



How to integrate AI into your **contact center** **strategy**

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Introduction

Stories about artificial intelligence (AI) have overtaken the news, think pieces, water cooler chats, virtual meetings, and our collective minds. The truth of the matter is that in most industries, implementing AI into strategies is table stakes. Do it or fall behind.

Contact centers especially can benefit from implementing AI into their strategies. AI can open doors for contact centers to collect data in real-time and deliver a more fully personalized experience for customers.

Beyond that, AI can power contact center solutions to mindfully decide which fields to expose to virtual agents and live agents. That way, they don't get overwhelmed by unnecessary information while providing personalized experiences for customers.

In this ebook, we'll follow along a customer journey to see how AI can power contact centers to accomplish the following:



Create golden customer profiles



Collect, perceive, and activate data in real-time



Blend in-store and online customer experiences

Let's get started.



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1. Defining contact center AI

AI can mean so many different things for so many different industries, it can be challenging to understand how exactly it pertains to each business. So let's first take a step back and break down the basics when it comes to AI and how companies can take advantage of it with Twilio.

What is Twilio's CustomerAI technology?

CustomerAI is an open and extensible technology layer that differentiates how AI impacts your business's customer engagement. But what does that mean when it comes to contact centers?

Basically, it means integrating AI tools into your contact center to collect and apply **first-party customer data** in real-time to create a golden customer profile. This profile continues to update and enhance with every interaction that each customer has with your brand.



"Twilio's CustomerAI technology couples the power of large language models (LLMs) with real-time customer data flowing through Twilio's Customer Engagement Platform, helping companies better understand and unlock the potential of their customers while providing deeper value using predictive artificial intelligence (AI) capabilities."

Jeff Lawson

Digital Greatness Built With CustomerAI





This golden profile powers AI bots to deliver highly customized interactions, such as knowing most likely why the customer is reaching out to your business. It can also provide generative AI—a subfield of AI focusing on creating new content based on existing data—to agents, so they have all of the information needed to customize and personalize each engagement a customer has with your brand.

But what does all of that mean? Even the terminology can feel like learning an entirely new language. So here is a quick breakdown of some contact center AI terms we'll use throughout this ebook:

- **Artificial Intelligence:** AI is the broad concept of machines performing tasks that typically require human intelligence, such as problem-solving, perception, or reasoning.
- **Customer Data Platform (CDP):** Software that combines data from all product and service touchpoints to create a single centralized customer database. Businesses can then segment that database to create more personalized customer experiences.
- **Language Models (LMs):** Types of AI models that can understand and generate human language. Trained on vast amounts of text data, LMs learn the statistical structure of human language to understand it.
- **Large Language Models (LLMs):** Sophisticated, expansive versions of LMs trained on a considerable volume of text data. These offer a more nuanced understanding and generation of human language.
- **Conversational Artificial Intelligence:** A branch of AI that uses machine learning and natural language processing (NLP) to interact with humans. Its primary purposes are to address problems and influence customer interactions.
- **Generative Artificial Intelligence:** A subfield of AI focusing on creating new content, including images, music, voice, or text. It learns from existing data and tries to generate similar content.
- **Predictive Artificial Intelligence:** A subfield of AI that takes historical data and existing information available to it to forecast a specific outcome.
- **Machine Learning:** A subset of AI, is the practice of using algorithms to parse data, learn from it, and make predictions or decisions without explicitly programming a machine to perform the task.

For a more in-depth AI glossary, check out our [Complete Generative AI Glossary for Businesses](#).

Now that we've covered the basics, there's one more piece to the puzzle we need to cover: quality real-time data.

2. AI and real-time engagement data

AI is only as effective as the data that is running its machine learning. In other words, you need quality data if you want to create a personalized AI experience for customers. But **only 48% of organizations are capturing data that drives context-based customer engagements**, according to the **NTT 2021 Global Customer Experience Benchmarking Report**.

Here's the thing—to effectively serve customers, you must first understand them.

But the degree of understanding that contact centers have historically equipped their agents with has been mostly captured by static CRM records with generic fields such as phone number and email address. That's no longer enough if you want to differentiate your business from its competition.



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What if you expanded your customer knowledge with data points such as recent purchases, key interests, pain points, or even a customer's propensity to make a purchase? This comes down to two types of data points:



Inferred traits:

Data that can be collected from conversations agents (or anyone at the business) has with a customer. For example, that could be your dietary preferences or restrictions for the food service on an airline.



Predictive traits:

Data that is based on a customer's previous activity with a business. An example of this would be information about a customer's propensity to buy a pair of running shoes based on their browsing history on your website.

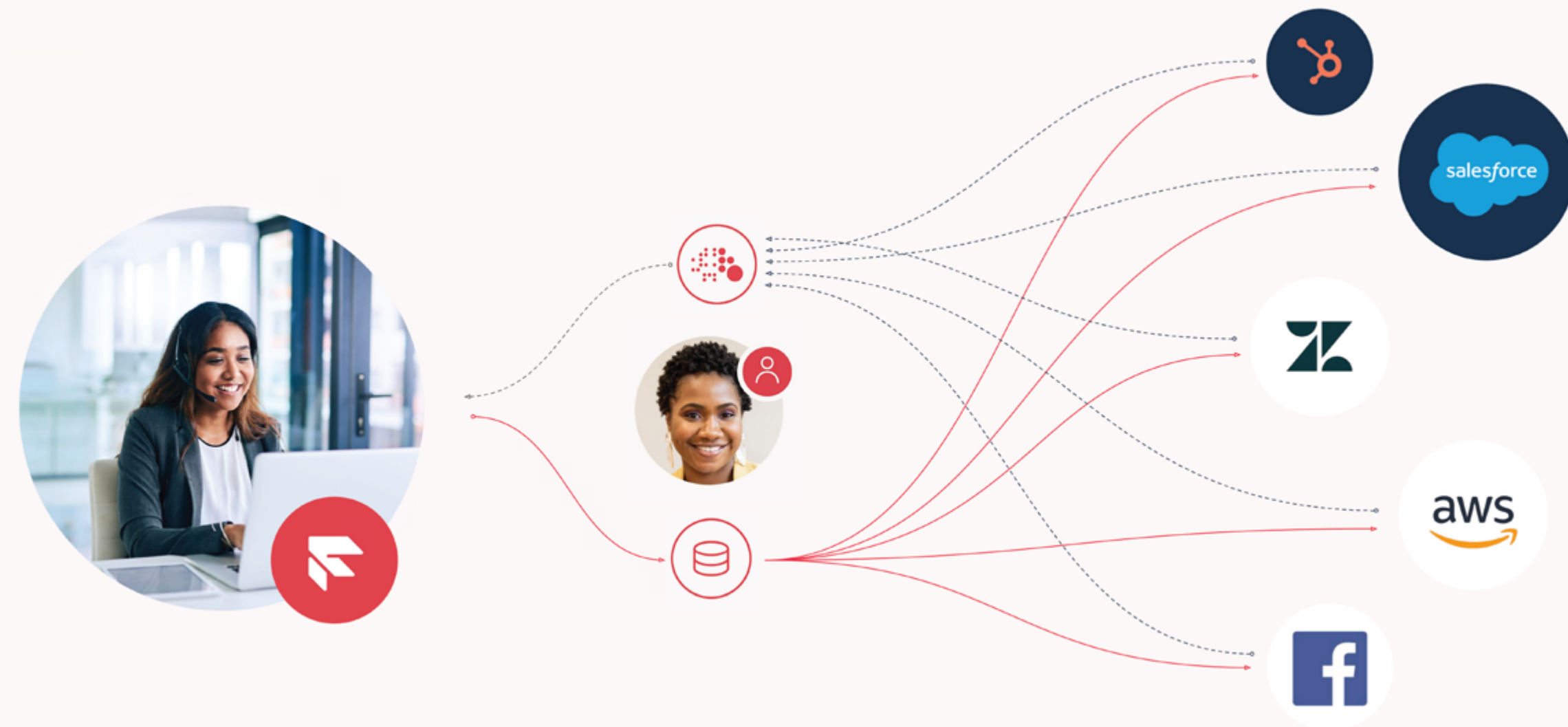
Both kinds of data points are essential to differentiate your business and deliver the level of hyper personalization that consumers now expect. But how can an agent access these data points in real-time to enhance customer engagement?

How to manage real-time data

Even if businesses have access to these data points, too often they live in a variety of enterprise applications. This presents challenges for agents, who are trying to access this data across a variety of tools and tabs instead of focusing on the customer engagement.

To put it bluntly: This is a data management issue.

Personalized experiences are a data management challenge





To offer the personalization customers expect, businesses need to be able to go beyond collecting data. Their customer experience solution must mindfully decide which data fields to expose to virtual agents and live agents so they don't get overwhelmed by unnecessary information.

Your business's customer experience solution should automate discovery of relevant information. Then, it should provide teams with the necessary inferred and predictive traits to truly understand the customer.

The goal should be a golden profile—a single, unified customer profile that follows a customer across every interaction they have with a business.

Twilio's solution to this is Flex Unify.

Flex Unify, **announced at SIGNAL**, is exactly like it sounds, a unifier for a variety of backend enterprise systems to build a customer profile that is updated in real-time. This data management solution leverages real-time data, then generates predictive and inferred traits such as churn risk and lifetime value. This, in turn, influences routing strategies and cross-sell or upsell guidance to agents while they're engaging with customers.

To fully understand how all of these data points and AI come together, let's walk through a customer journey with Uma, an existing customer of fictional electronics retailer Positronics.

3. Implementing AI throughout your customer's journey

In this scenario, our fictional customer Uma Drew is packing up for her much anticipated trip to Japan when disaster strikes: Her tablet has stopped working.

Now, this is a long trip to Japan. She had every intention of spending this long flight to catch up on the latest season of her favorite show. And she needs to get to the airport, now.

So, now what?

Our customer heroine decides to pack everything up and purchase a new tablet at the Positronics store she knows is at the airport. To ensure she will be able to do this, she messages the customer sales team.

Before Uma starts her journey toward Japan, she has launched herself into a customer journey with Positronics. Here's how data management and AI enables the store to navigate her toward not only her original tablet purchase, but also upsell her on headphones.







Creating a golden customer profile

We left Uma reaching out to the customer sales team via messaging. Ping! A virtual agent responds conversationally, powered by CustomerAI.

As stated above, Uma is an existing Positronics customer. She has frequented not only the stores, but also its website. As a result, Positronics, powered by Flex Unify, already has a golden customer profile for Uma, built from unified data from multiple backend systems.

Data provided by the golden customer profile

-  **Flex Unify gives employees all relevant customer data in a single UI**
-  **Flex Unify offers customers the personalization they expect**

PURCHASE HISTORY

Lumina L60X Pro
4K Ultra HD 60" Led TV

May 23
2022

Uma Drew

Flying to Tokyo!

I broke my tablet on the way to the airport 🤔

- Repeat customer
- Frequent flyer
- Budget conscious
- Brand Loyalty

Customer since 2022

Emails
Regular updates and inquiries about products and services.

Phone Calls
Multiple calls regarding product specifications and pricing.

Subscription and Opt-In Data
Subscribed to the company's newsletter and promotional emails.




Virtual agent identifies the golden customer profile and an opportunity for an upsell

Again, a golden customer profile includes both inferred and predictive traits that enables Positronics's sales and support teams to drive higher sales conversions, loyalty, and customer lifetime value.

The virtual agent identifies Uma's golden customer profile as an existing customer with previous purchases. It greets her, confirms her interest in the Magic Tablet, and transfers her to a human agent, because her golden customer profile signals that she has a high propensity to buy. Positronics has learned that customers with a high propensity to buy convert more when transferred to a live agent—in this case, Teri.

Now it's up to Teri to guide Uma's customer journey toward her Magic Tablet purchase and upsell—all before her flight leaves. (The suspense!)



Magic X1

Sleek Fusion Design, Unbounded Potential

Crafted with precision, the Magic X1 boasts a sleek fusion design that melds aesthetics with functionality. Its mesmerizing 10-inch edge-to-edge display showcases vibrant colors and crystal-clear details, making every visual an immersive spectacle.



Hi, I'm leaving for a trip and hoping to pick up a new tablet. Do you have any in stock at your airport location?

Hi Uma, are you looking to purchase a Magic tablet?

Yes, the Magic tablet in Silver.

It looks like there are two tablets left in Silver. Would you like to reserve one?

That would be great.

Let me transfer you to a member of our team to further assist you.

Thank you.



Real-time data to personalize virtual agent conversations



AI prompts agent with real-time data on customer's interest in audio as well as an in-store discount for headphones

Collecting, perceiving, and activating data in real-time

Teri picks up the baton, AKA the conversation between Uma and her virtual agent. Not only does he have access to Uma's golden customer profile, but he also gets to see the data produced using AI with the virtual agent.

Contact Center Agent Teri looks at a summary of the conversation between Uma and the virtual agent to ensure he is all caught up without Uma having to restate anything. But he also takes a look at her golden customer profile and sees that she is an audiophile.

An AI prompt shows Teri this information in real-time as well as the fact that there is an in-store discount for headphones at Positronics. So Teri asks Uma if she would like to book an appointment at the store in the airport. That way she can ensure she has everything configured on her new tablet for her trip and see the in-store discount for the headphones.

Teri and Uma agree on a time that works with her flight to Japan, and she is sent a confirmation text.

At this point, Teri passes the baton to Isaac, the airport Positronics in-store sales representative.

The screenshot displays a customer service interface for 'POSITRONICS'. At the top, a header bar shows the company name. Below it, a chat window with 'Uma Drew' (00:32) shows a conversation where Teri, a contact center agent, is helping Uma. A summary box indicates that Uma is traveling soon and looking to purchase a Magic tablet. To the right, an 'Insight' box states that Uma is very likely to purchase a pair of headphones along with her Magic X1. Below this, 'PRODUCTS TO SUGGEST' includes 'MagicTune Enchanter Pro' and 'MagicTune Enchanter Mini'. A sidebar on the right shows a customer profile with traits: Technology enthusiast, Privacy conscious, Frequent flyer, Audiophile, and Multimedia enthusiast. The chat history shows Teri introducing herself and offering an appointment at the airport store, which Uma agrees to at 4:30 PM.



Use inferred and predictive traits to customize responses and product recommendations



In-store sales rep receives real-time customer data via Flex Mobile and prepares for customer visit

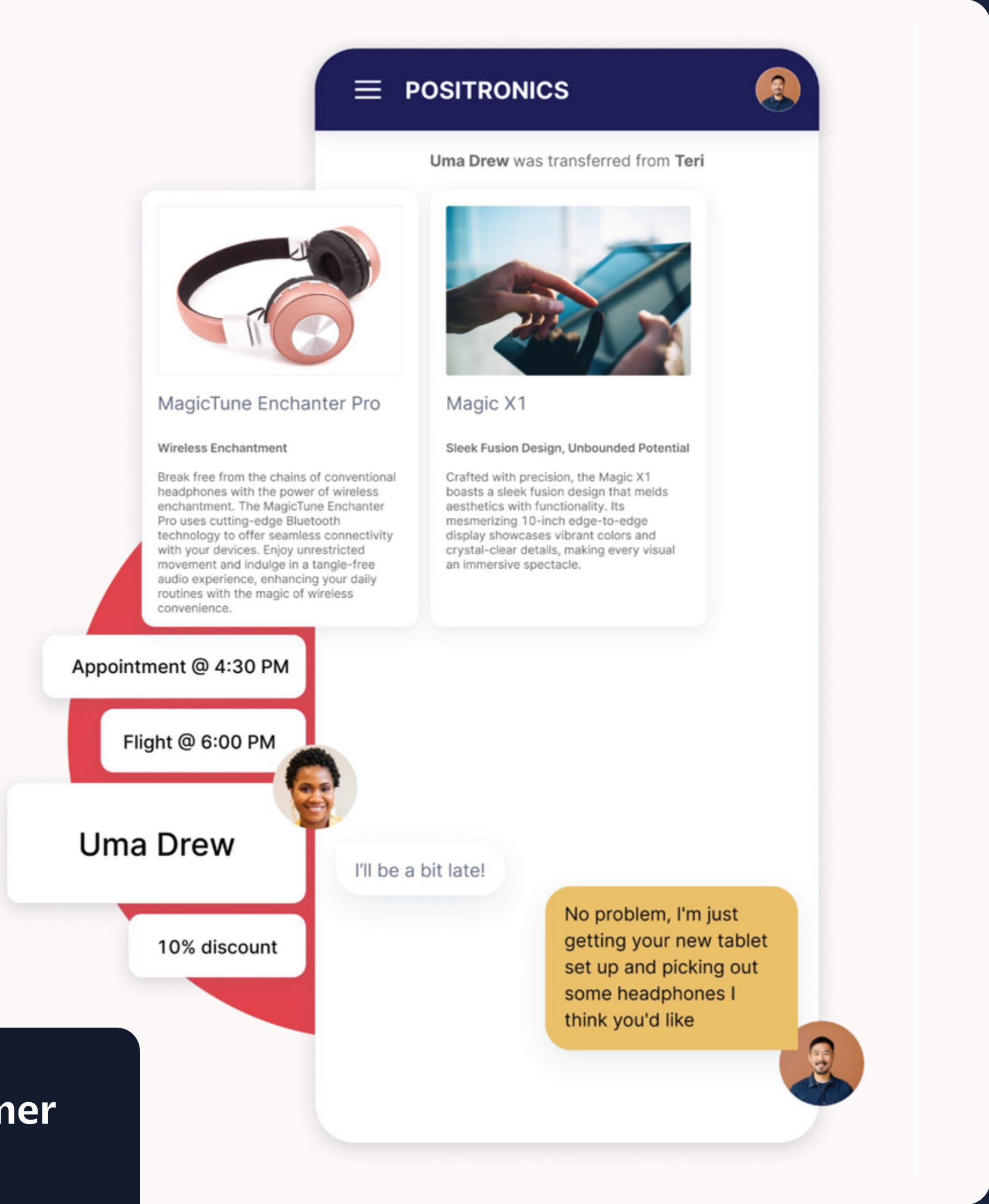
Blending in-store and online customer experiences

At **SIGNAL**, Twilio announced Flex Mobile, which connects field sales, contact center, and remote agents with the power of 1:1 communications, CustomerAI, and an intuitive app experience. Isaac, our sales rep, of course has this on his phone.

Before Uma arrives at her appointment, he has already received and learned about her interaction with sales and knows she only has limited time available. The app also shares Uma's golden customer profile with Isaac, so he knows that she has an interest in headphones but is very picky about sound quality.

Isaac has all the information he needs to land this plane before Uma's plane takes off to Japan.

But Uma is running late, so she messages Isaac. No worries, Flex Mobile makes information from her online interaction available from anywhere, ensuring Isaac can align with her goals and make Uma's experience fast and frictionless.



Blend in-store and online customer experiences with Flex Mobile



Customer purchases initial desired product as well as the upsell—all before her flight

By the time Uma shows up to her (late) appointment, Isaac already has her Magic Tablet all charged up and a pair of headphones ready for her to take a quick listen. She likes the sound quality (of course she did, Isaac made sure to present her with the best ones), and she decides to purchase those, too.

Purchase now complete, Uma flies off to Japan with her Magic Tablet, new high-quality headphones, and all the episodes she wants to watch of her favorite show.

This is how quality, real-time data can power AI, leading to highly personalized contact center interactions that can create customers for life.

Repeat customer

Frequent flyer

Budget conscious

Brand Loyalty

Audio enthusiast

Uma Drew

Have a great flight! I'm sure those shows are going to sound awesome on those new MagicTunes!

Thank you so much!

PURCHASE HISTORY

Lumina L60X Pro

4K Ultra HD 60" Led TV

May 23 2022

Magic X1

12" 512 GB Tablet

August 23 2023

MagicTune Enchanter Pro

HD Wireless Headphones

August 23 2023

Magic X1

ie Enchanter Pro

OX Pro

Unlock the expertise of your field employees to help increase productivity

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4. AI powering the virtuous cycle of engagement

AI has opened up so many opportunities for contact centers, but it all comes down to ensuring your customers feel understood and valued.

Powered by quality data, AI is an opportunity to add even more learning to what Twilio refers to as the virtuous cycle of engagement. The more contact centers engage with customers, the more they and the customer experience solution learn. This leads to continually improving recommended responses, dynamic self-service menus, and understanding preferences to guide future conversations.



To learn more **about implementing AI solutions into Twilio Flex** with quality real-time data using Flex Unify **talk to our experts.**





Today's leading companies trust Twilio's Customer Engagement Platform (CEP) to build direct, personalized relationships with their customers everywhere in the world. Twilio enables companies to use their communications and data to add intelligence and security to every step of the customer journey, from sales to marketing to growth, customer service and many more engagement use cases in a flexible, programmatic way. Across 180 countries, millions of developers and hundreds of thousands of businesses use Twilio to create magical experiences for their customers.

For more information about Twilio (NYSE: TWLO), visit: www.twilio.com.

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