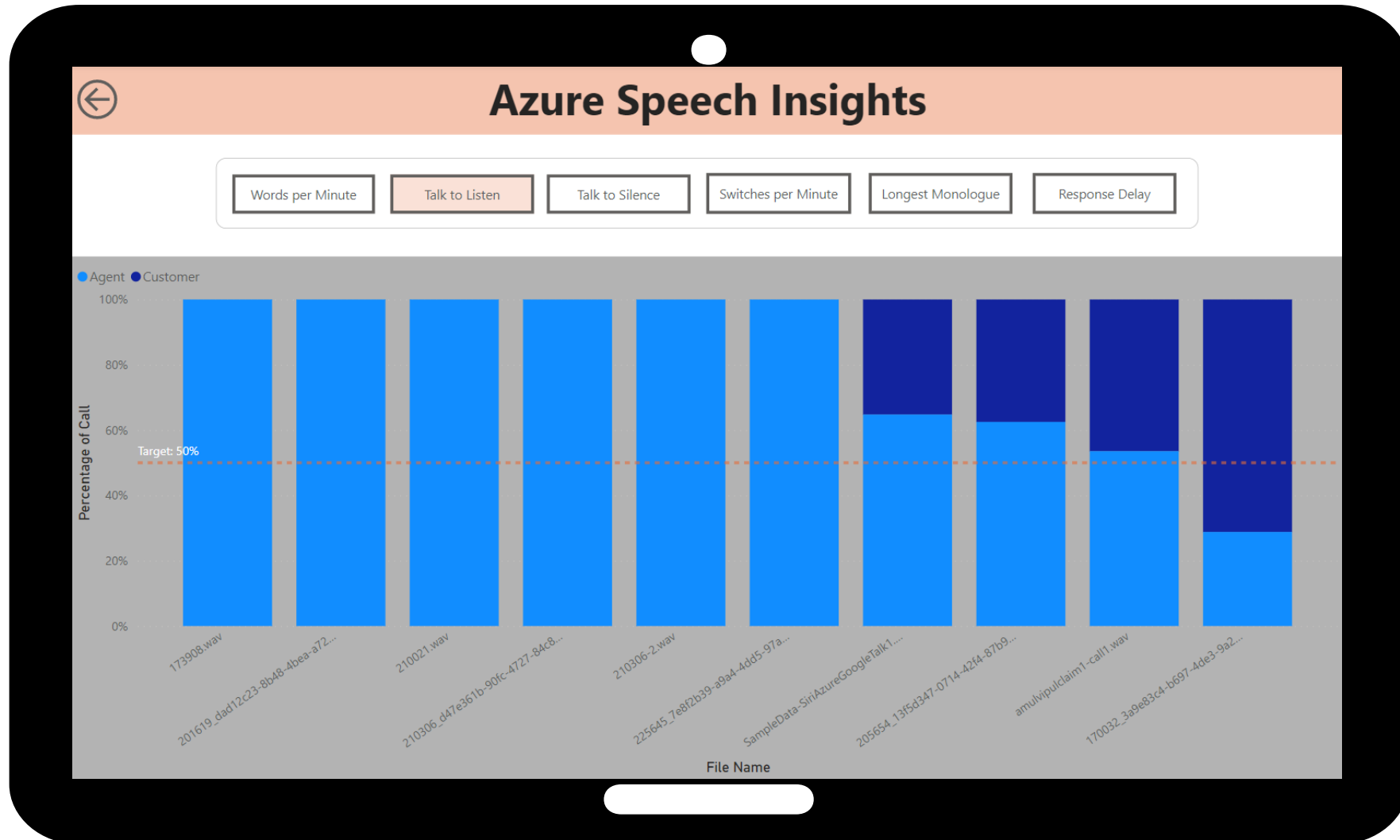
Ease and expedite call center operations

Azure Cognitive Services and Power BI deliver end-to-end call transcription insights

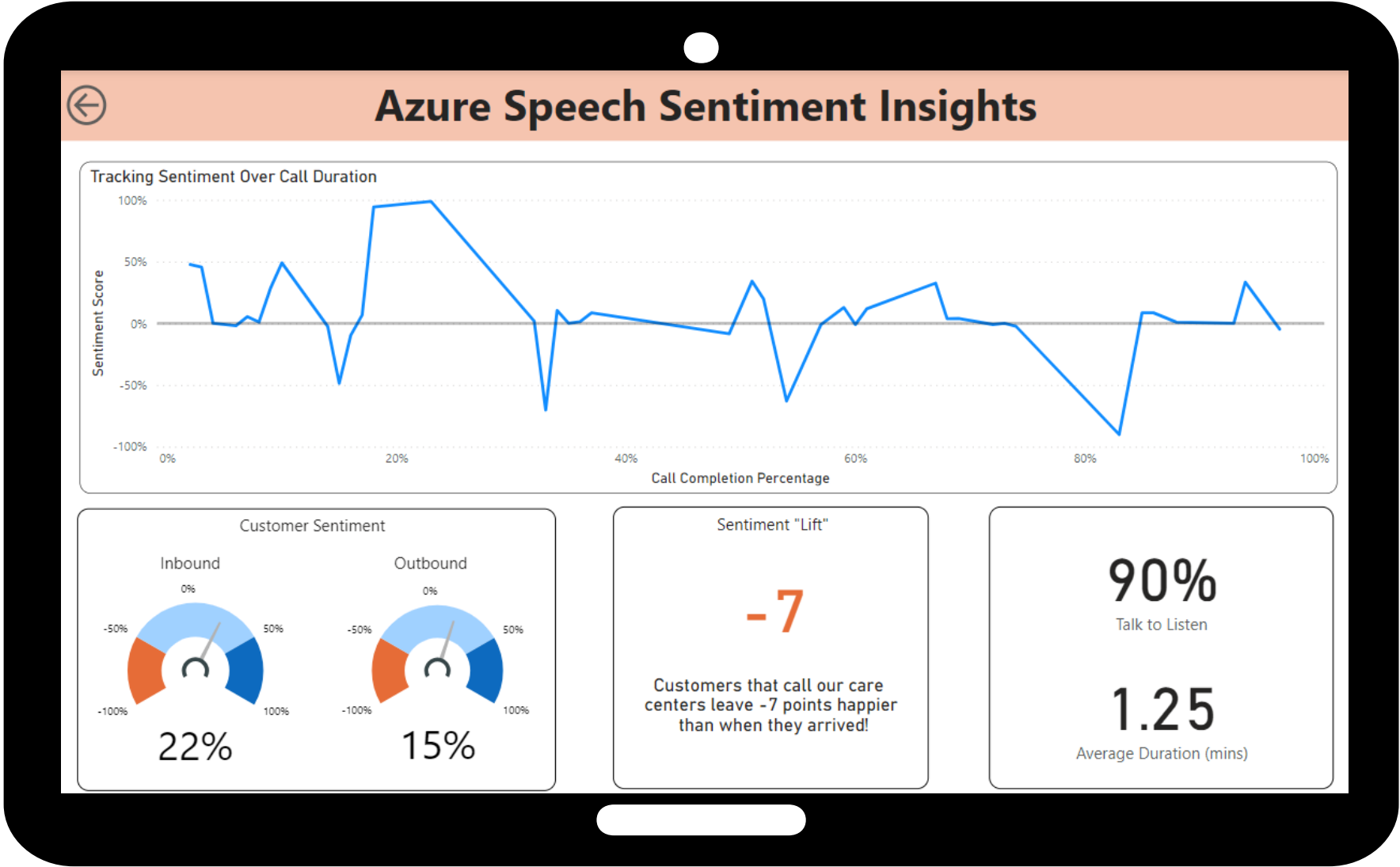


Visualize real-time and historical call analytics

Accurate automated transcription enables actionable customer insights



Track customer sentiment throughout calls



Allstate transforms the call center experience with AI

Single-call auto insurance claims help reduce customer stress

Situation	Allstate discovered that its agents were not able to capture the rich details customers were sharing during their initial reporting of an accident.
Solution	The company leveraged Azure Cognitive Service, creating a custom speech model that recognizes and transcribes calls, including important insurance vocabulary.
Impact	Allstate now fully processes each customer claim which results in better customer care and faster results.



With our transcription work, when a customer reports their accident initially, we're able to take that rich detail and figure out, without involving them, how to process their claim.

Olivia Mahler-Haug
Senior Product Owner
Claims, Innovation & Delivery



[Watch the Allstate customer success story video >](#)

Accelerate your journey to Call Center Intelligence



Kick-off

Learn more about the **AI-Powered Call Center Intelligence Accelerator** and view a demo.

30 minutes

Proof of value

Optional accelerator code walk-through and prototype creation based on sample data for testing.

3-5 days

Proof of concept

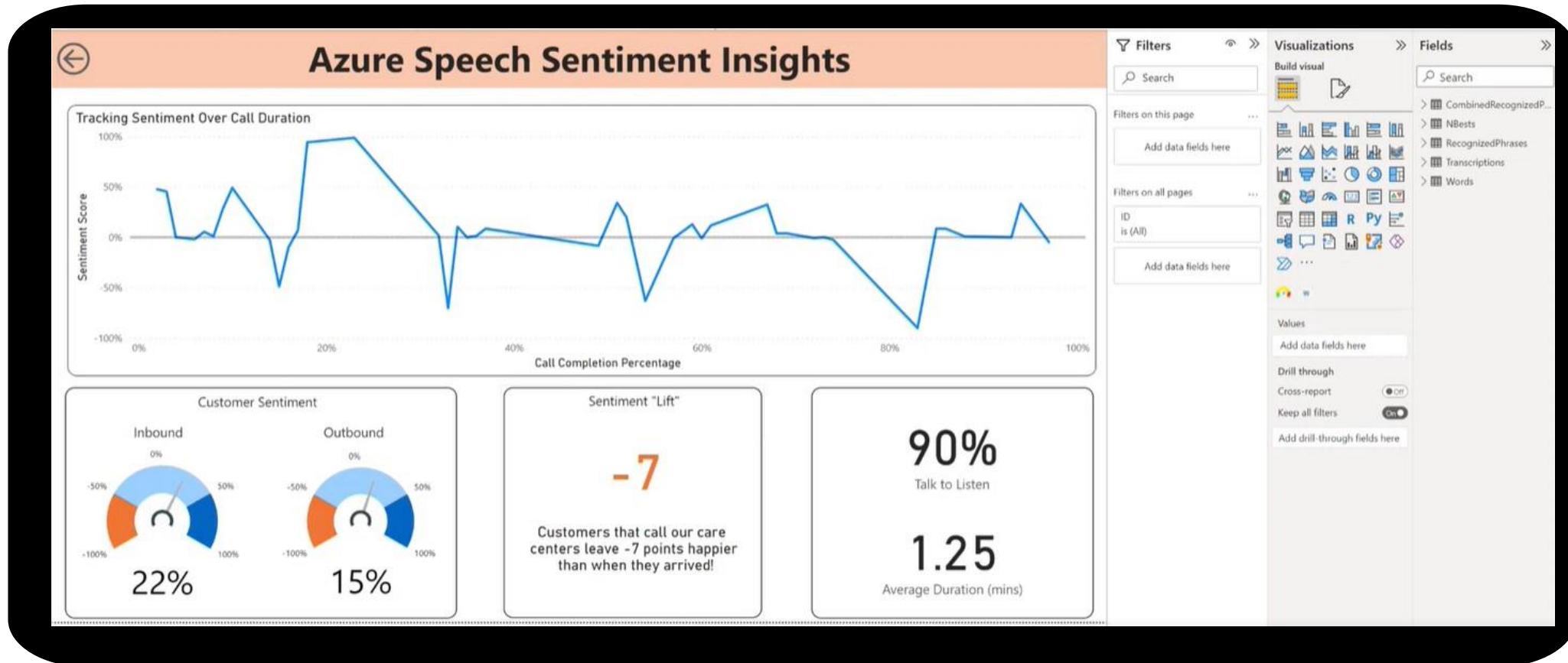
Proof of concept (POC) is built and deployed with support of Microsoft technical specialists and partners.

MVP is scaled to deployment.

3-6 weeks

Video of the accelerator

[View the Call Center Intelligence demo](#)



Transform the agent and customer call experience

Highly accurate transcription unlocks new insights at scale



Limitless call volume
transcription automation



Complete ownership,
control, and visibility into
your data



Accommodates your
hybrid or multicloud
infrastructure.



Rapidly deployable pre-
configured IP

In **2016** a Microsoft Artificial Intelligence and Research team reported a speech recognition system with a word error rate of **5.9%**.

This is the same rate as professional transcriptionists.¹

¹ [Historic Achievement: Microsoft researchers reach human parity in conversational speech recognition | Microsoft AI Blog, October 2016](#)

Streamline call center operations with the power of AI

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Streamlined approach creates efficiencies for call centers

Apply cutting edge transcription and AI locally or in the cloud



Custom Speech

Customize your speech recognition model for your business, including unique vocabulary, with Azure Cognitive Services.



Real-time call intelligence

Speech Key, Text Analytics Key, and Custom Speech Endpoint ID are run locally, generating real-time AI output.



Call batch ingestion and AI

Call recordings are stored as .WAV files in Azure Blob Storage. Azure Cognitive Services and the Azure Data Platform create batch analytics and output to a SQL database.

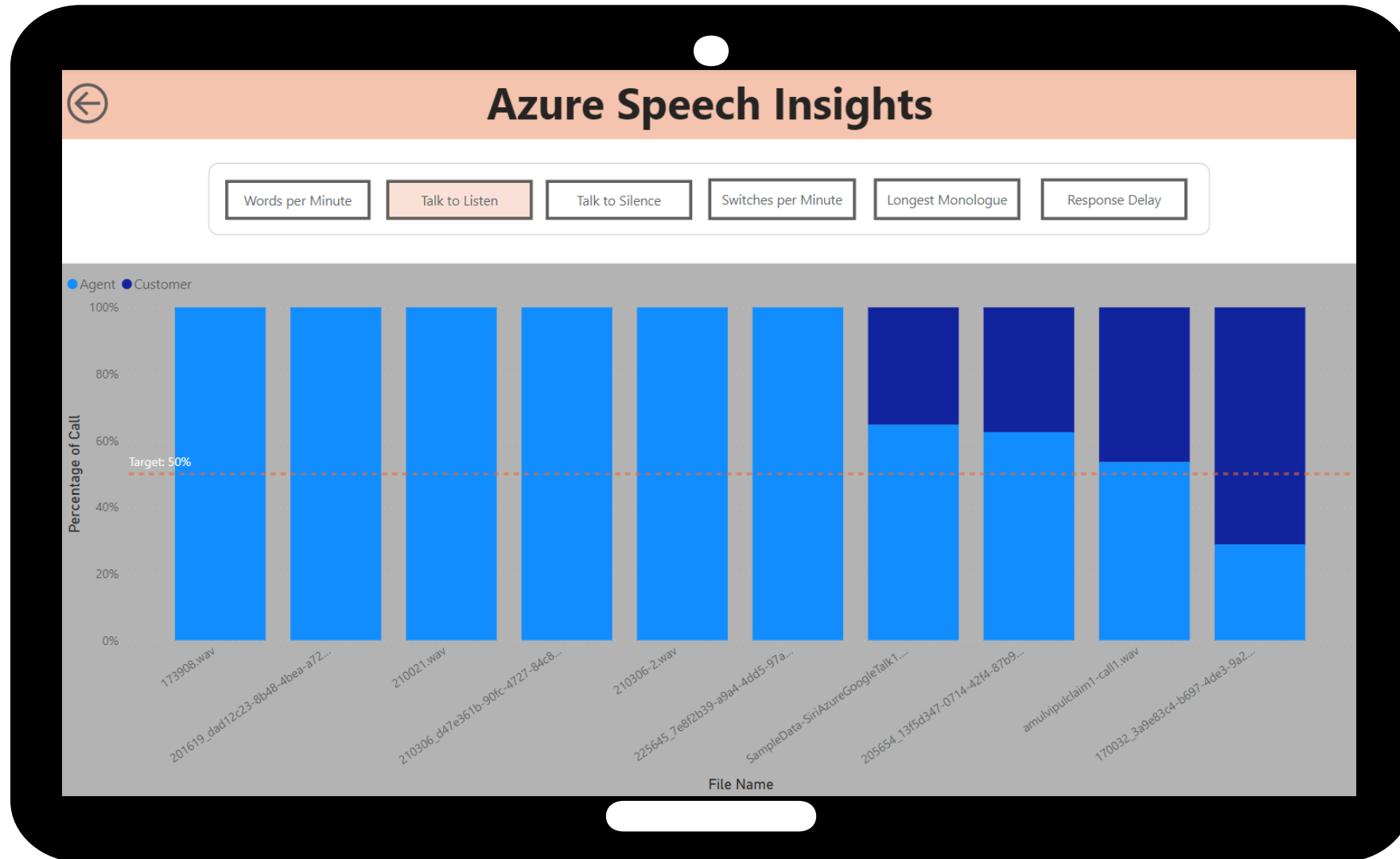


Visualized call insights and analytics

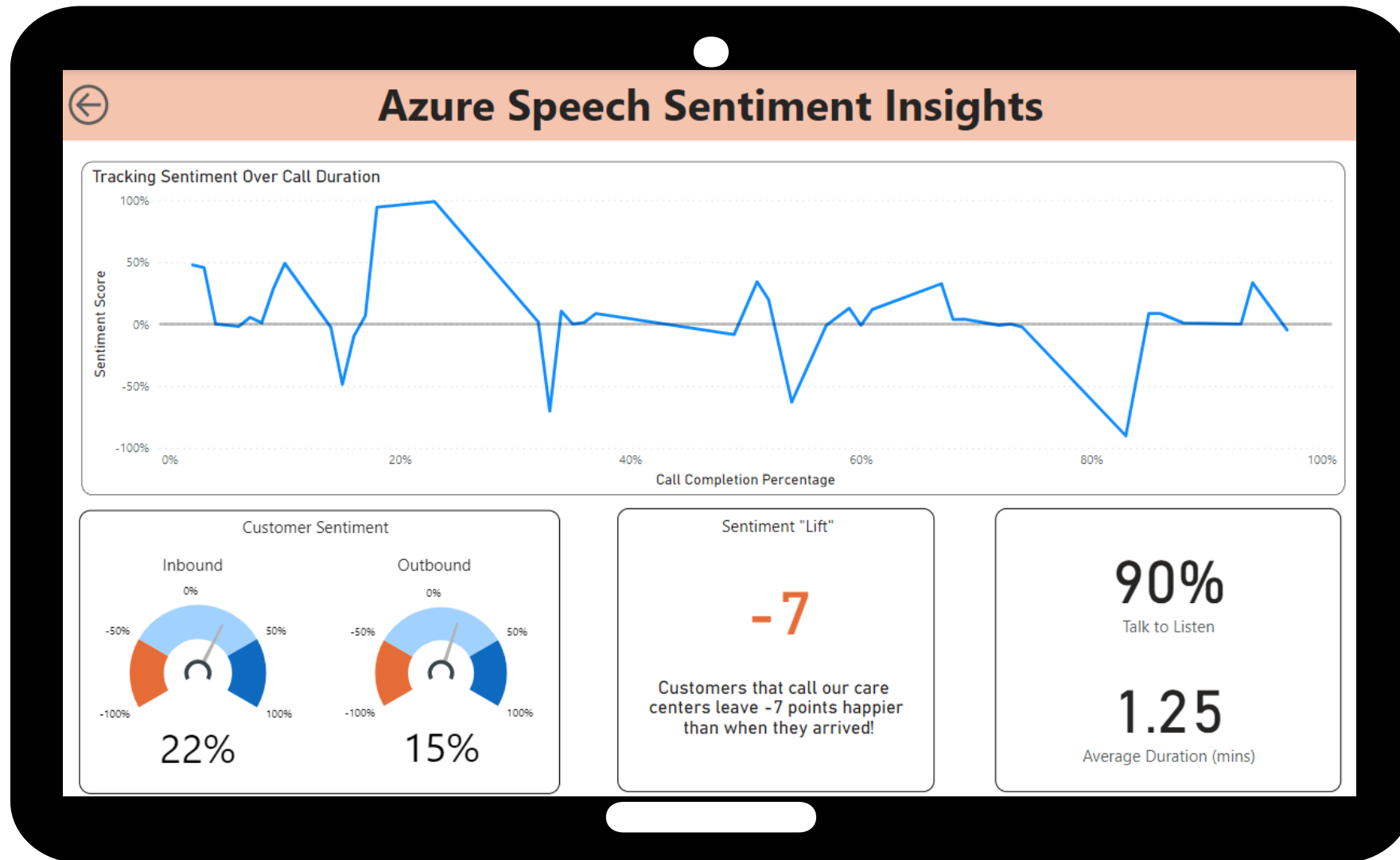
Power BI creates easy-to-understand visualizations from batch-AI output, including speech insights and sentiment insights.

Visualize real-time and historical call analytics

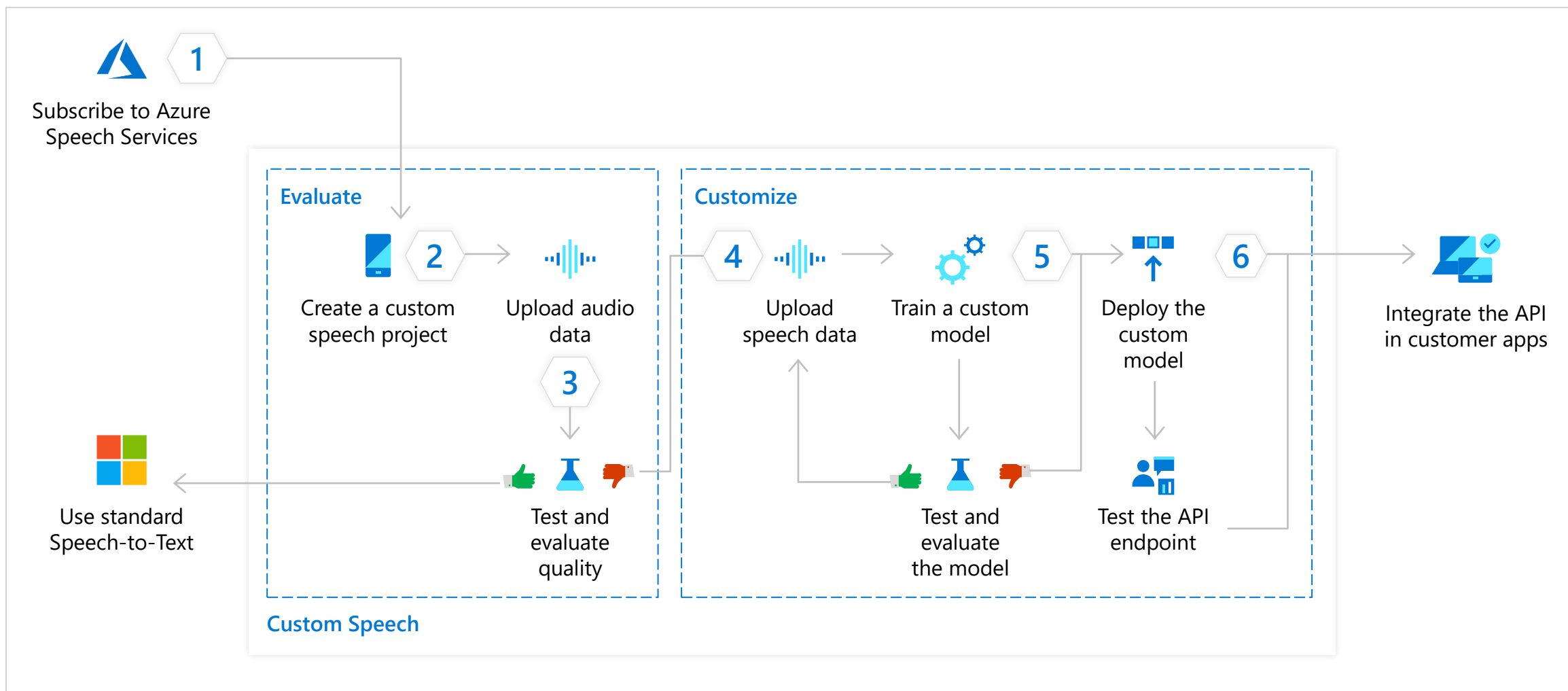
Accurate automated transcription enables actionable customer insights



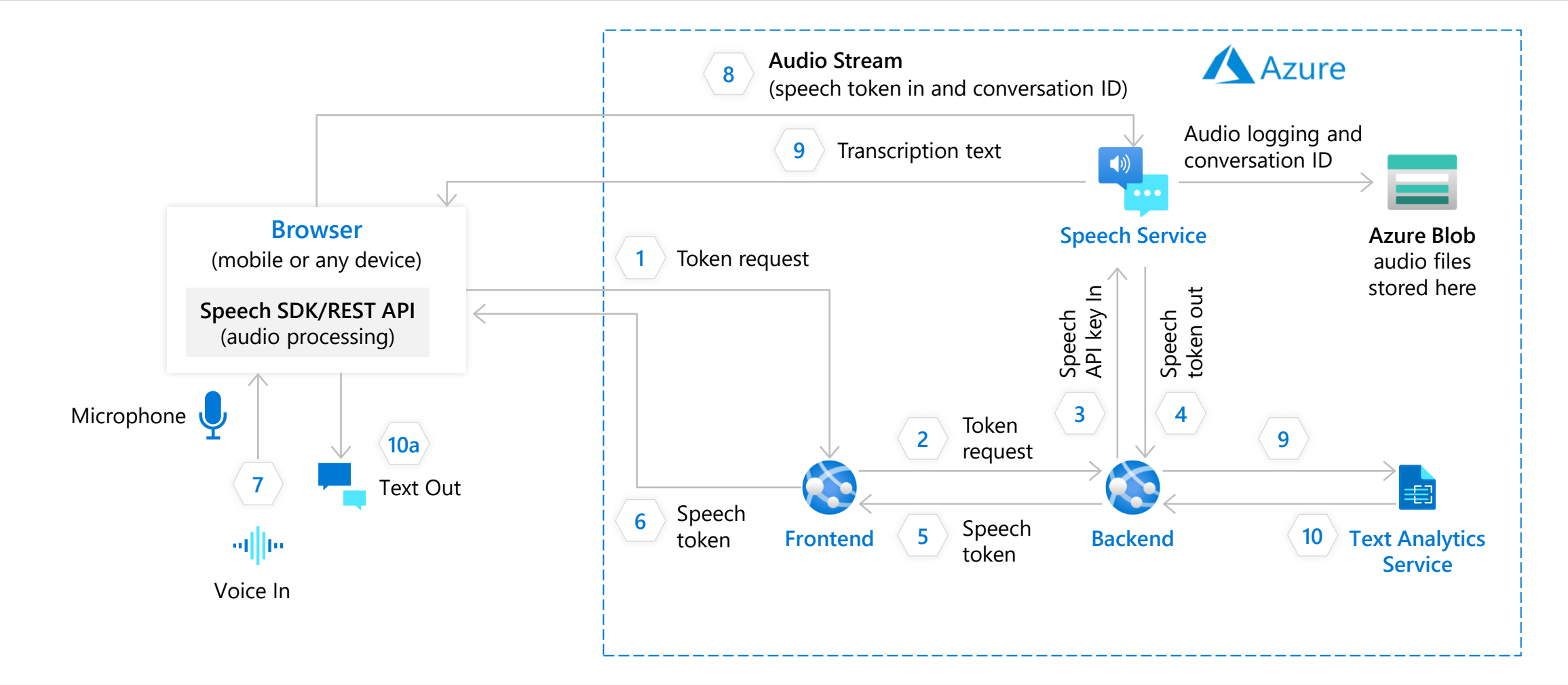
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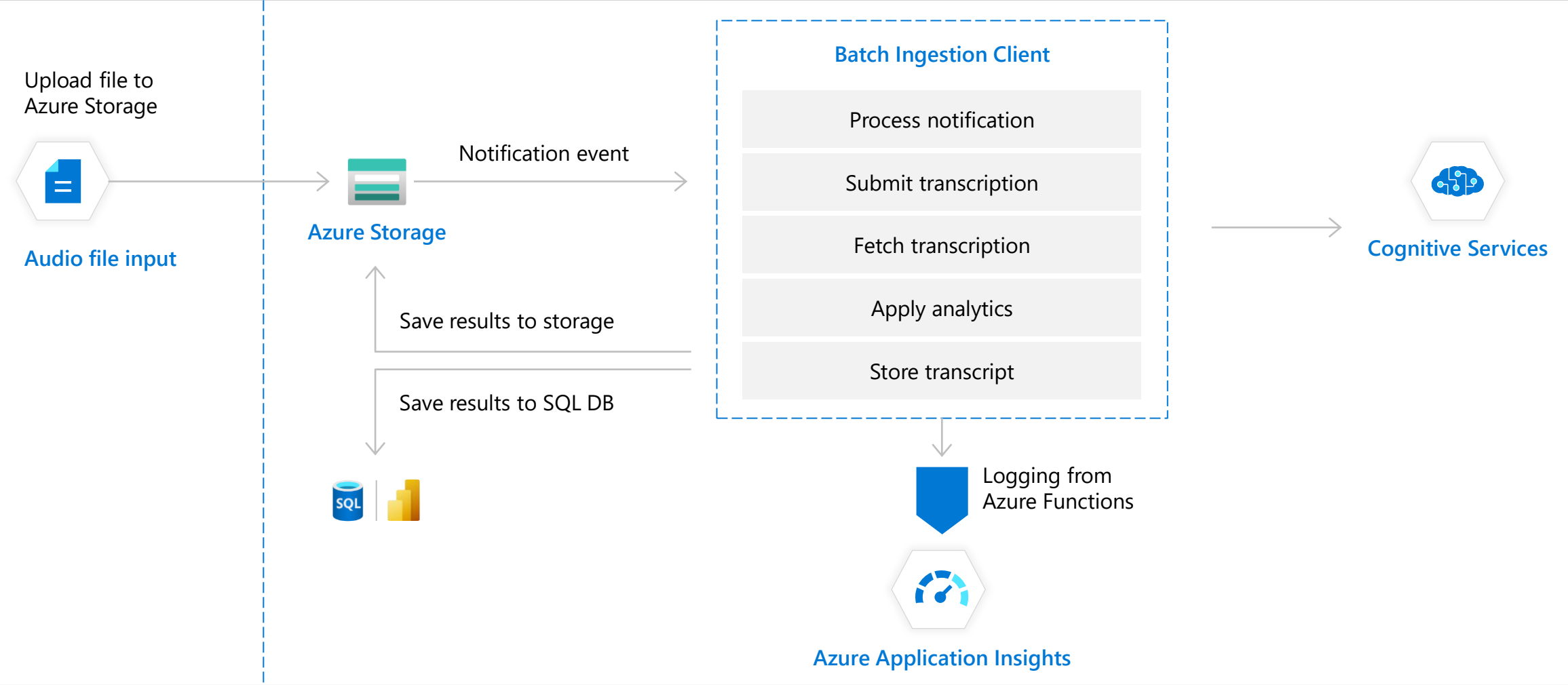
Azure Custom Speech reference architecture



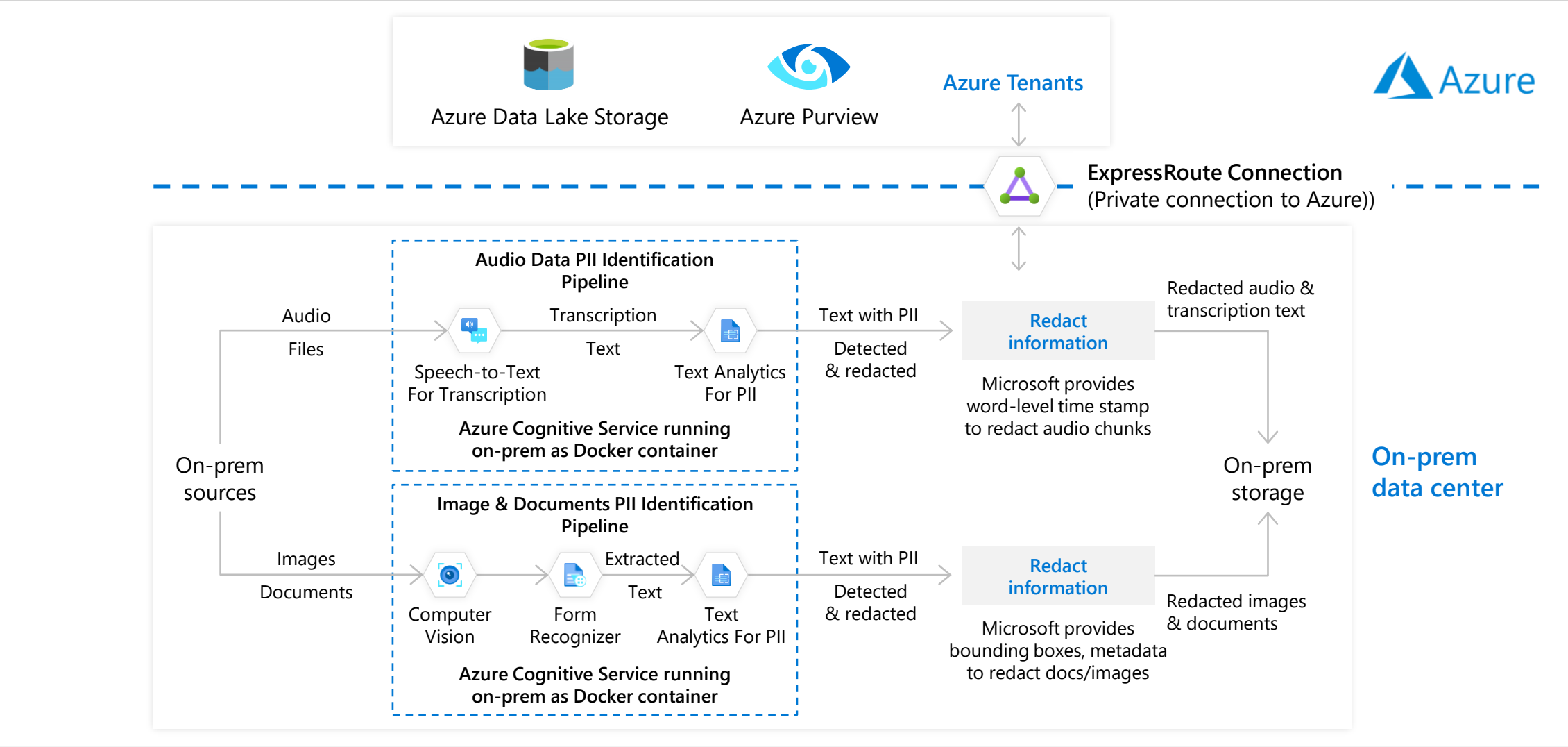
Real-time call intelligence reference architecture



Call batch ingestion and AI reference architecture



On-premises PII detection and redaction architecture



Next steps to your Call Center Intelligence MVP



Deploy resources

Create a resource group you can use as a container.

Prepare data and customize model

Prepare and upload test data, customize speech model.

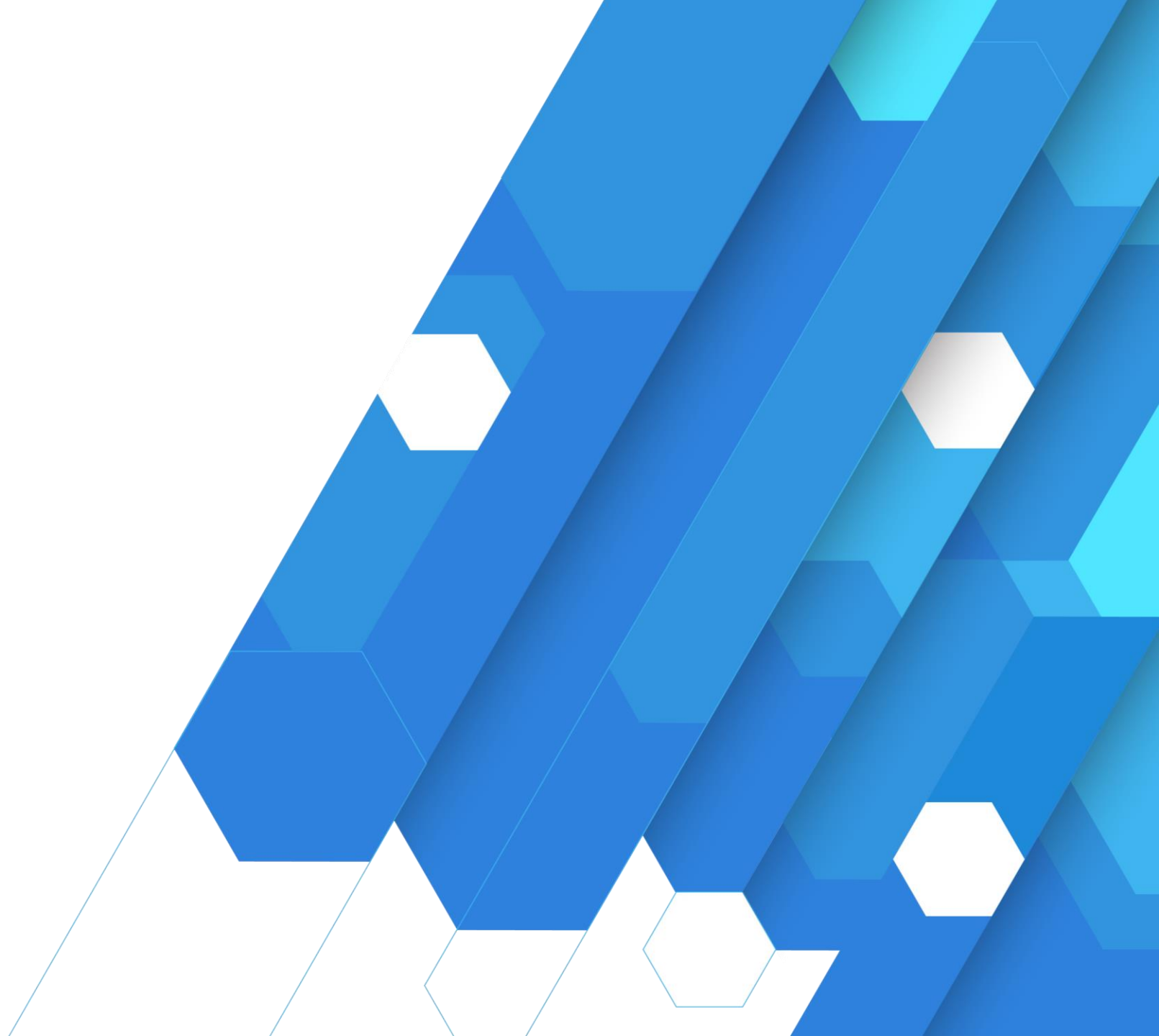
Train model

Provide additional relevant text to train your speech-to-text model and improve accuracy.

With demo data create a proof of value in 3-5 days.

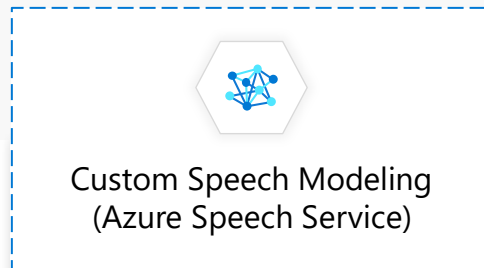
With your customer data and a prep session, create your proof of concept in 3-6 weeks.

Thank you



How to build your intelligent call center

Step 1: Customize Speech model for Business

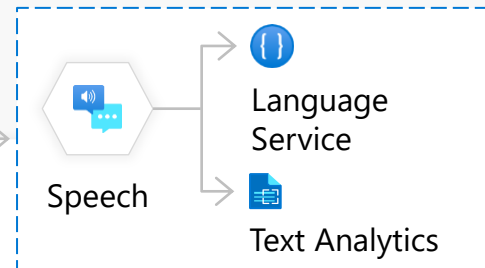


1. Create custom speech model
2. Use Azure Speech resource and "InsuranceLanguage-Data1.txt"

Outputs

1. Custom speech Endpoint ID
2. Azure Speech resource key

Step 2: Real-time Call Intelligence

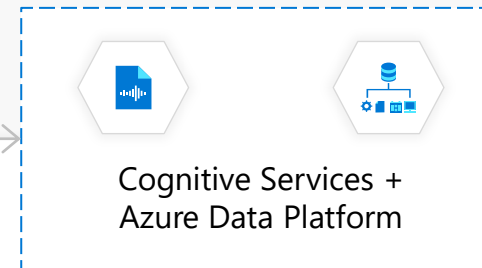


1. Configure Frontend & Backend NodeJS apps (GitHub)
2. Use Speech Key, Text Analytics Key & Custom Speech Endpoint ID
3. Run app locally simulating your business conversation and see the real-time AI output (Don't need to deploy it to Azure App Service.)

Outputs

1. Call recording (WAV file)
2. Download WAV file from Azure Storage Blob

Step 3: Call Batch Ingestion & Batch AI

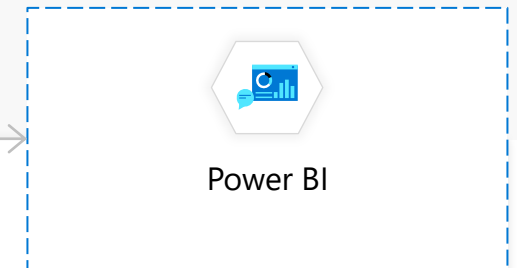


1. "Setup Instructions" & ARM template deployment is already done in Coach RG
2. Follow "Running Batch Analytics on Call Recordings" instructions (GitHub)
3. Upload WAV file to Storage Blob
4. Check results of batch analytics

Outputs

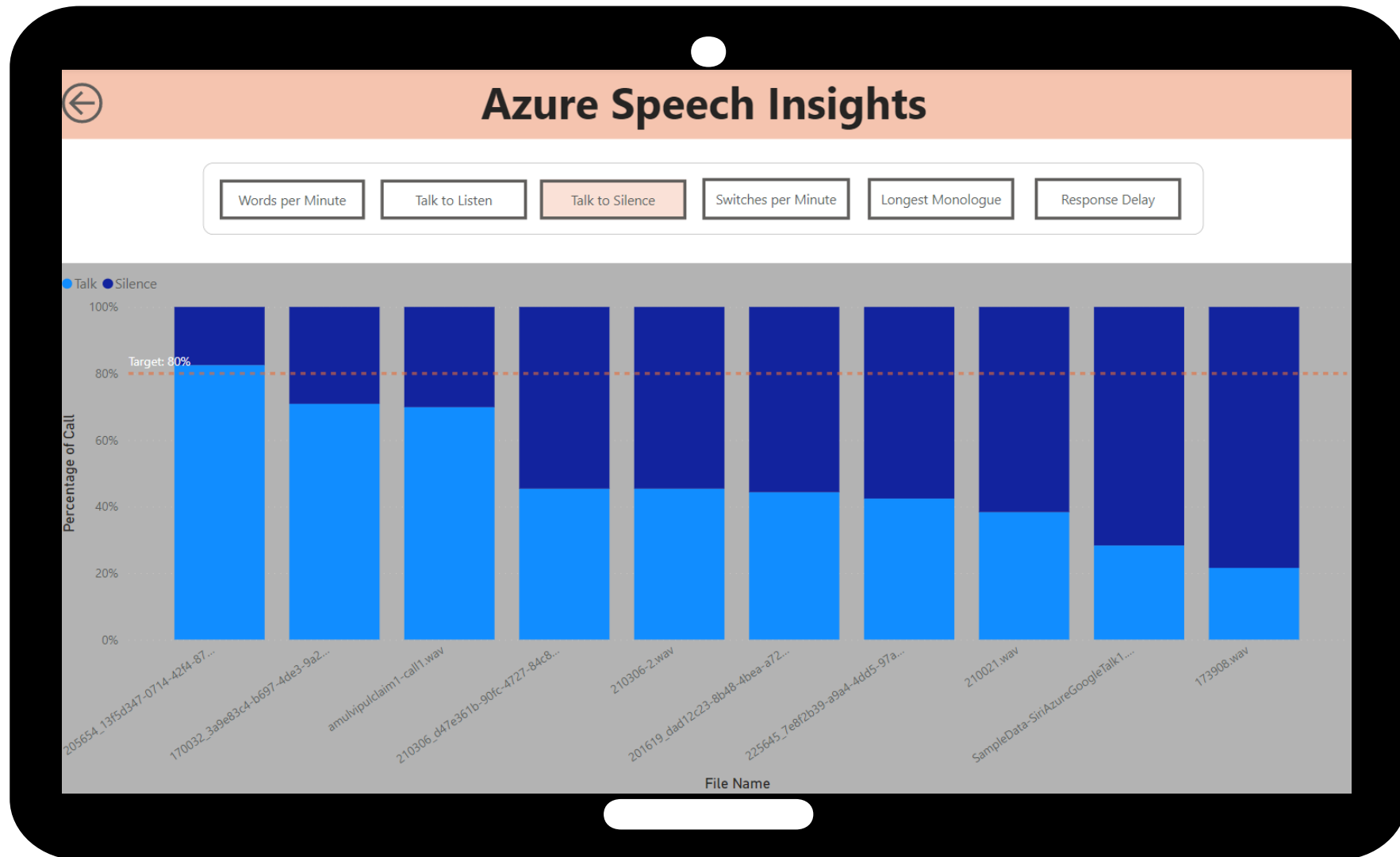
1. AI batch analytics output
2. Output stored in SQL DB & Storage Blob (JSON file)

Step 4: Call Insights & Analysis



1. Visualize batch-AI output using Power BI
2. Use Power BI templates (GitHub)
3. Use SQL DB connection info to get data in Power BI and view AI insights.
4. Two Power BI templates provided - Speech Insights & Sentiment Insights

Visualize speaking time to silence time ratio



Track response delays

