

Call Center Intelligence Accelerator

Financial Services and Insurance industries

Creating better customer experiences with AI

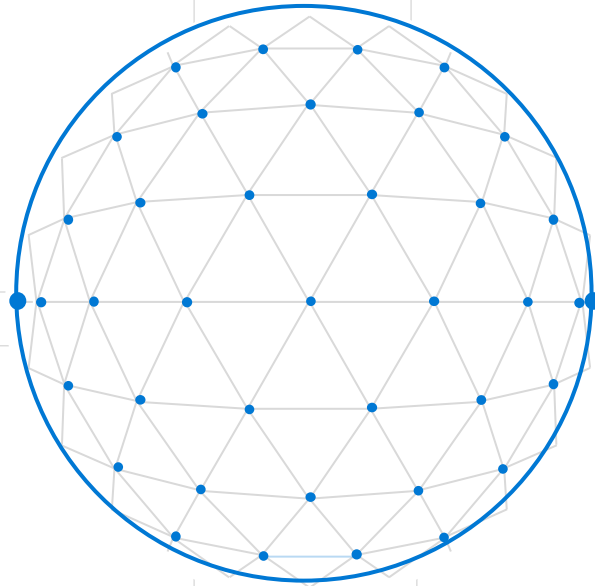
Organizations are implementing advanced technology to improve customer satisfaction

Callers lose patience

3 minutes is the average time a customer will spend on hold before simply hanging up—hold times frustrate 57% of customers.¹

Callers repeat themselves

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



AI for call centers is growing

\$3.5B is the projected global market for AI in call centers by 2026—a 21.5% 5-year compound annual growth rate.³

Data insights enhance business

82% of marketers agree that insights from inbound calls and call experiences may reveal costly blind spots in their organizations.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 during real-time conversation slows service delivery and creates errors.



Labor shortages and high turnover add strain to call center operations.



Privacy laws protecting customer data are varied and complex.



Untapped data from historic call records is a wasted resource.



Legacy AI transcription technologies are significantly less accurate than human transcription.

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** with automation.



Increase **efficiency** by reducing average call duration, limiting re-routing, and eliminating customer repetition.



Generate a wealth of **customer insights** to inform training and sales processes.



Ensure **compliance and PII protection** with leading security and flexible data warehousing.



Create improved **personal customer interactions** and increase customer retention.

Streamline call center operations with the power of AI

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

The **Call Center Intelligence Accelerator** automates call transcription in near real-time with Azure Cognitive Services 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 in **Power BI**.

Customizable speech model incorporates your industry and business language.



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

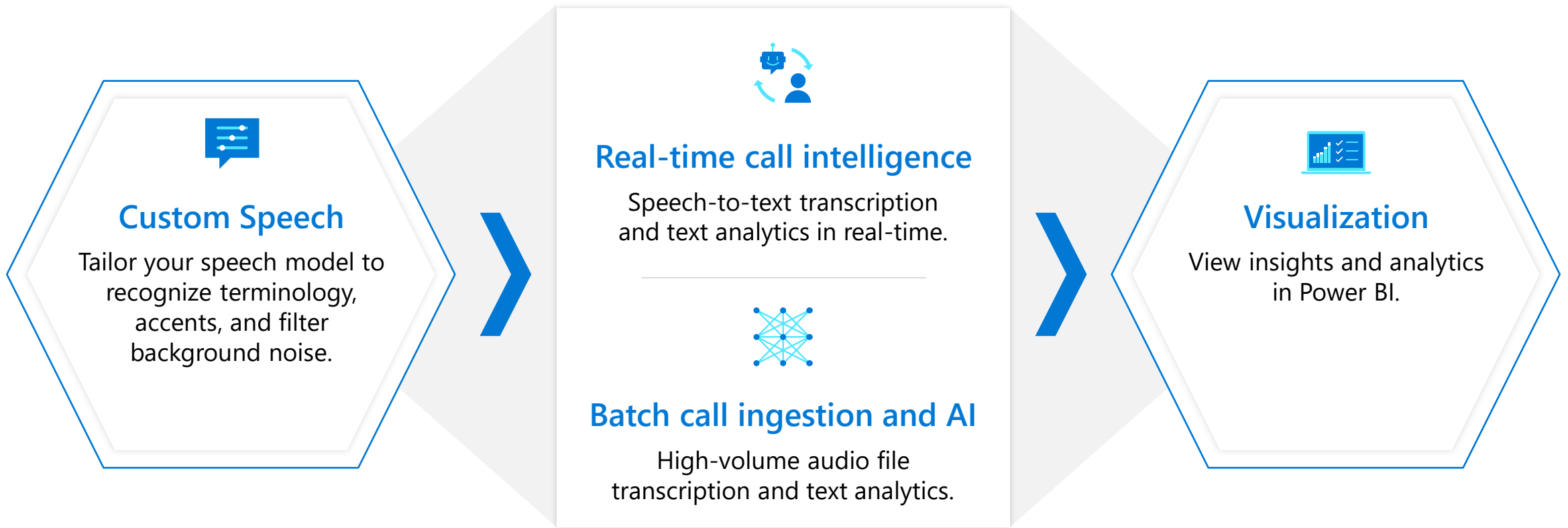
Automated PII detection and redaction protects customer privacy and promotes compliance.



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

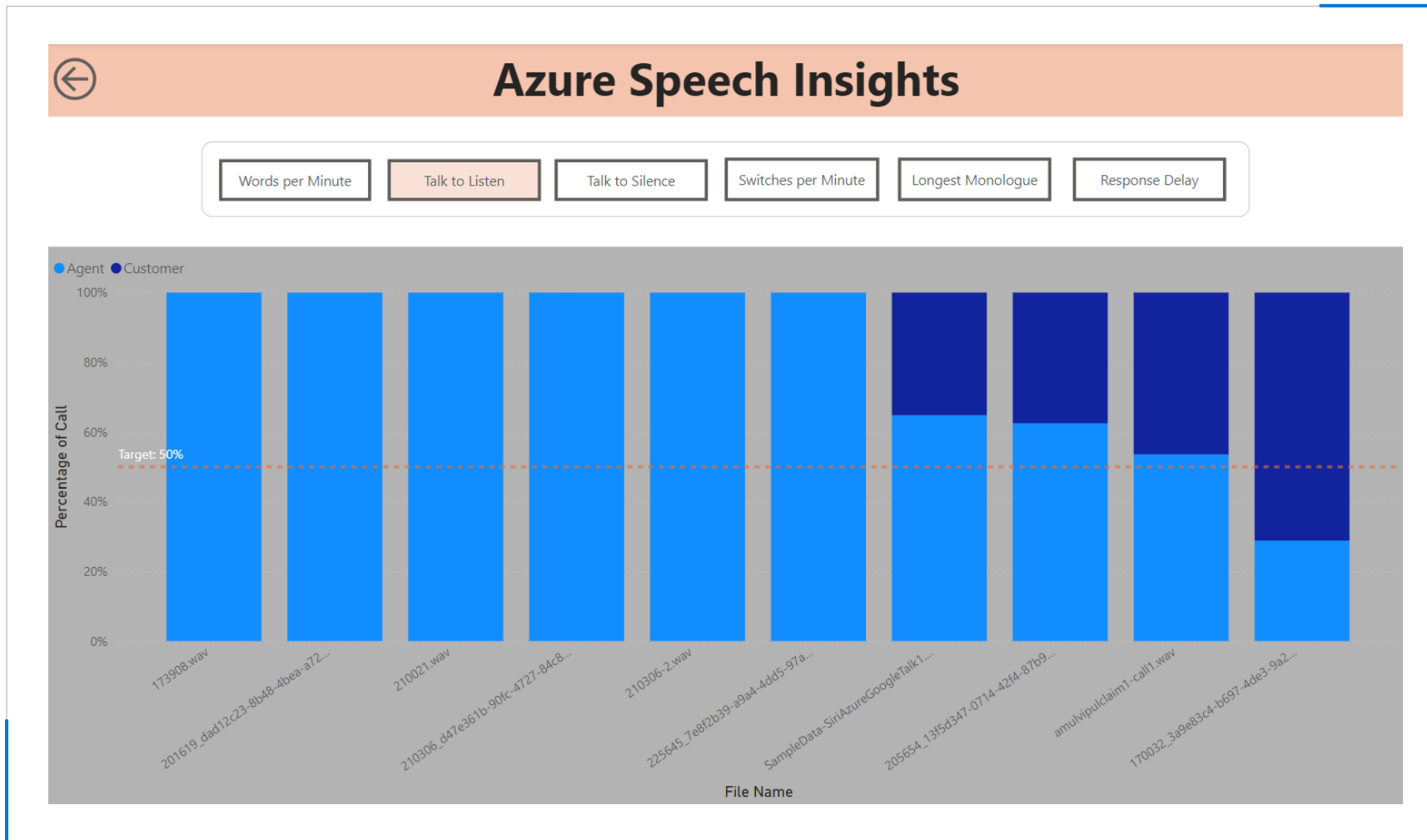
Ease and expedite call center operations

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

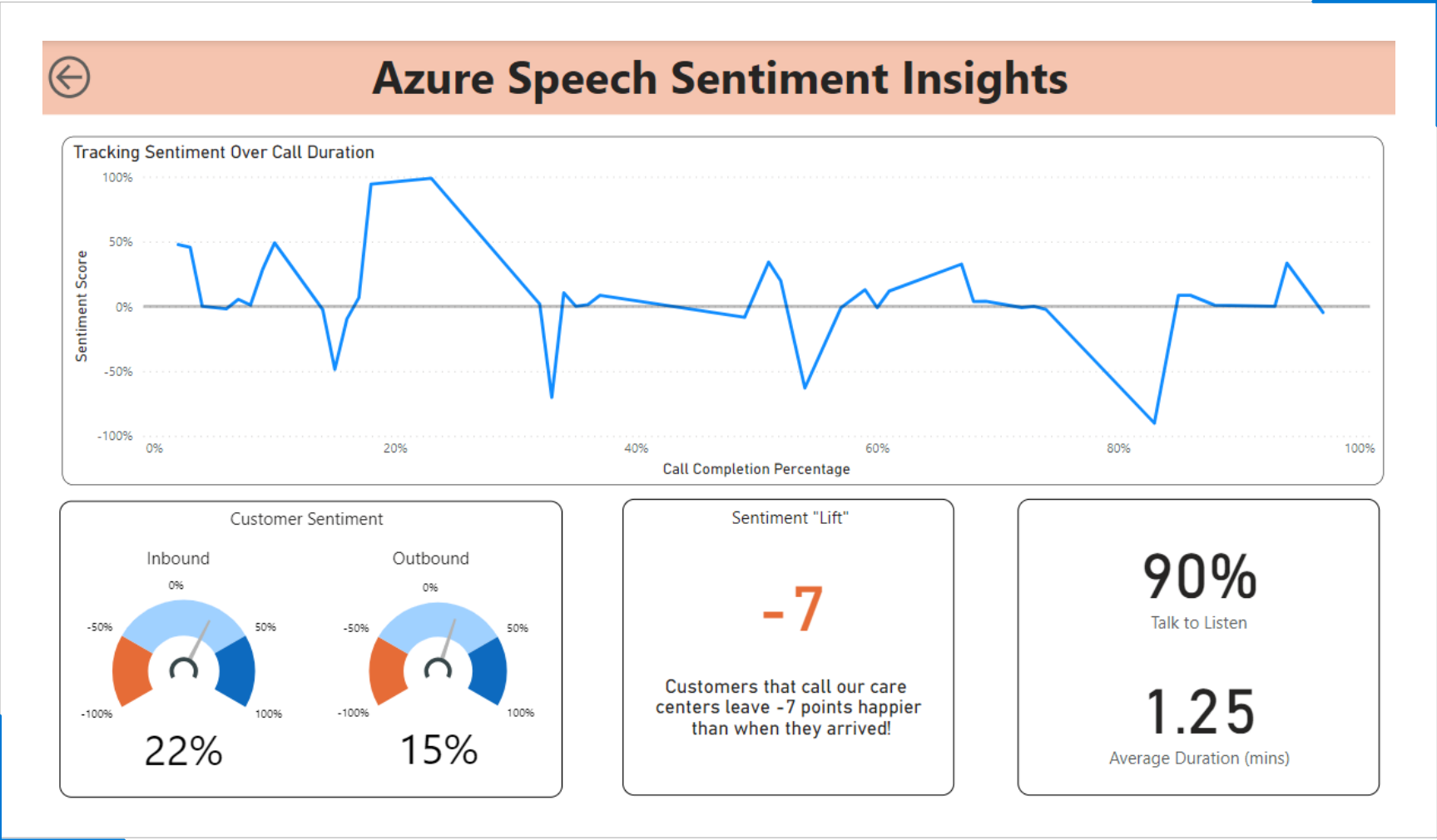


Visualize real-time and historical call analytics

Accurate automated transcription enables actionable customer insights



Track customer sentiment throughout calls



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Allstate transforms the call center experience with AI

Single-call auto insurance claims help reduce customer stress

| | |
|------------------|--|
| Situation | Allstate found that when auto insurance customers initially called to report an accident, they provided rich details and information that agents weren't effectively capturing . The company wanted to remove as much friction as possible from the claim filing process. |
| Solution | The company leveraged Azure Cognitive Services to create a custom speech model that recognizes insurance vocabulary and to deploy a transcription service that automatically captures customer calls as text . |
| Impact | Allstate now automatically ingests all information from a single customer call to initiate the claims process. The enhanced customer experience is creating greater customer satisfaction and brand affinity. |



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 >](#)

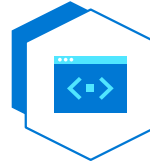
Accelerate your journey to Call Center Intelligence



Kick-off

Learn more about the 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

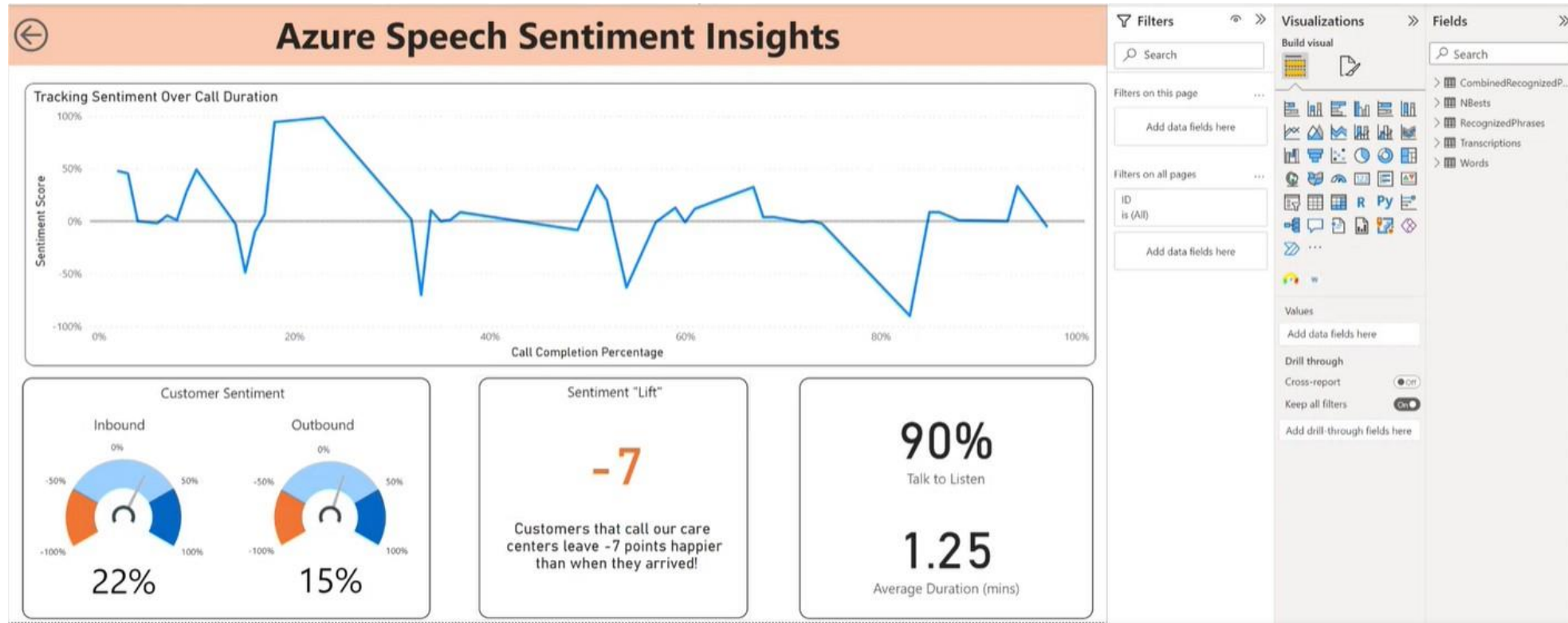
Proof of concept (POC) is built and deployed with support of Microsoft technical specialists and partners.

MVP is scaled to deployment.

3-6 weeks

View a demo video of the accelerator

Click [here](#)



Transform the agent and customer call experience

Highly accurate transcription unlocks new insights at scale



Scale to manage **limitless call volume transcription** automation.



All transcription and recording data resides in your Azure tenant, giving you **complete ownership, control, and visibility**.



The Accelerator can run on Azure or in containers, **accommodating your hybrid or multicloud infrastructure**.



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

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

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

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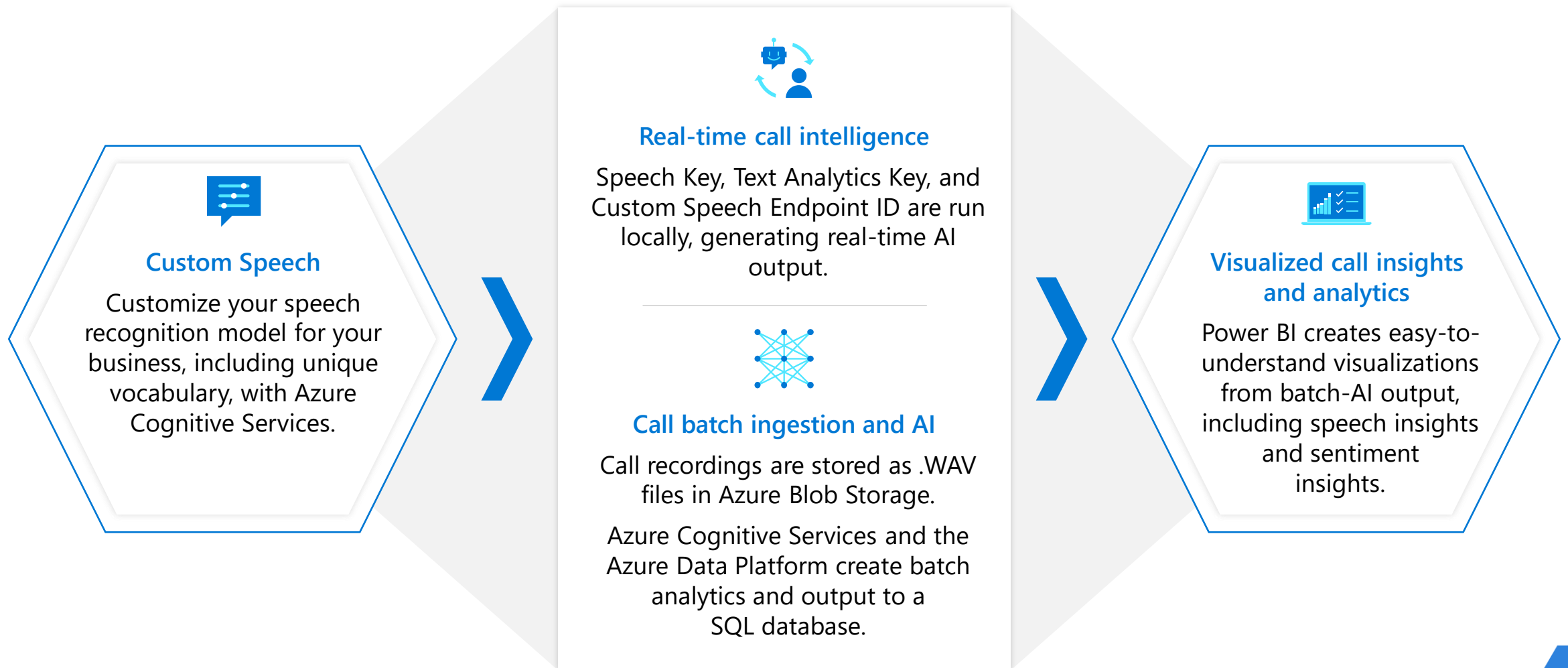
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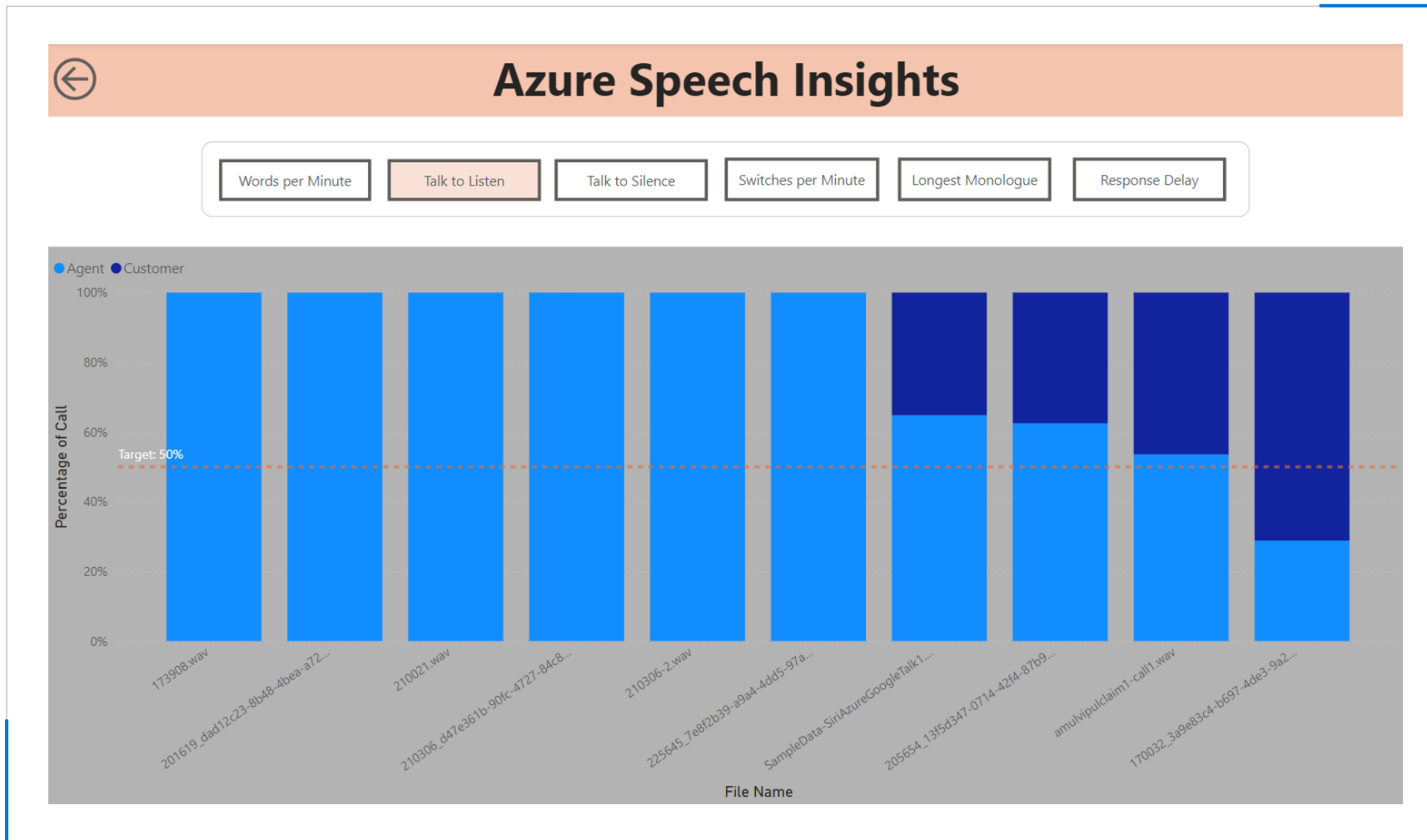
Streamlined approach creates efficiencies for call centers

Apply cutting edge transcription and AI locally or in the cloud

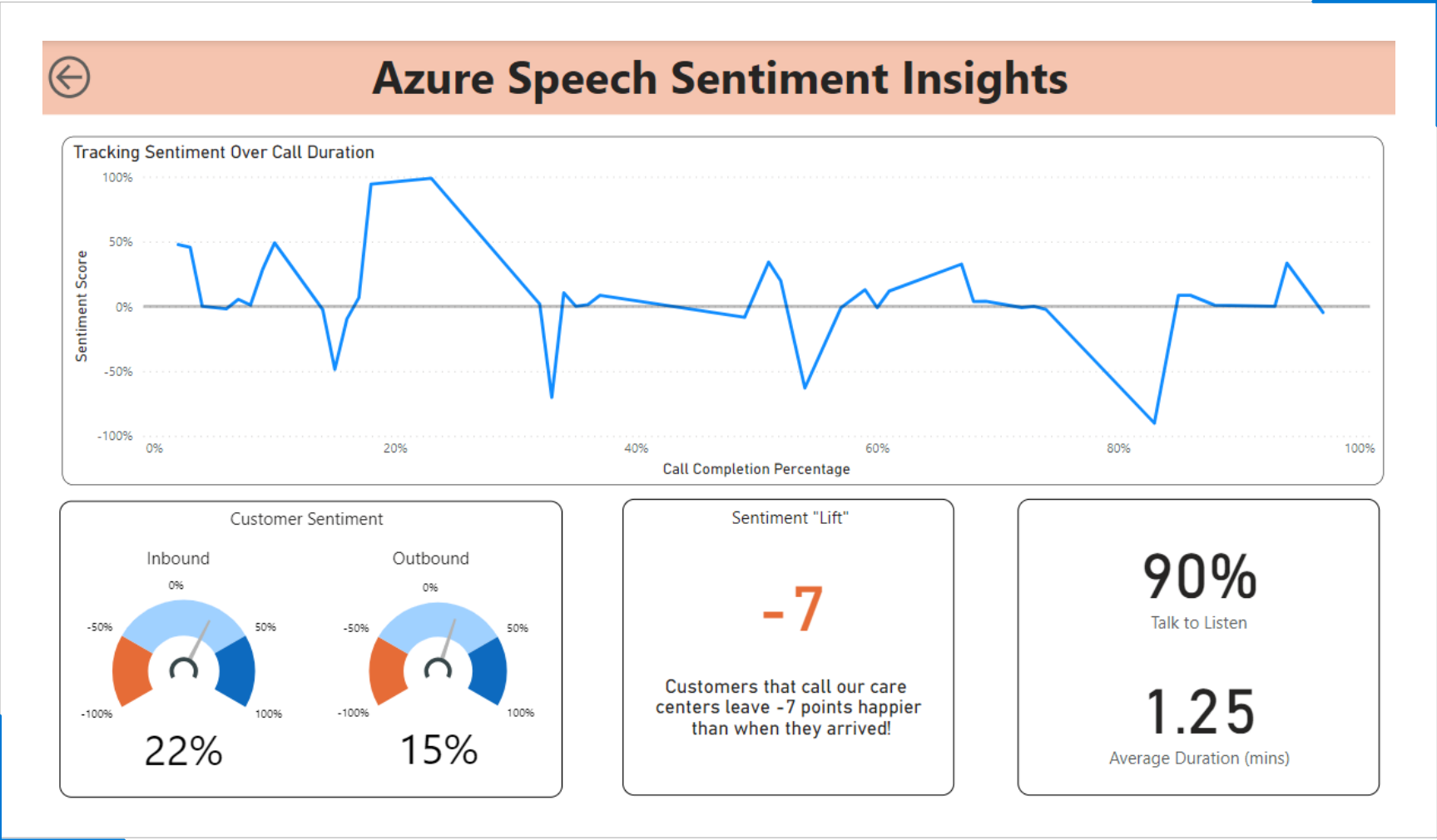


Visualize real-time and historical call analytics

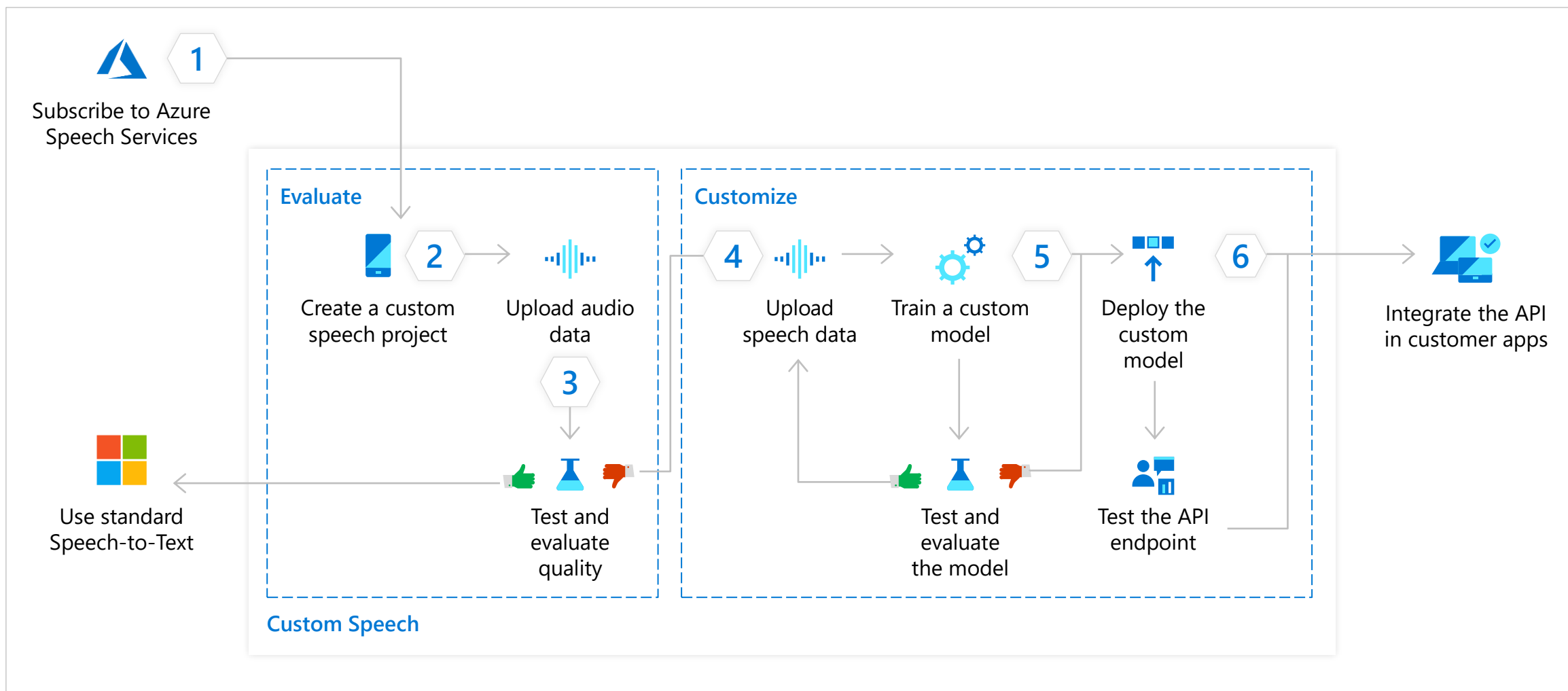
Accurate automated transcription enables actionable customer insights



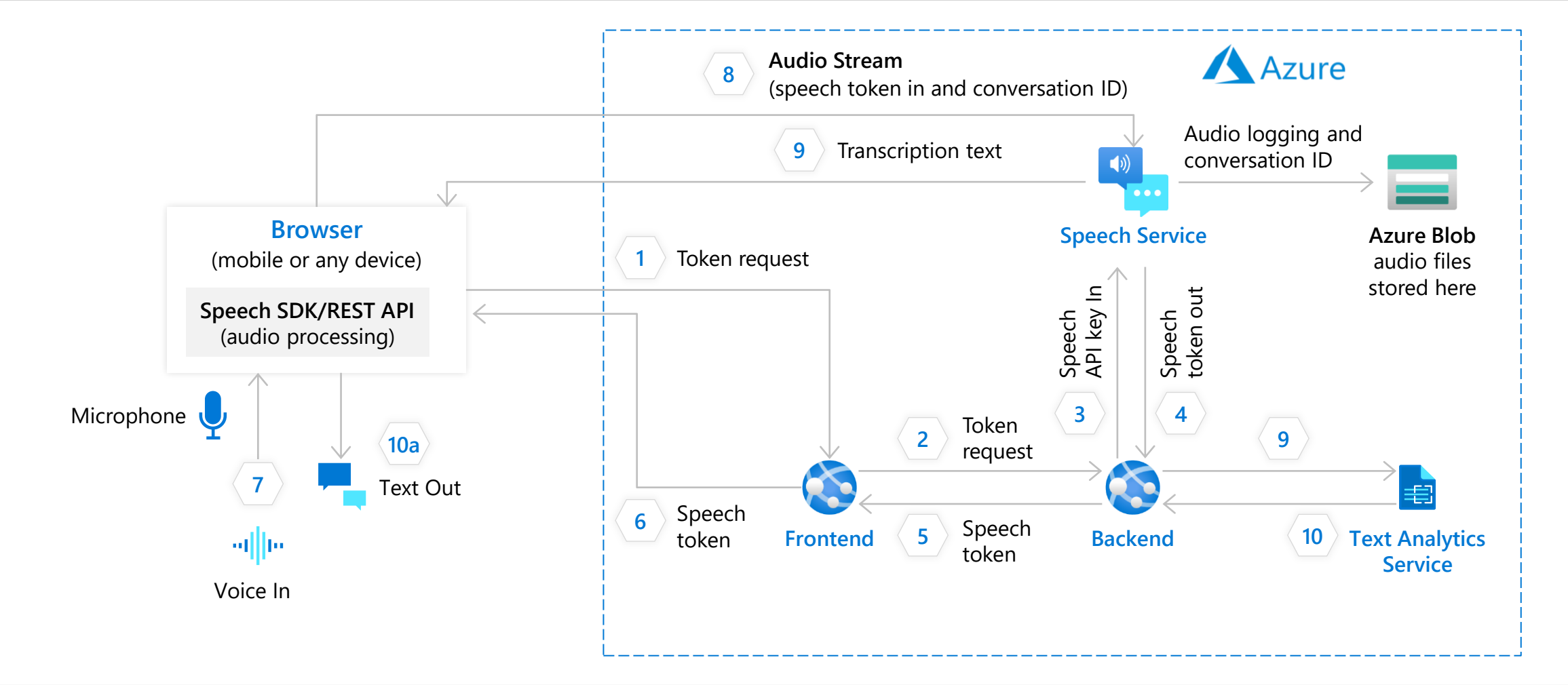
Track customer sentiment throughout calls



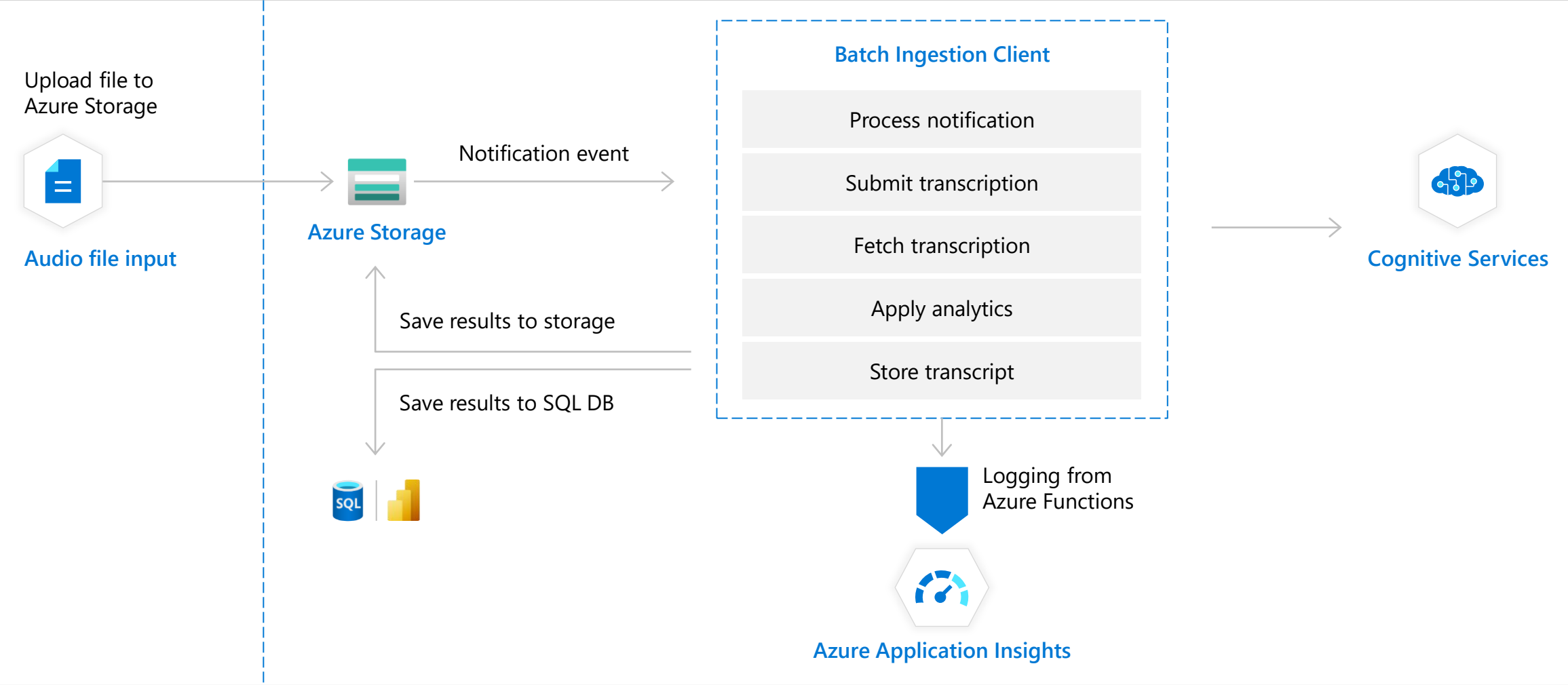
Azure Custom Speech reference architecture



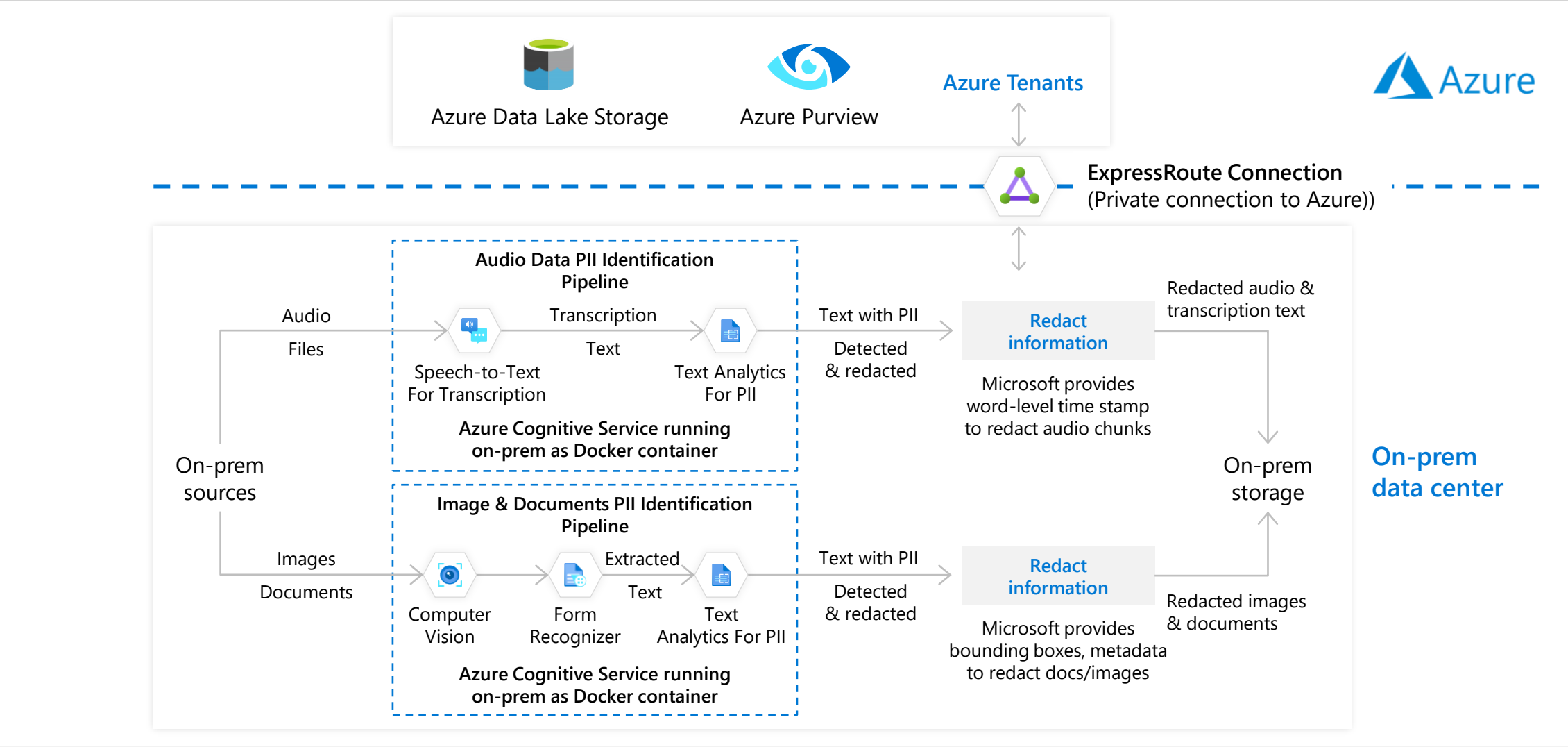
Real-time call intelligence reference architecture



Call batch ingestion and AI reference architecture



On-premises PII detection and redaction architecture

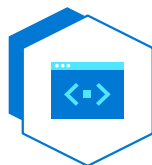


Next steps to your Call Center Intelligence MVP



Deploy resources

Create a resource group you can use as a container to begin deploying the resources to Azure.



Prepare data and customize model

Prepare and upload test data. Customize speech model to recognize specific terminology, as well as accents and background noise.



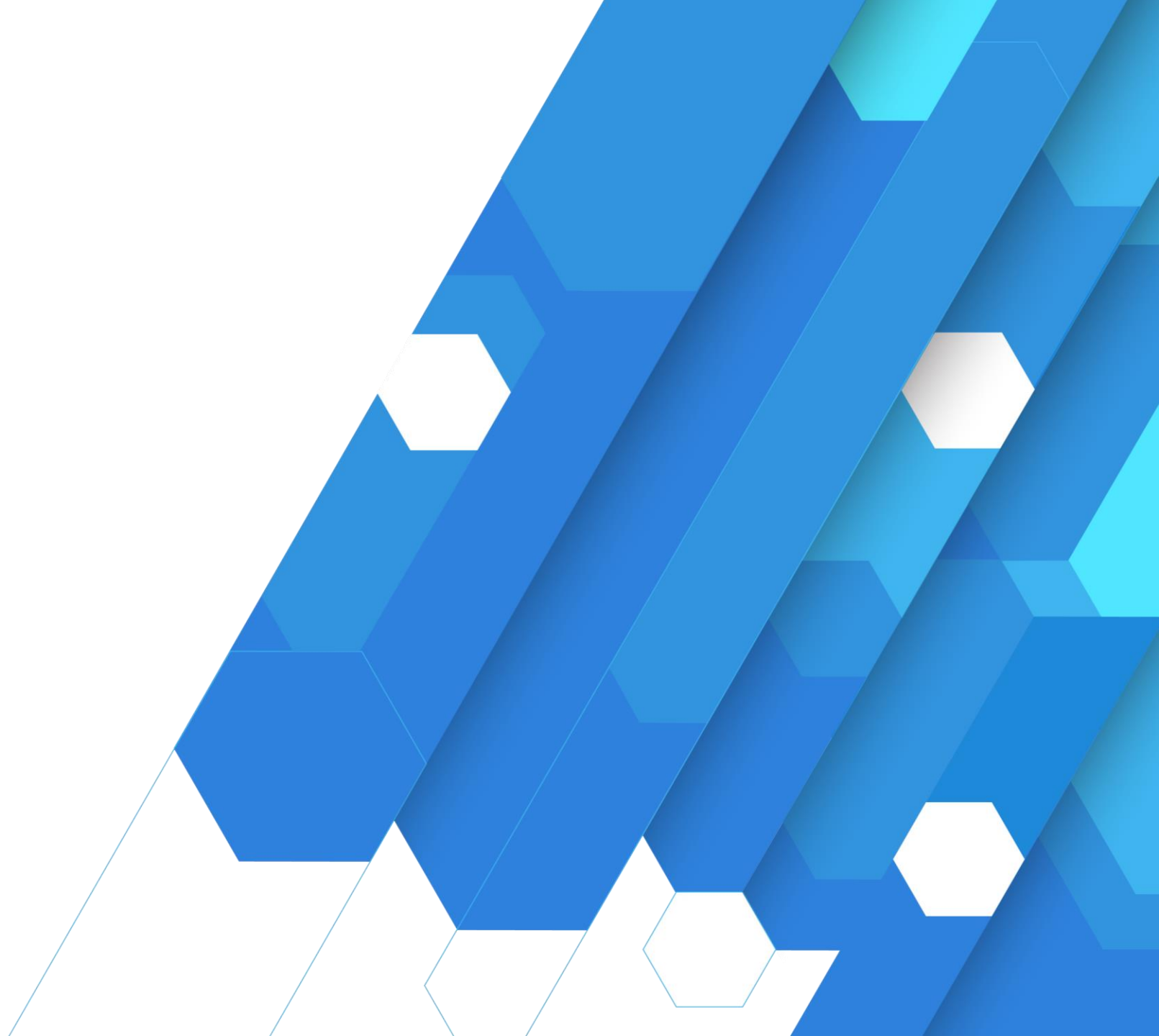
Train model

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.

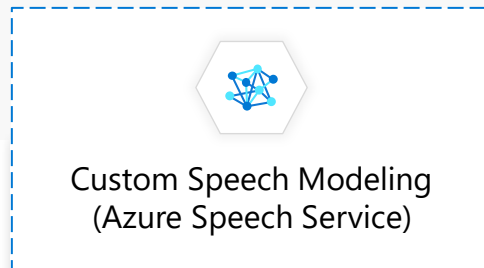
With your customer data and a prep session, create your proof of concept in 3-6 weeks.

Thank you



How to build your intelligent call center

Step 1: Customize Speech model for Business

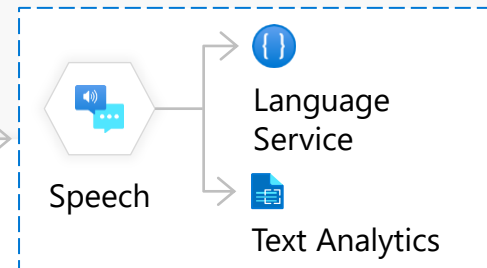


1. Create custom speech model
2. Use Azure Speech resource and "InsuranceLanguage-Data1.txt"

Outputs

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

Step 2: Real-time Call Intelligence

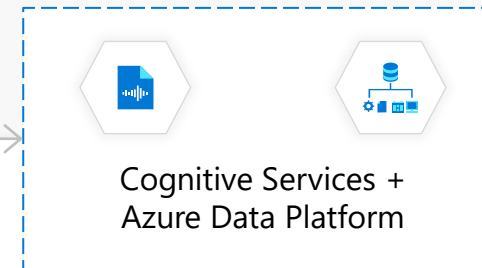


1. Configure Frontend & Backend NodeJS apps (GitHub)
2. Use Speech Key, Text Analytics Key & Custom Speech Endpoint ID
3. Run app locally simulating your business conversation and see the real-time AI output (Don't need to deploy it to Azure App Service.)

Outputs

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

Step 3: Call Batch Ingestion & Batch AI

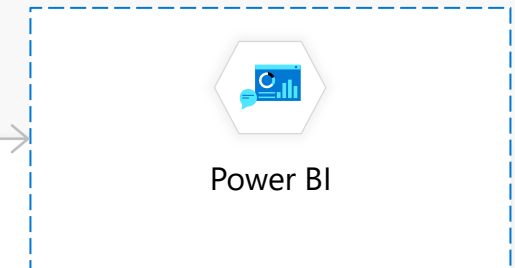


1. "Setup Instructions" & ARM template deployment is already done in Coach RG
2. Follow "Running Batch Analytics on Call Recordings" instructions (GitHub)
3. Upload WAV file to Storage Blob
4. Check results of batch analytics

Outputs

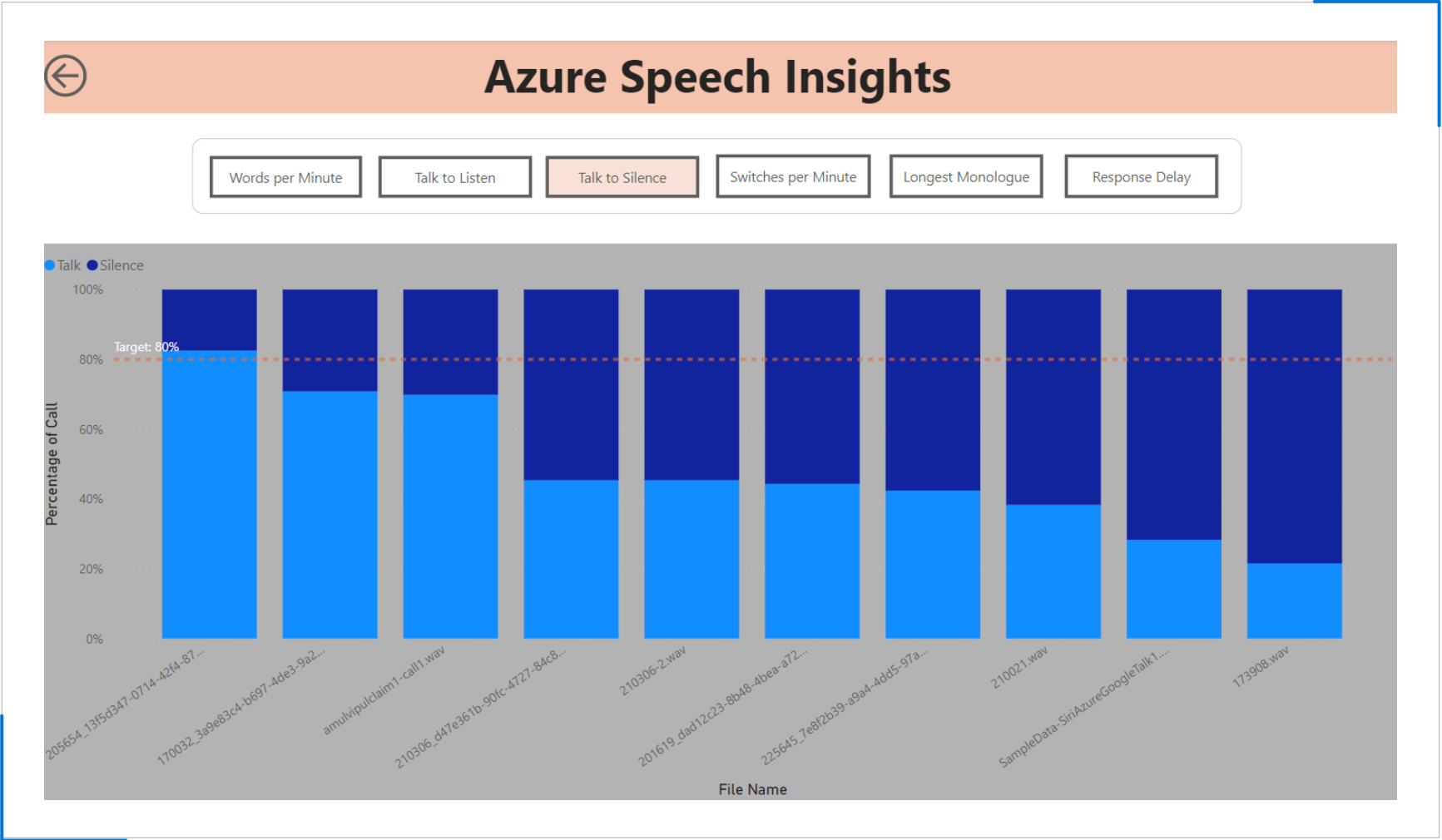
1. AI batch analytics output
2. Output stored in SQL DB & Storage Blob (JSON file)

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

