WEBINAR

Enhancing Customer Experience: AI/ML Analytics in Amazon Connect

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Agenda

- Customer segmentation
- Amazon Connect
- Overview and key objectives
- Demo – using generative AI to Improve CX
- Architecture deep dive
- Call to action

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Customer segmentation

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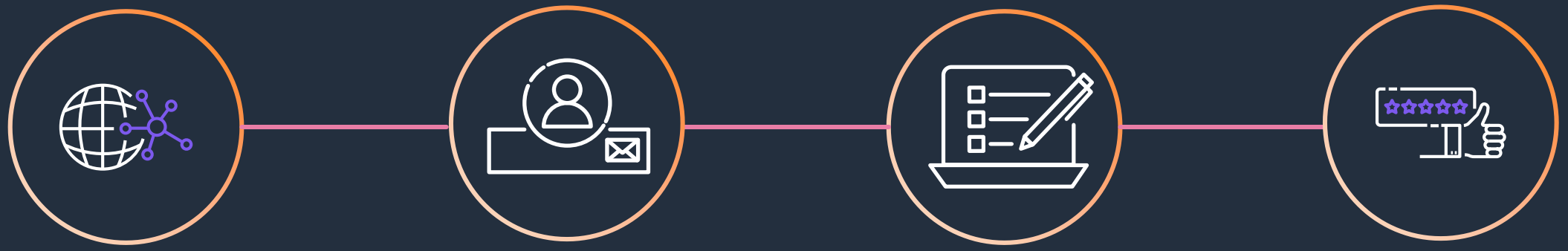
Customer segmentation…Why?

“We see our customers as invited guests to a party, and we are the hosts. It's our job every day to make every important aspect of the customer experience a little bit better.”
Jeff Bezos



Targeted marketing and messaging

Personalized experiences

Growth opportunities

Improved customer service

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Key considerations for customer segmentation success

Identify the right segmentation model

Select the appropriate criteria to segment customers for a tailored experience

Streamline customer data collection

Utilize customer data stored in various sources to fuel segmentation efforts

Leverage powerful AI/ML tools

Leverage AI/ML capabilities such as conversational analytics and text generation for high value use cases

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Amazon Connect

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Amazon Connect

ACCELERATE CX INNOVATION WITH AMAZON'S NATIVE CLOUD CONTACT CENTER

Deliver dynamic, personal, and automated customer experiences across all channels

Make real world impact with AI/ML at the heart of every interaction

Accelerate your innovation using simple, self-service UI

Drive continuous optimization with native analytics and insights

Pay only for what you use

Globally redundant telephony 30+ providers, 85+ inbound & 230+ outbound countries

350+ feature launches since 2017

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Amazon Connect

EASY-TO-USE CLOUD CONTACT CENTER

OMNICHANNEL CUSTOMER EXPERIENCE

Easily delight customers while saving them time and effort

AGENT EMPOWERMENT AND PRODUCTIVITY

Empower agents to deliver great customer experience

ANALYTICS, INSIGHTS AND OPTIMIZATION

Turn your data into action and continuously improve

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Easily delight customers while saving them time and effort

Omnichannel experiences

Personalized automation that delights

Proactive outbound engagement

OMNICHANNEL
CUSTOMER EXPERIENCE

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Empower agents to deliver great customer experiences

Flexibility for your workforce

Unified agent workspace

AI/ML-powered

AGENT EMPOWERMENT AND PRODUCTIVITY

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Turn your data into action and continuously improve

Real-time and historical analytics

Forecast, plan, and schedule your agents

ML-powered conversational analytics

Self-service configuration

ANALYTICS, INSIGHTS, AND OPTIMIZATION

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Overview and objectives

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Overview and objectives

AMAZON CONNECT AND GENERATIVE AI USE CASES

Amazon Connect

Amazon Bedrock

LLMs tuned for contact center use cases

Agent assistance

Personalization

Customer self-service

aws

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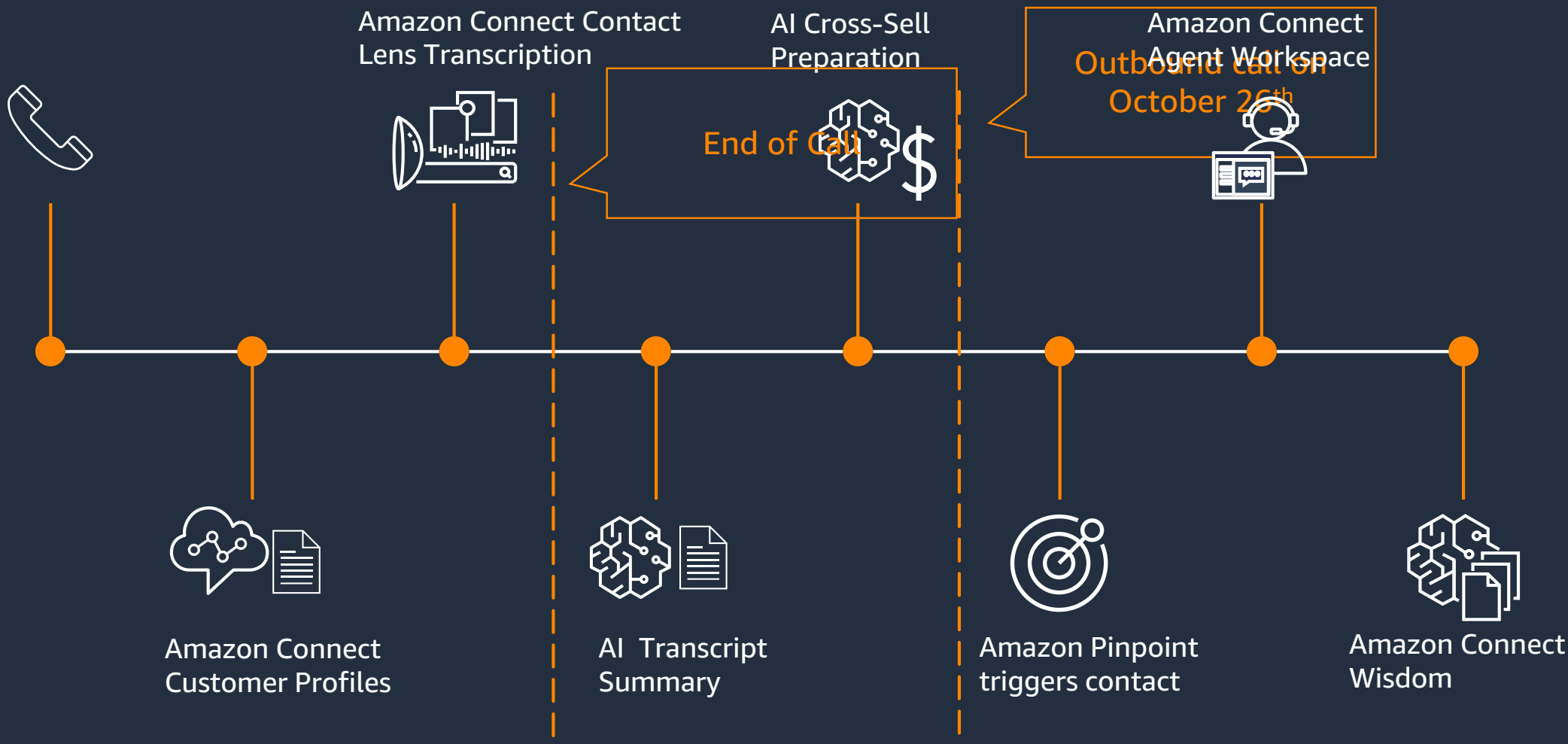
The Customer Journey of John Smith



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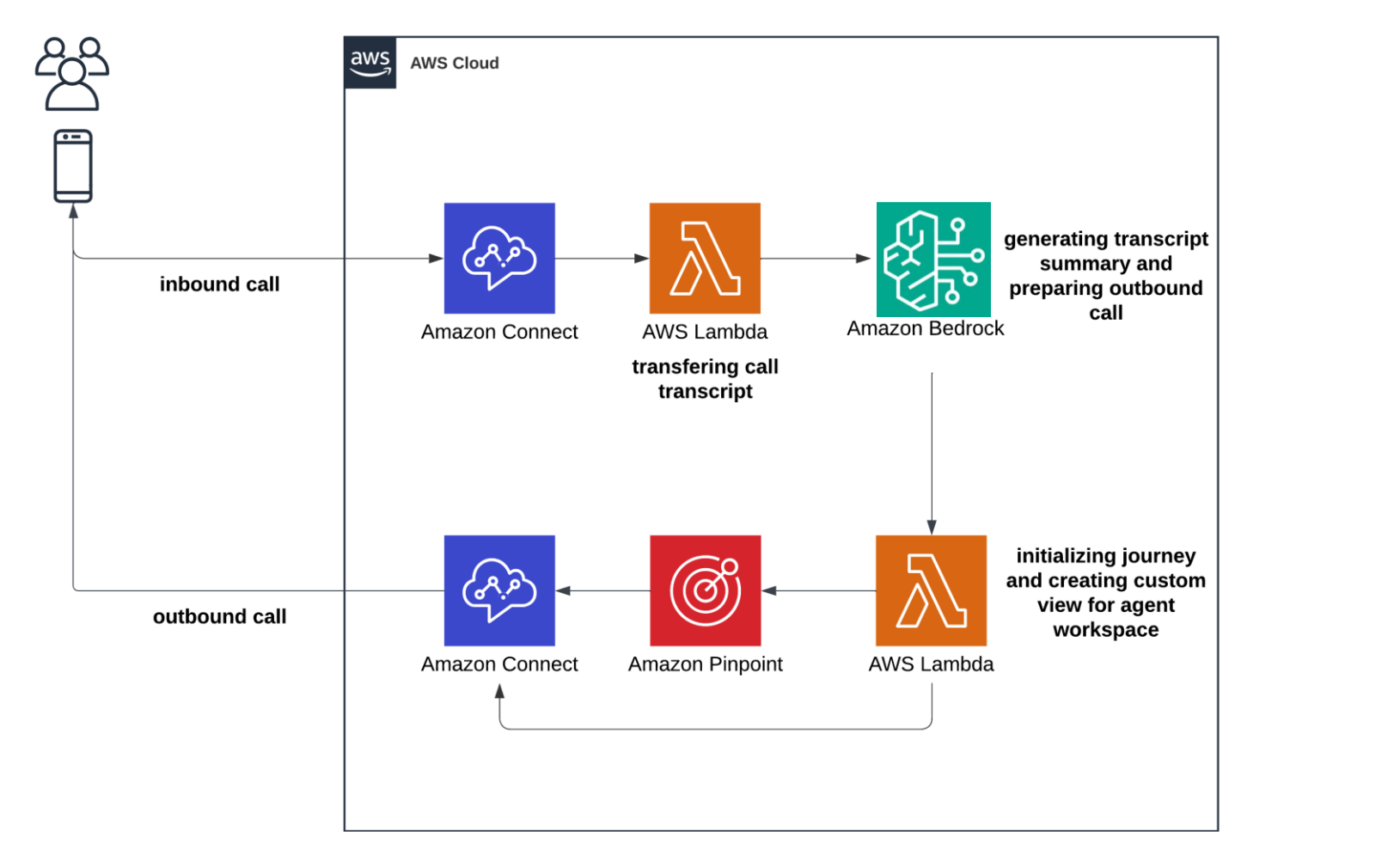
Architecture



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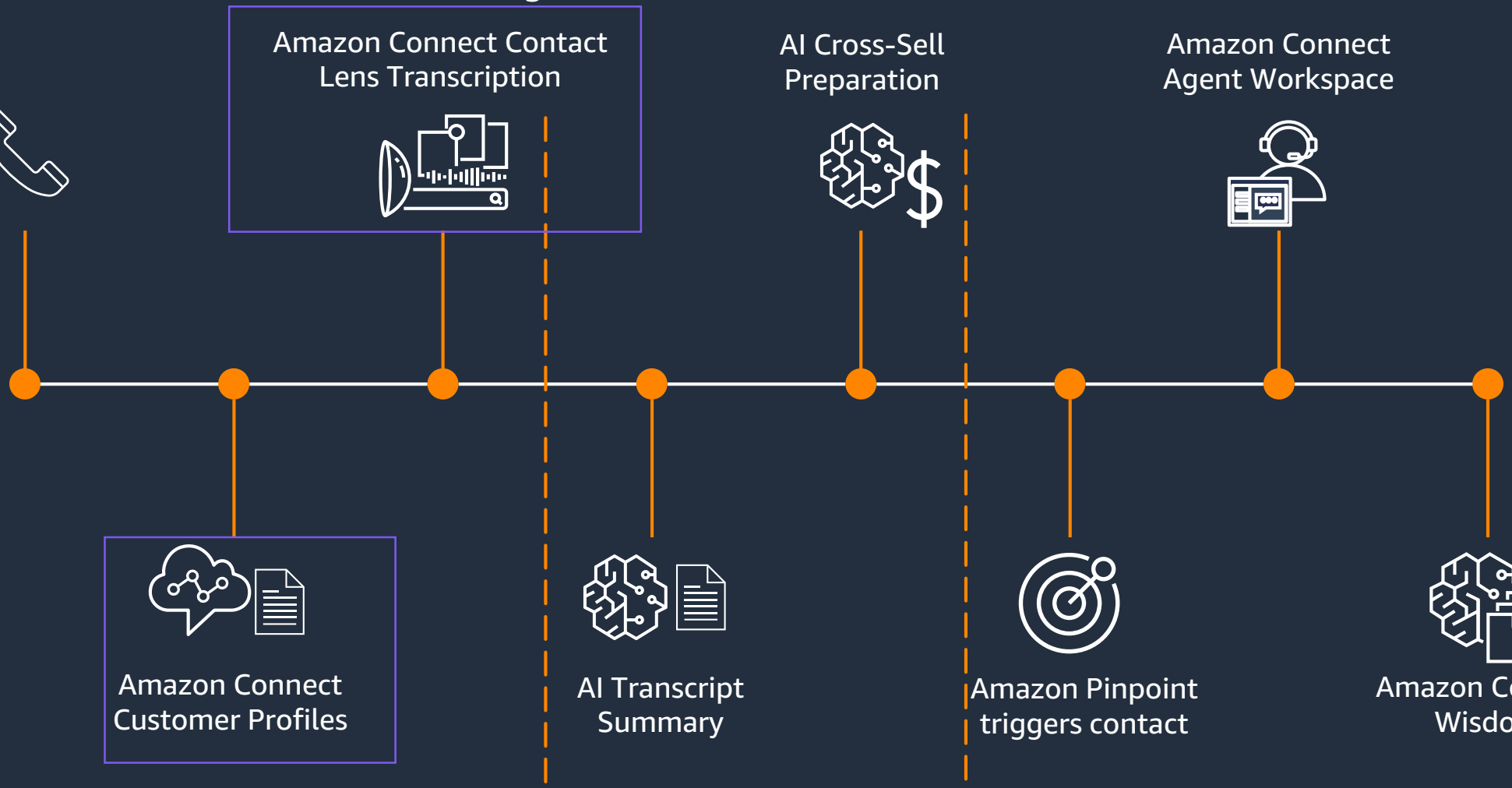
The Customer Journey of John Smith



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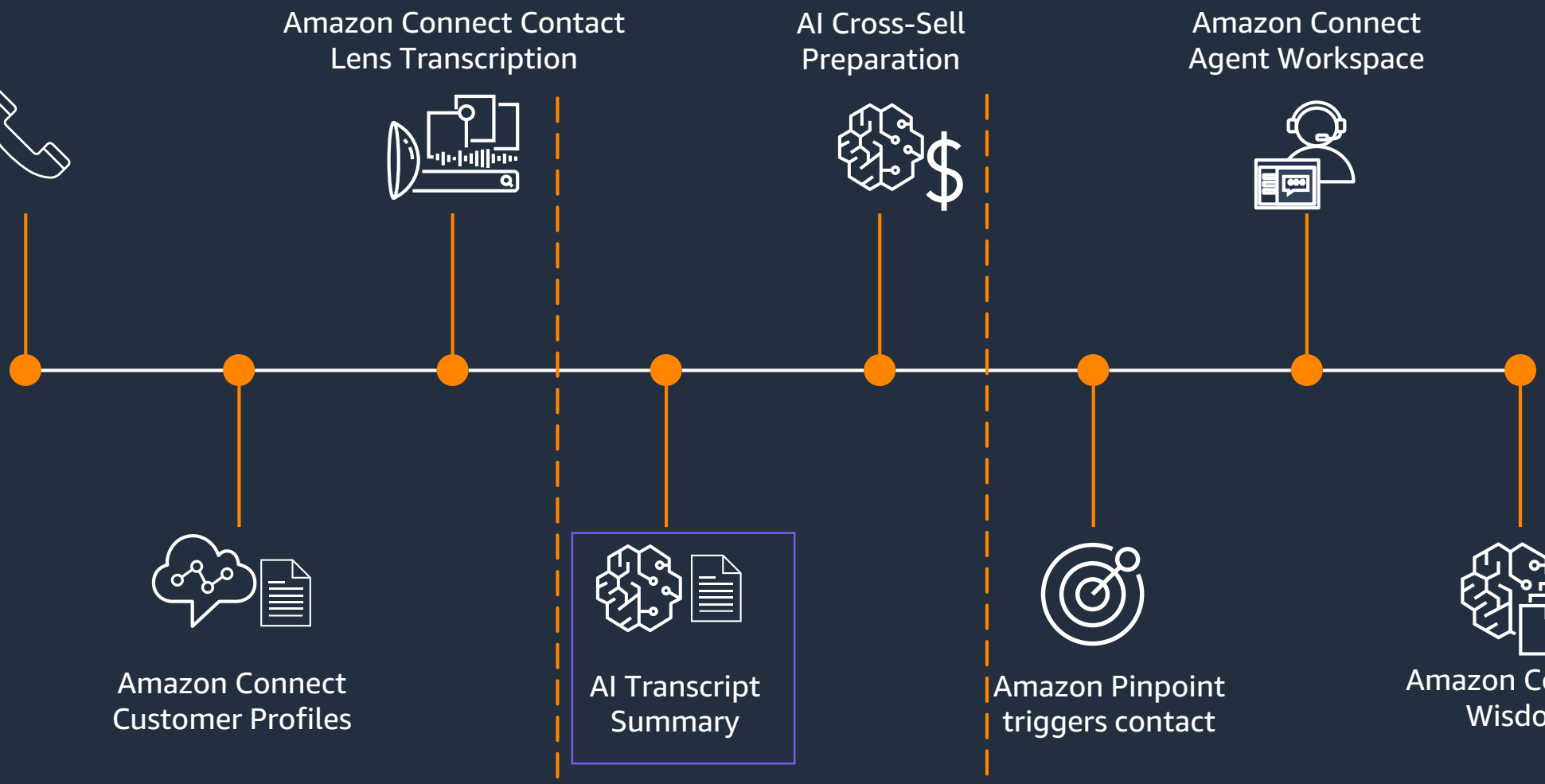
The Customer Journey of John Smith



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From speech to summary

Amazon Connect with Contact Lens

- Transcribe customer calls
- Analyze customer sentiment
- Redact sensitive data and more
- Post call or in real-time natively within Amazon Connect

Transfer transcript

- Transcripts are saved in Contact Trace Records
- Stored in S3

AI Summary

- Engineer a prompt
- Try different instructions to alter the output to your needs
- Load transcript
- Invoke model

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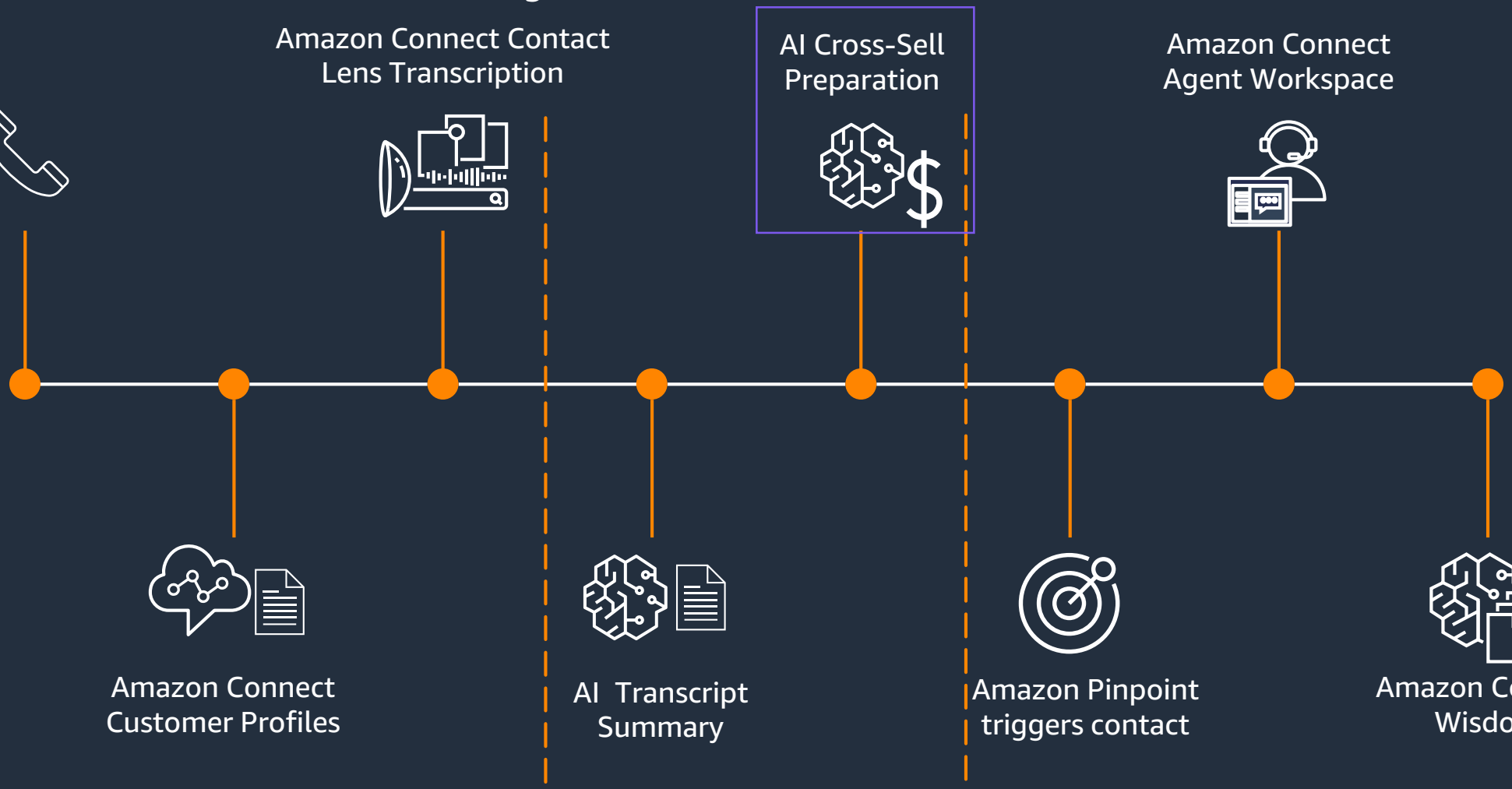
The Customer Journey of John Smith



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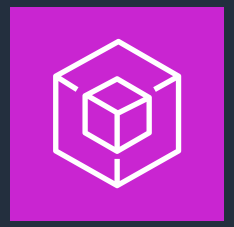
Amazon Bedrock – behind the rock

Summarize <text>



API/SDK

“Lorem Ipsum ….”

Prompt

InvokeModel

Amazon Bedrock invokes model

Summary

Temperature & Model Parameters

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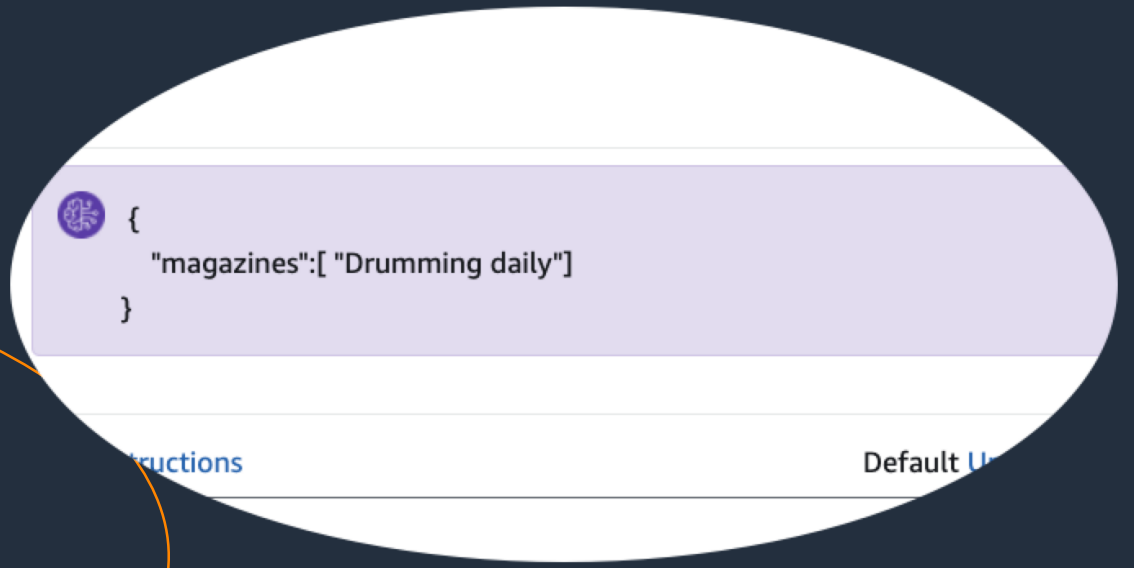
Cross-sell with prompt engineering

- Describe your potential offers
- Get the transcription

Prompt: In the <chat> section there is a chat transcript. Analyze the chat and write which product is for the customer.



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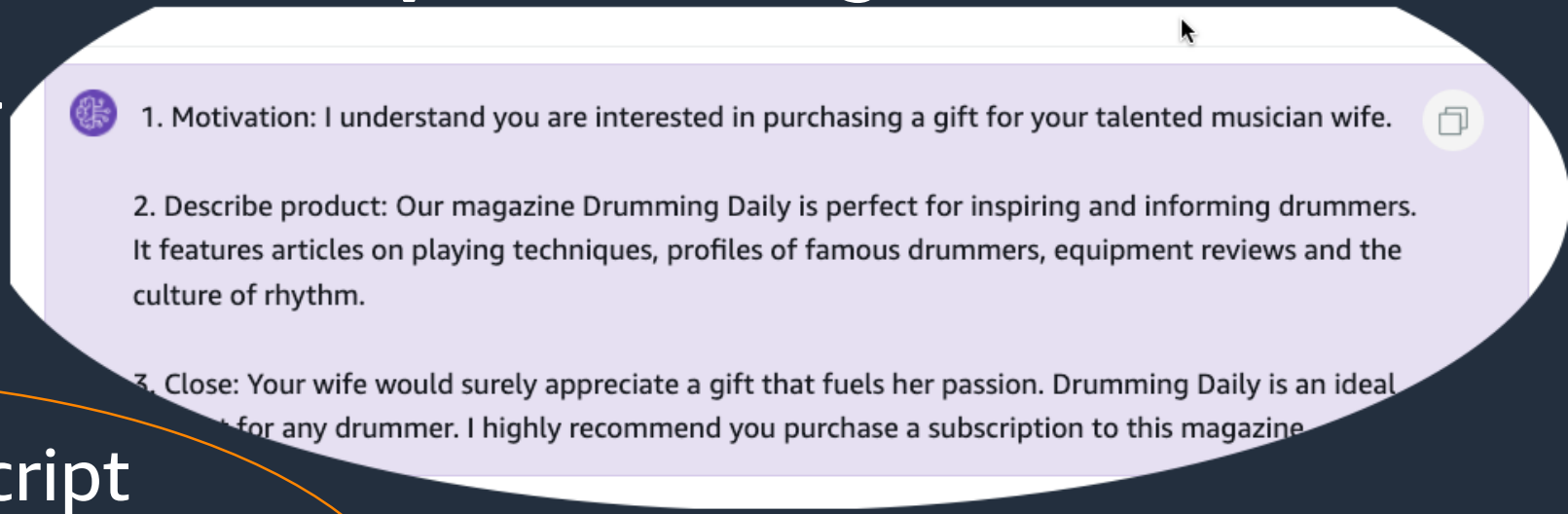
Generate an outbound call script for the agent

- Get the proposed offer
- Get the information about



Prompt: Make script from <offer> for customer <transcript>

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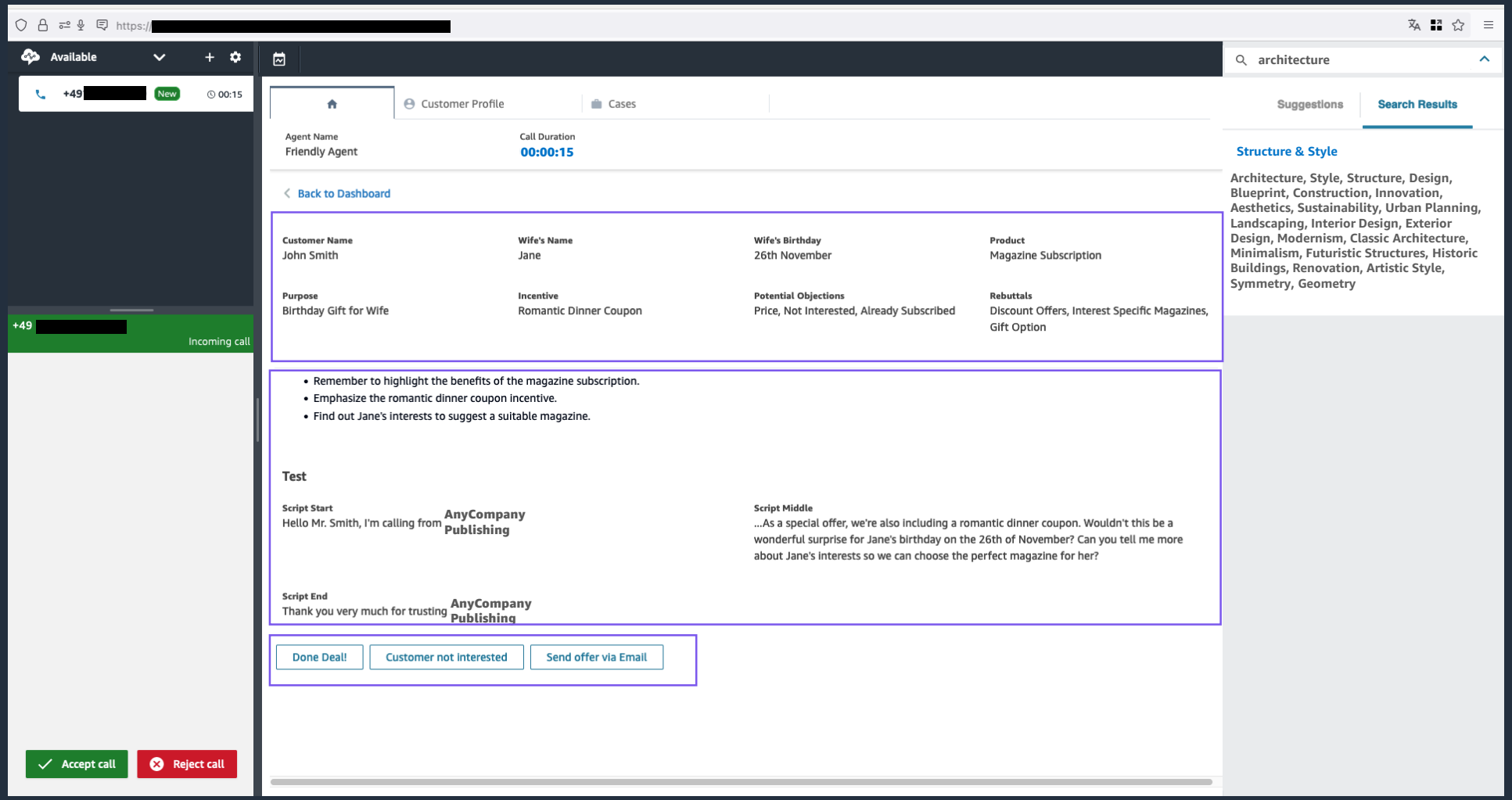
Call script provided by Amazon Bedrock in Agent Workspace



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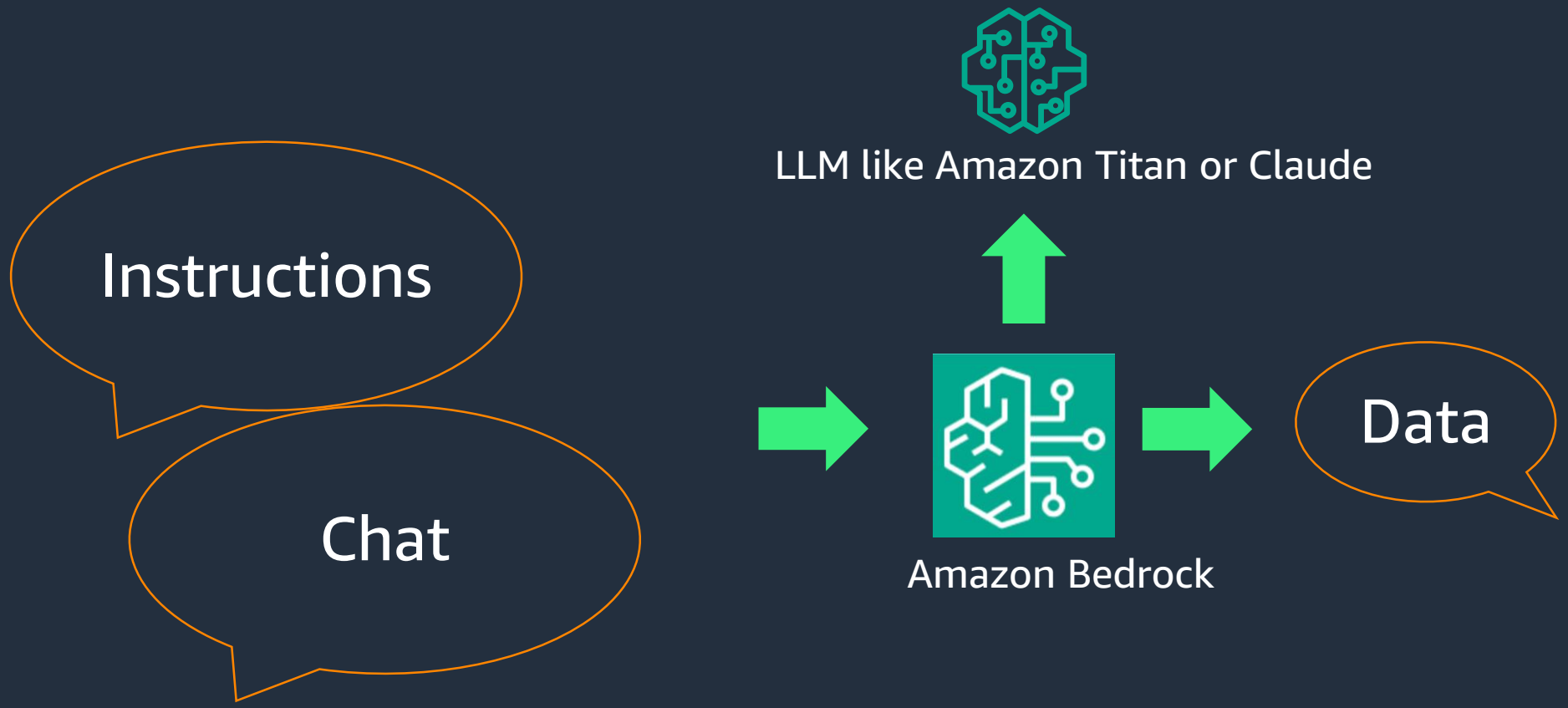
Amazon Bedrock



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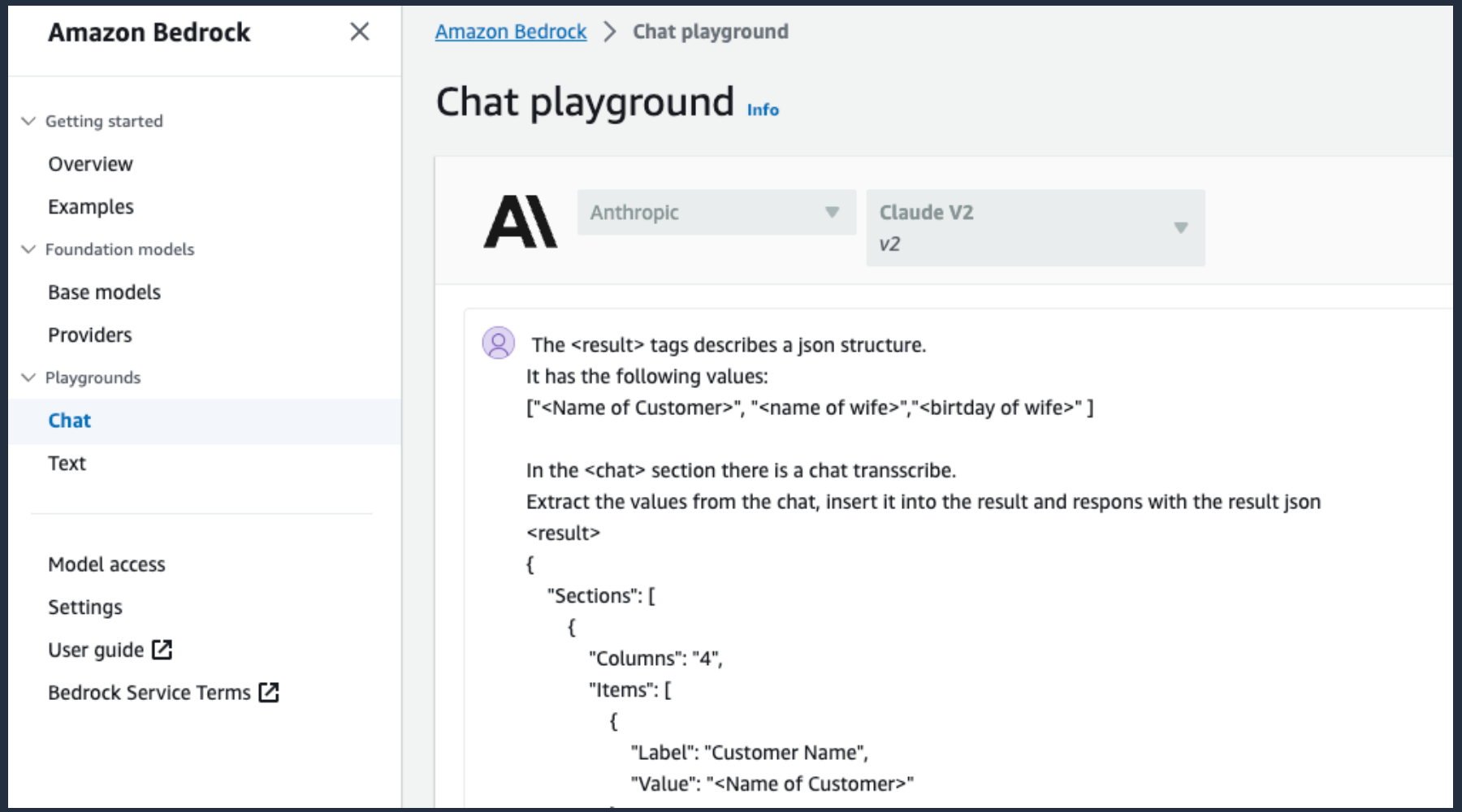
Extract data for call script from transcript



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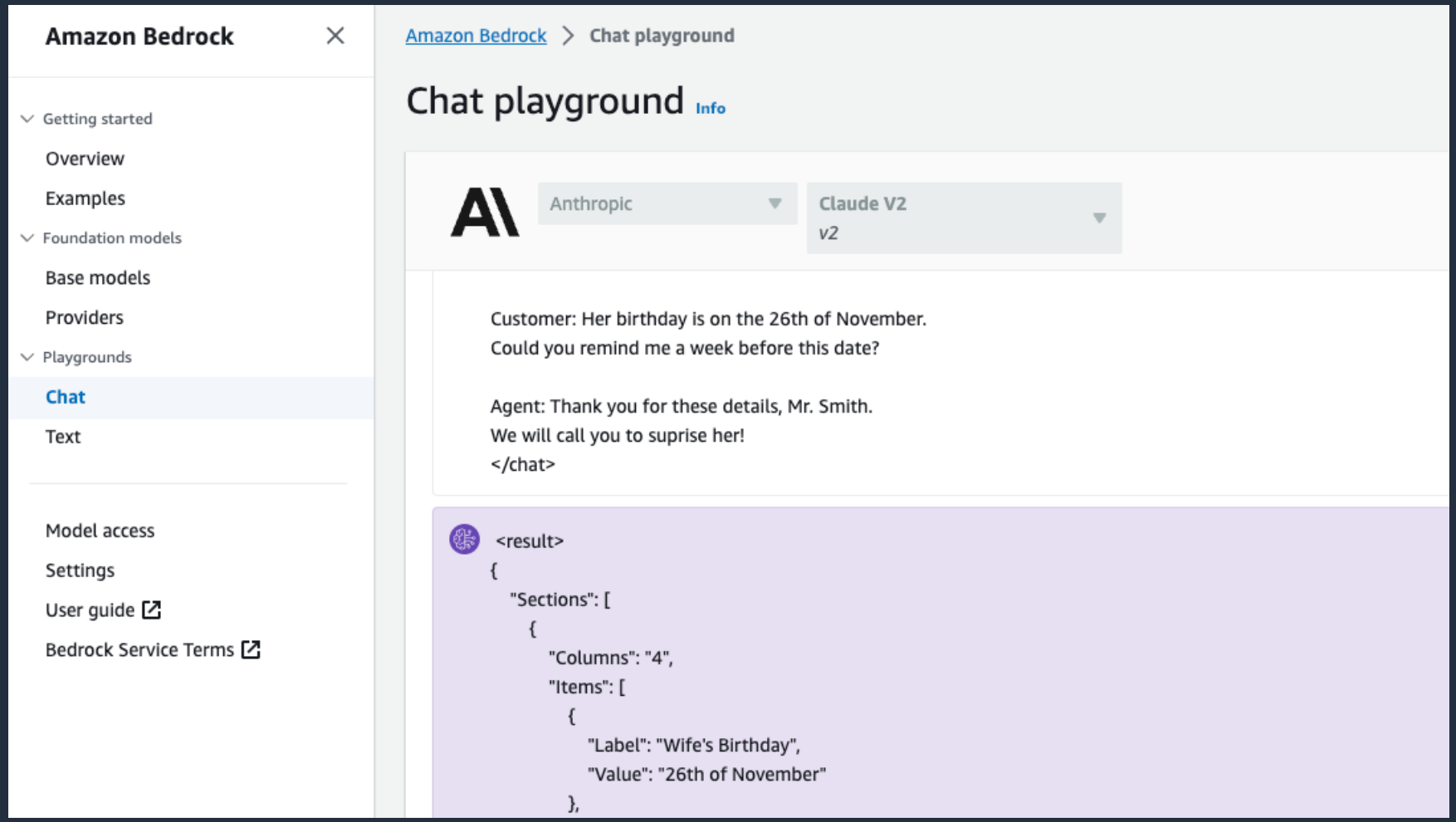
The LLM extracts the data



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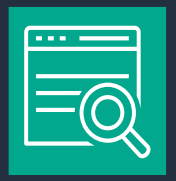
Advanced Bedrock Architectures

RAG – Augmented Retrieval

- Document search
- LLM summarize data

- Less hallucination
- Limit to defined scope



Amazon Kendra Index

Fine-Tuning

- Give additional examples
- Bedrock adds data to model

- Exact answers to specific questions

Amazon Bedrock/Sagemaker fine tuning

Embedding

- Modell encodes search data
- Model encodes query
- Vector database searches similarity

- Search meaning, not text

Amazon Aurora Postgres pgvector

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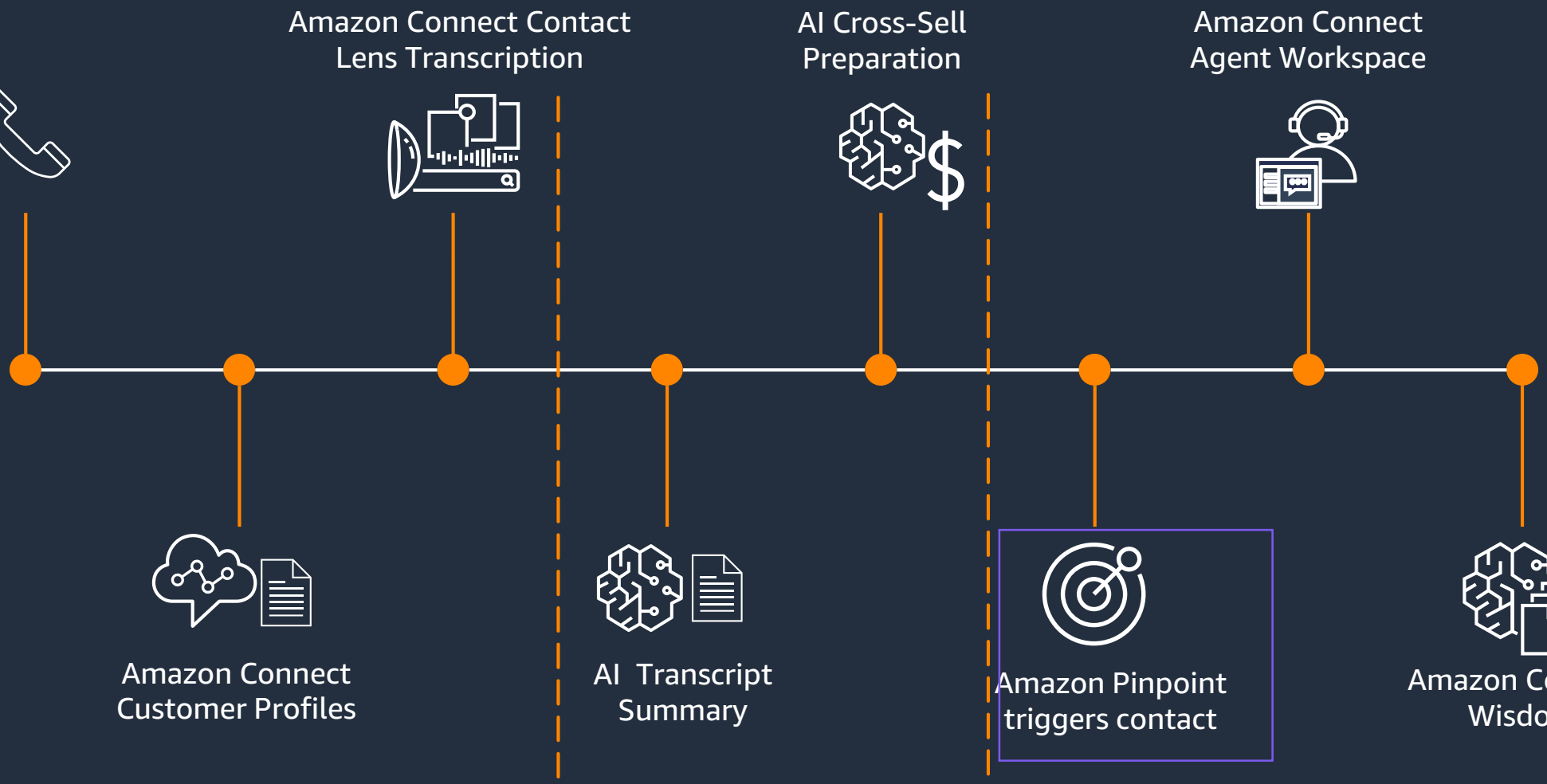
The Customer Journey of John Smith



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Amazon Pinpoint for Customer Engagement

What is Amazon Pinpoint

- Flexible, scalable marketing communications service
- Multiple channels: email, SMS, push notifications, voice, and custom channels
- Offers audience segmentation, message templates, and analytics

How does Pinpoint work?

1. Import customer data
2. Create audience segments
3. Develop messaging campaigns
4. Schedule and send messages
5. Analyze customer engagement and campaign performance

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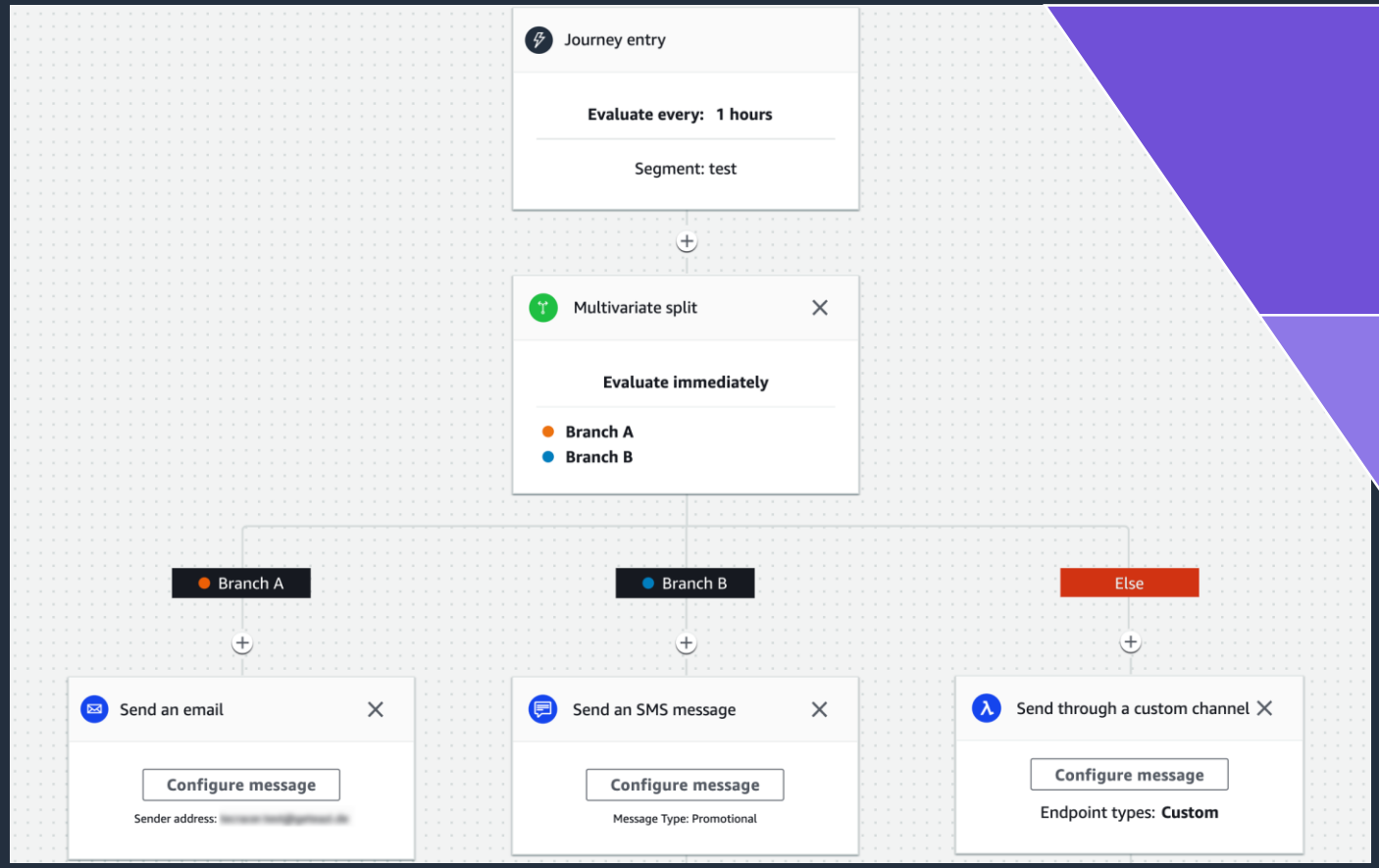
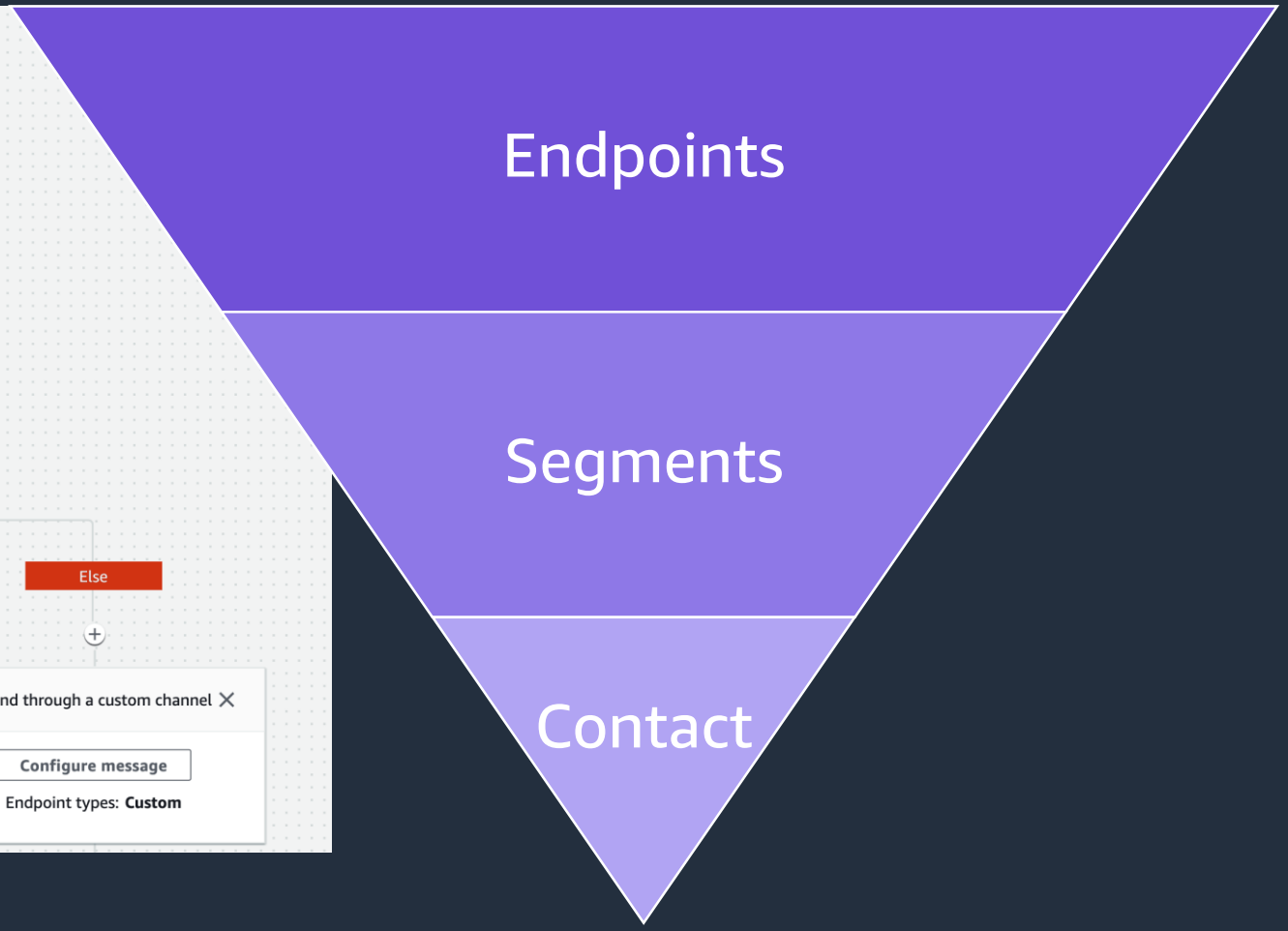
Customer Journey in Pinpoint





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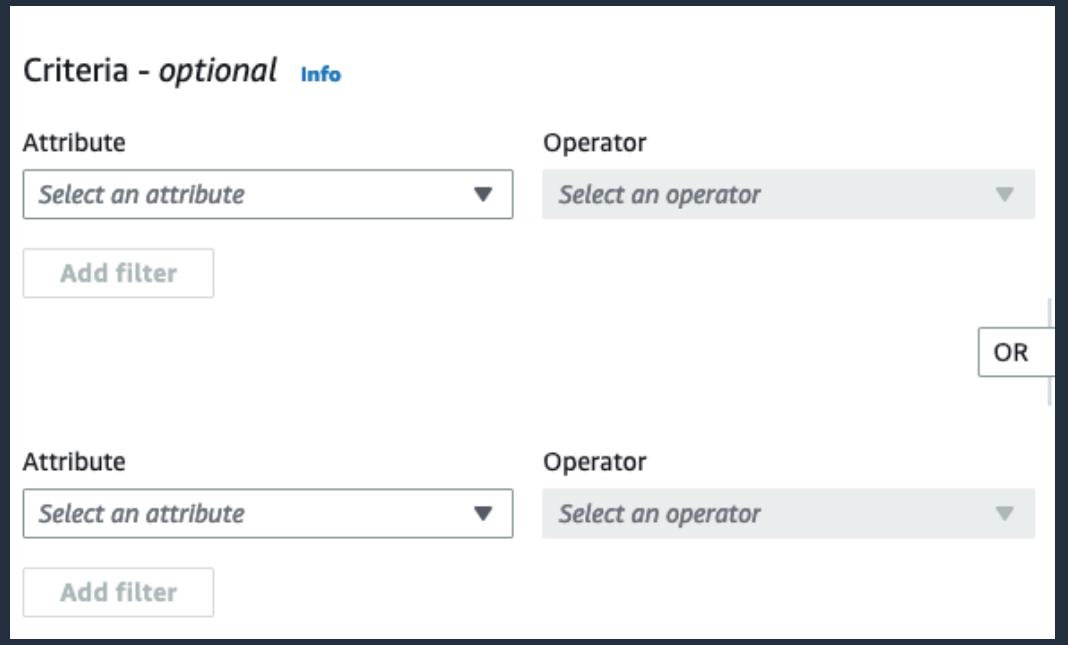
Pinpoint endpoint & Segmentation

```
json
{
    "Address": "+1234567890",
    "ChannelType": "VOICE",
    "Attributes": {
        "FamilyMembers": [
            {
                "Name": "John",
                "Birthday": "1973-04-29"
            },
            {
                "Name": "Jane",
                "Birthday": "1972-10-26"
            },
            {
                "Name": "Tom",
                "Birthday": “2004-05-12"
            }
        ]
    }
}
```



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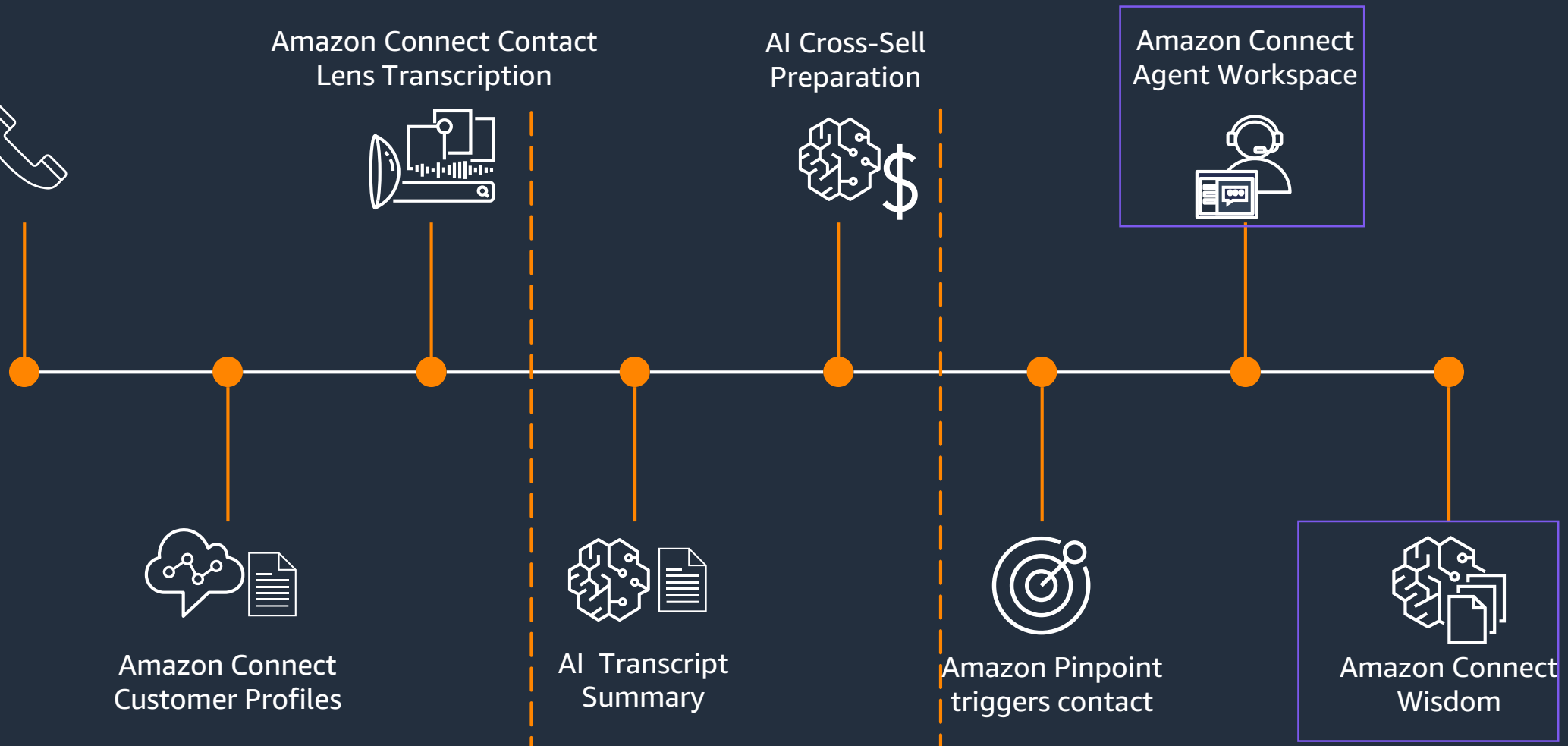

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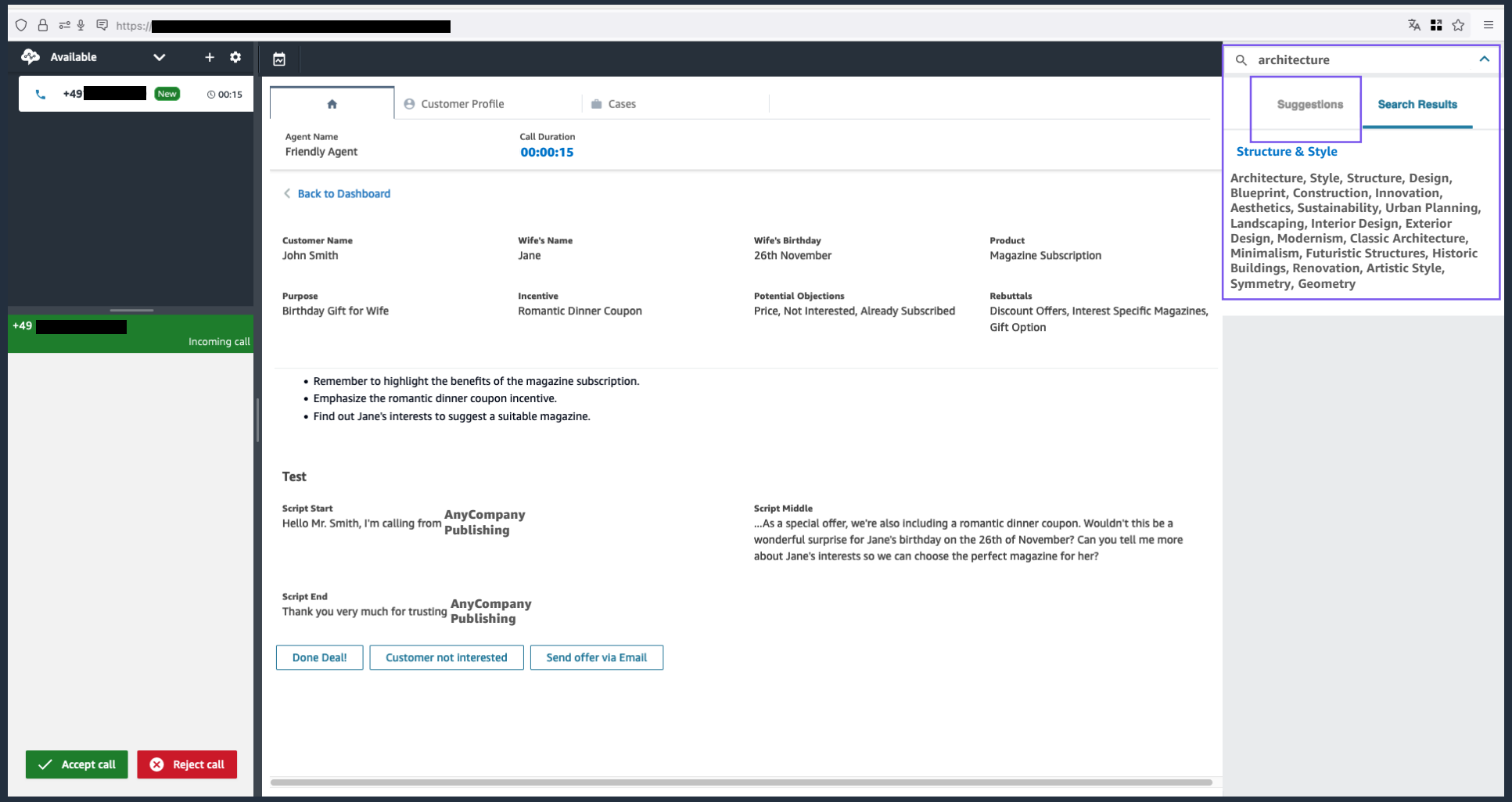
Amazon Connect Wisdom to find the right magazine



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Summary

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Summary

- Overview – what we reviewed:
  - Customer segmentation in the context of CX
  - Amazon Connect data and generative AI
  - Demo of the improved agent and customer experience
- Benefits:
  - Increased customer engagement
  - Enhanced agent performance
  - Insights into upsell/cross-sell opportunities

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Call to action

GET STARTED

Amazon Connect
Administration Guide

Amazon Bedrock
User Guide

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Thank you!

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