Seamless Customer Service with Amazon Connect and Alexa, using AI / ML

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Key Takeaways

- What is Amazon Connect.
- What are AI/ML services on AWS.
- How to utilise these services with Amazon Connect.
- How to integrate Amazon Neptune for data driven decisions on Amazon Connect.

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Amazon Connect

Simple to use, omnichannel cloud contact center

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Amazon Customer Service supports. . .

Amazon strives to be earth's most customer centric company

Millions
of customers

Dozens
of languages

32
countries

Over 70,000 Customer Service Associates

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So we built it

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Amazon Connect

Easy to use, omnichannel cloud-based contact center service that scales to support businesses of any size

The fastest path to customer service innovation

Skills-based contact routing

Voice & chat recording

Real-time and historical analytics

High-quality voice capability

Service Architecture:
Multi-Tenant across multiple availability zones connected through low latency links

Telephony Architecture:
Host toll-free and direct dial numbers (DID) on our managed network of carriers

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Demo I

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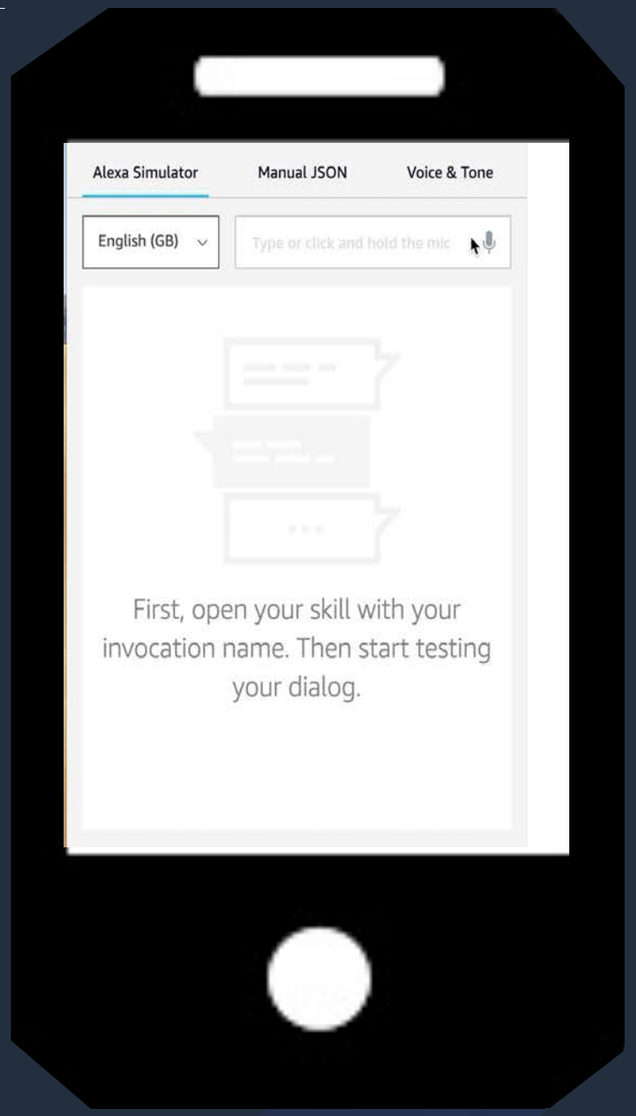

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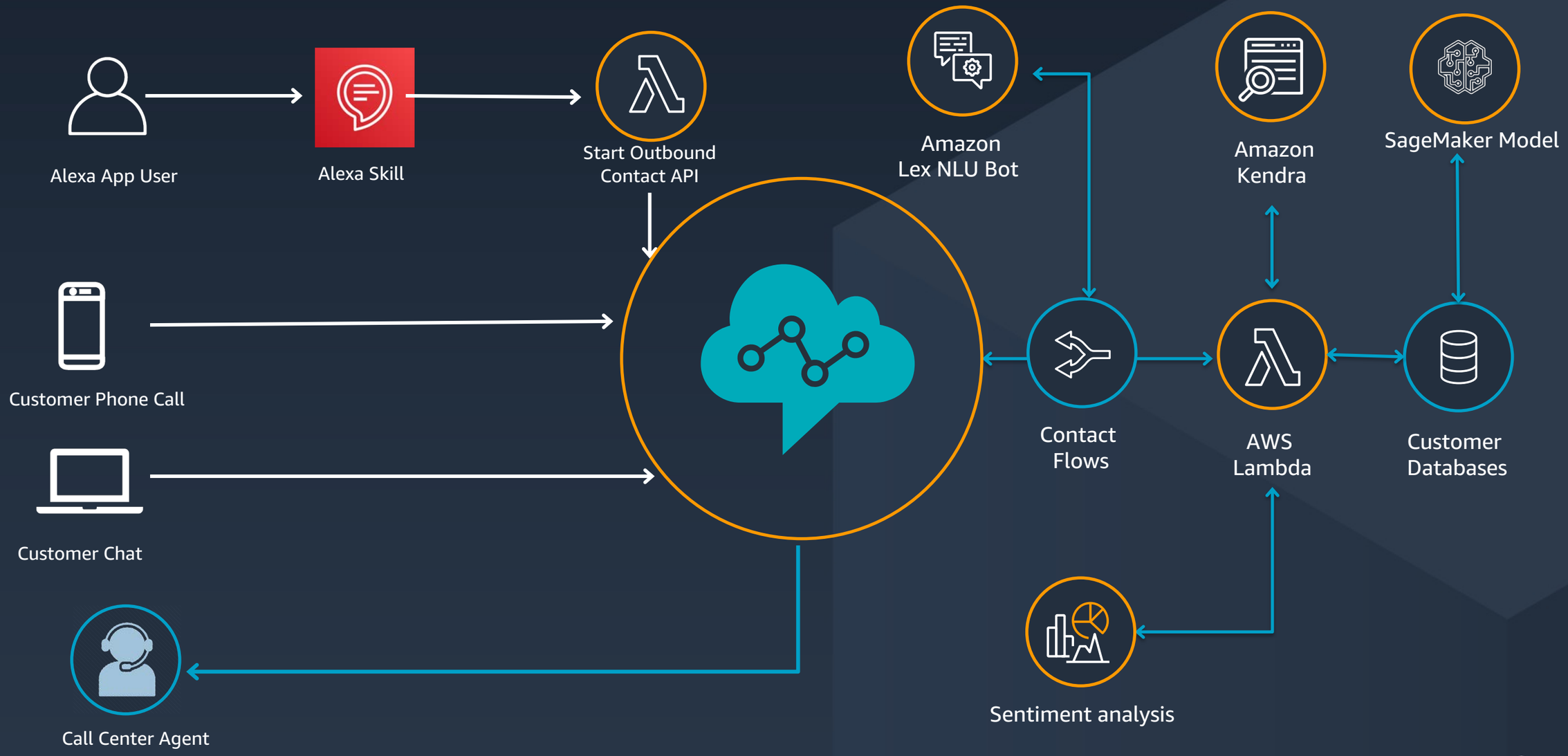
Demo I Architecture



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Business Drivers

Knowledge of New Customer

Interactive IVR

1. Dynamic Prompting and Natural Language Understanding
2. Ability to capture, store, and process information in real time
3. Dynamic Routing Capabilities

Knowledge of Existing Customer Base

Gain insights about our customers in order to create unique and correlative personas

1. Customer Satisfaction/ Churn
2. Customer Purchases
3. Customer Size (Purchasing Power/ Needs)

Knowledge of Individual Sales Agent

Dynamic and data driven personas for each sales associate

1. Sales Revenue Attainment
2. CSAT Scores/ Sentiment
3. Product Area Expertise

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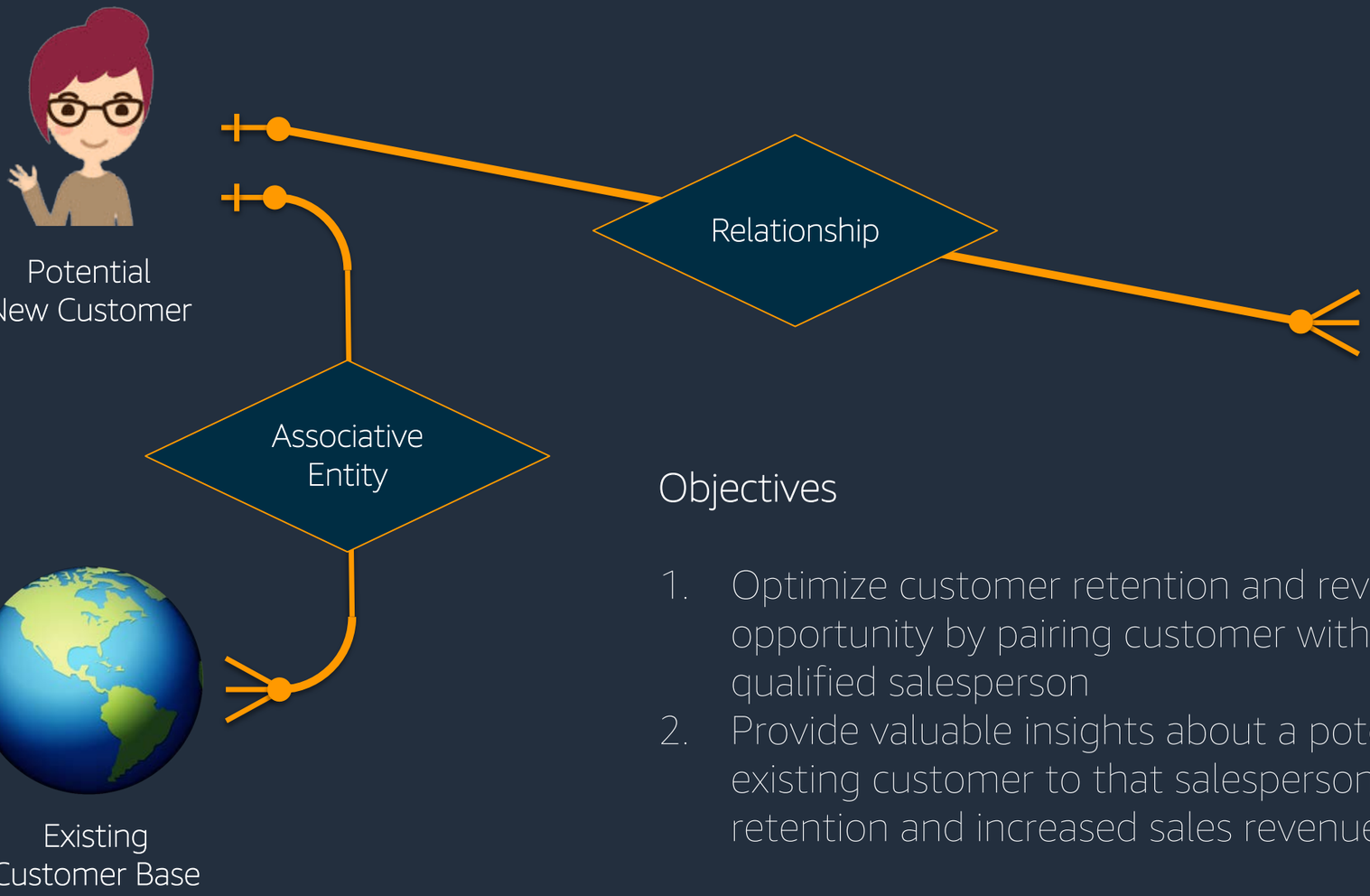
Visualization of Demo



Sales Team

Objectives

1. Optimize customer retention and revenue opportunity by pairing customer with best qualified salesperson
2. Provide valuable insights about a potential new or existing customer to that salesperson for retention and increased sales revenue opportunity

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Demo II

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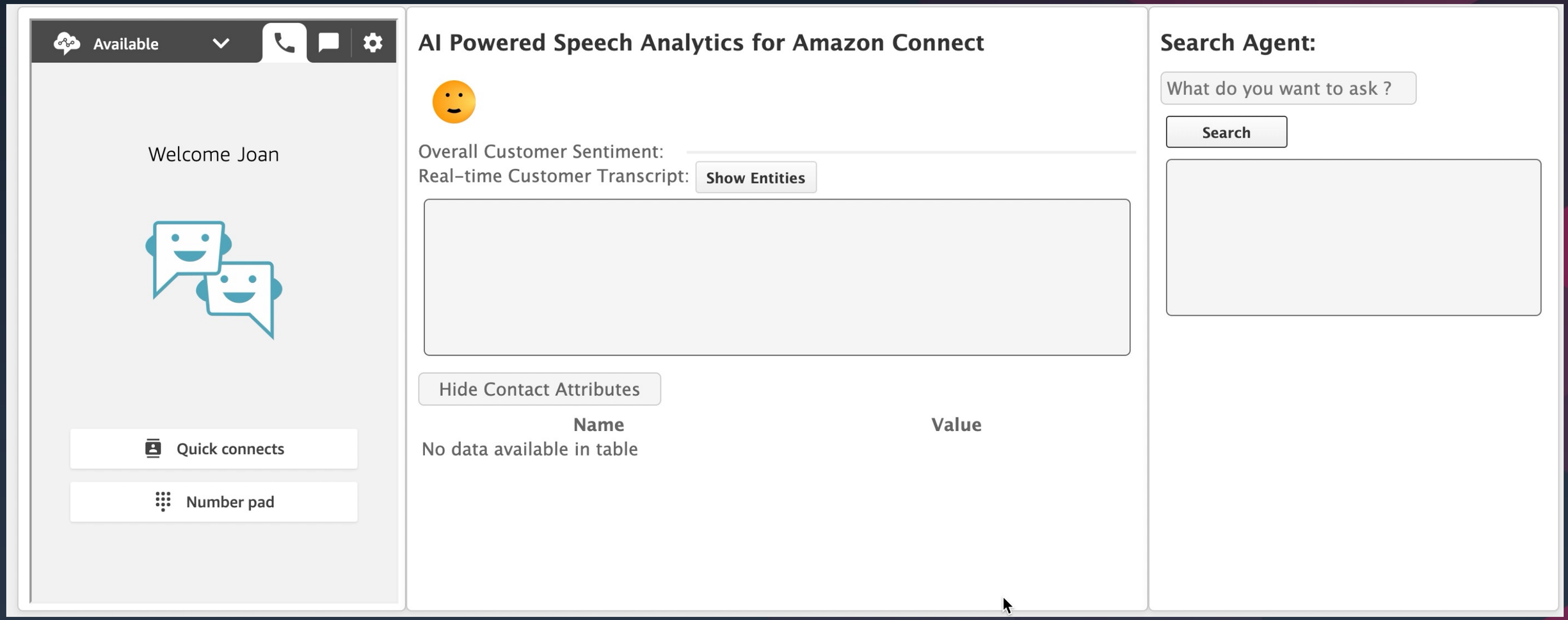
Optimized Sales Demo



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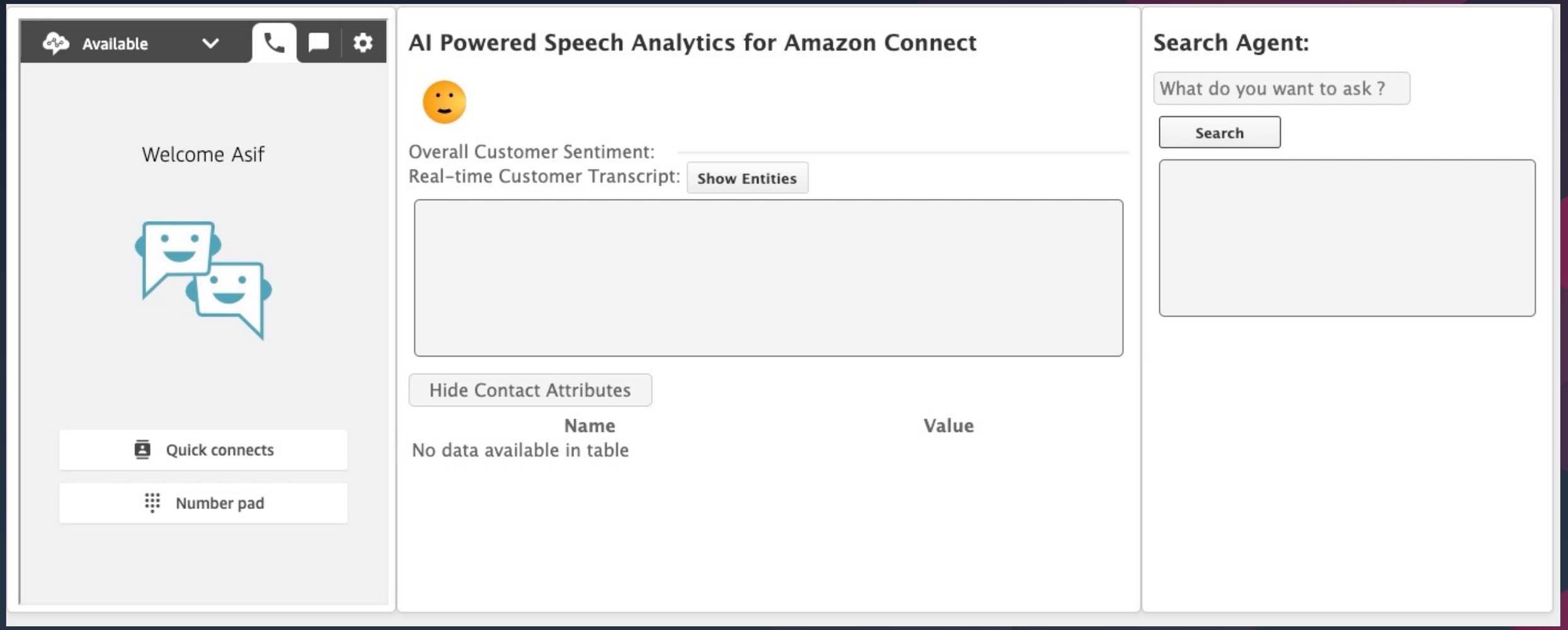
Optimized Customer Retention Demo



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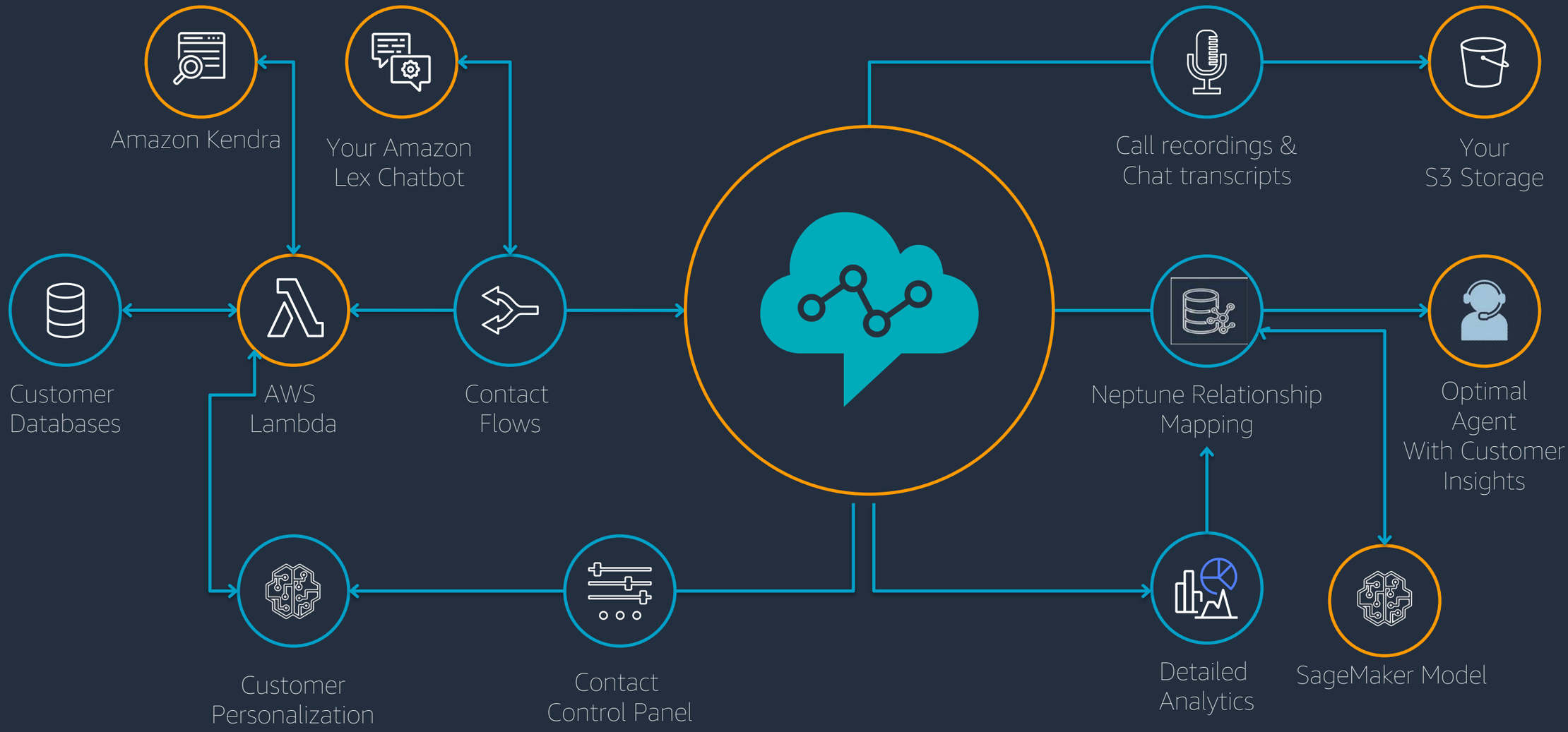
Demo Architecture



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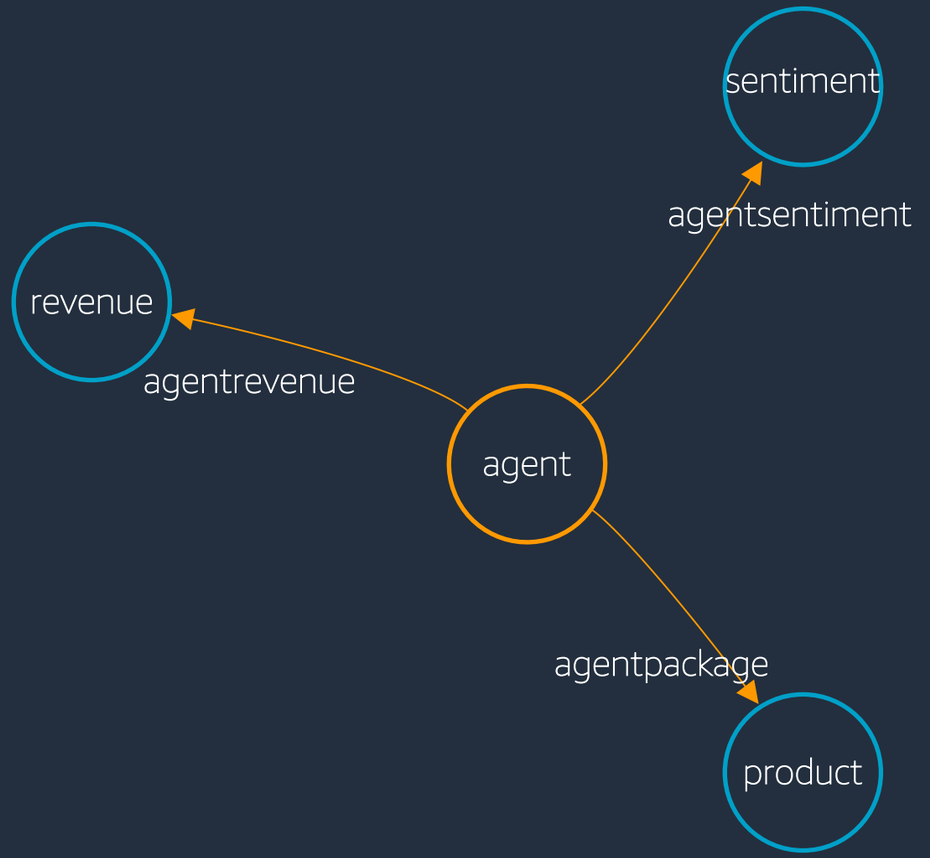
Relationship Mapping



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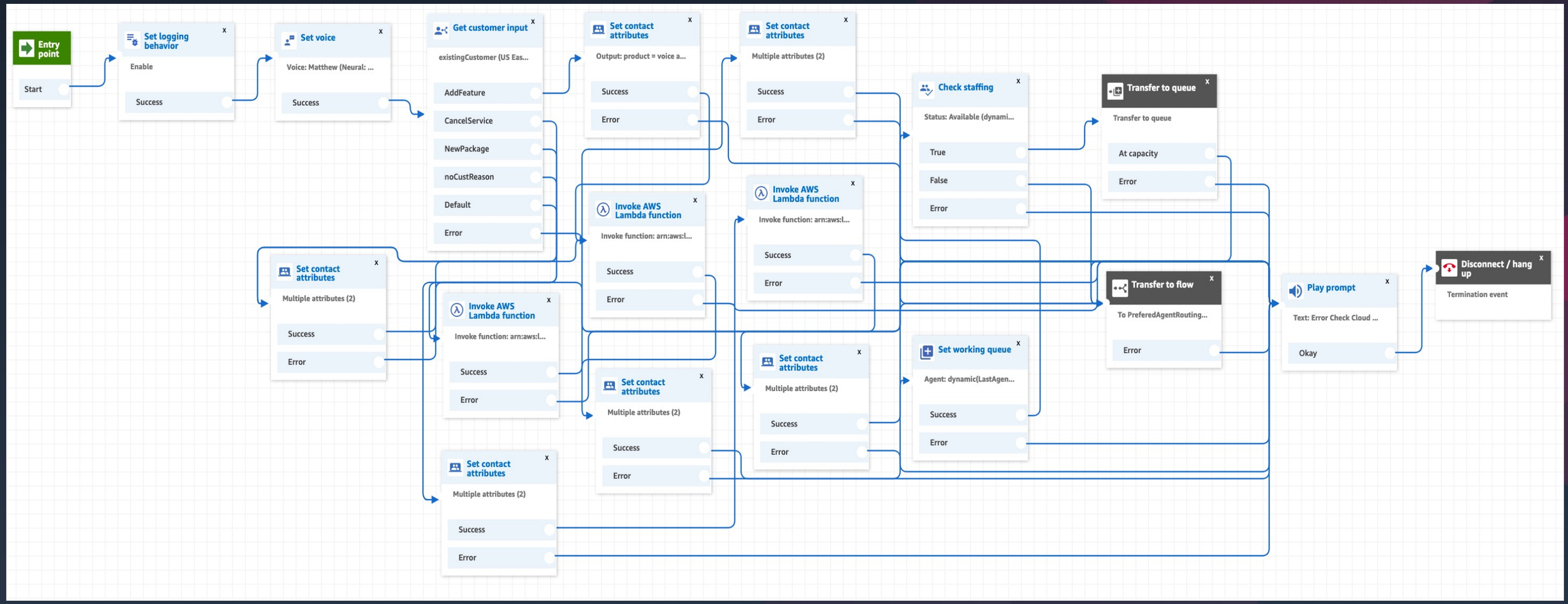
Contact Flow Graphical User Interface



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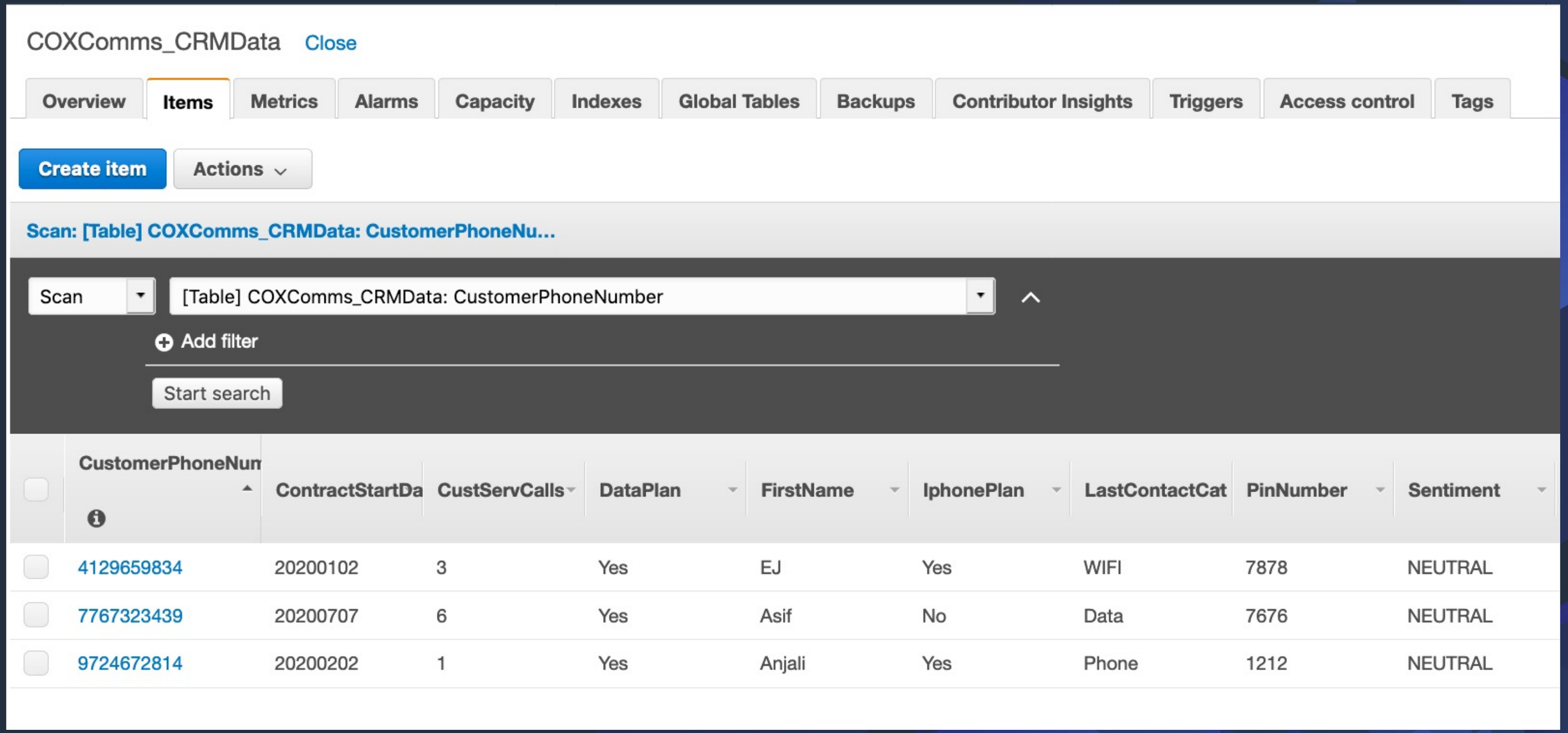
Customer Data Table



CustomerPhoneNum	ContractStartDa	CustServCalls	DataPlan	FirstName	IphonePlan	LastContactCat	PinNumber	Sentiment
4129659834	20200102	3	Yes	EJ	Yes	WIFI	7878	NEUTRAL
7767323439	20200707	6	Yes	Asif	No	Data	7676	NEUTRAL
9724672814	20200202	1	Yes	Anjali	Yes	Phone	1212	NEUTRAL

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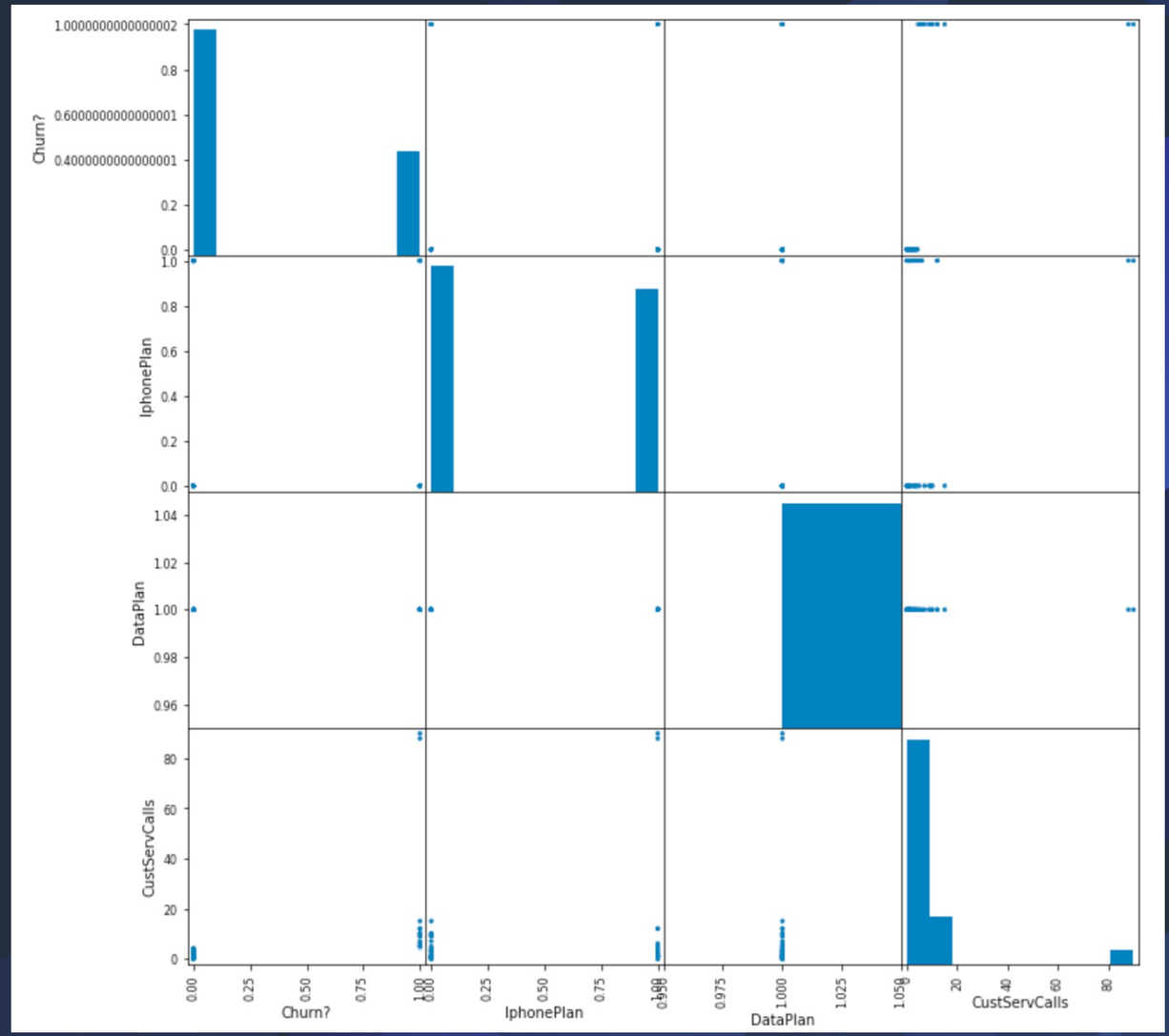
Machine Learning = Experience Evolution

	Churn?	IphonePlan	DataPlan	CustServCalls
0	0	1	1	2
1	0	0	1	1
2	0	1	1	0
3	0	1	1	3
4	0	0	1	4
...	...	...	...	...
204	0	1	1	2
205	0	0	1	3
206	0	1	1	4
207	1	1	1	6
208	1	0	1	9



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Thank you!

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