

The background features a dark blue gradient with abstract, glowing shapes in shades of purple and pink. Two thin, light blue lines intersect to form a large 'A' shape. The text is positioned on the left side of the image.

AWS re:Invent

DECEMBER 2 - 6, 2024 | LAS VEGAS, NV

BIZ223 - NEW

Reimagine end customer self-service with Amazon Connect

Keith Ramsdell

(he/him)

Principal Product Manager
Amazon Web Services

Jack Hutton

(he/him)

Principal Product Manager
Amazon Web Services





Amazon Connect

One application. One seamless experience.

TENS OF THOUSANDS
OF CUSTOMERS

MORE THAN 10 MILLION CONTACT
CENTER INTERACTIONS A DAY

USED BY +100,000 AMAZON
CUSTOMER SERVICE ASSOCIATES



Introducing Mary

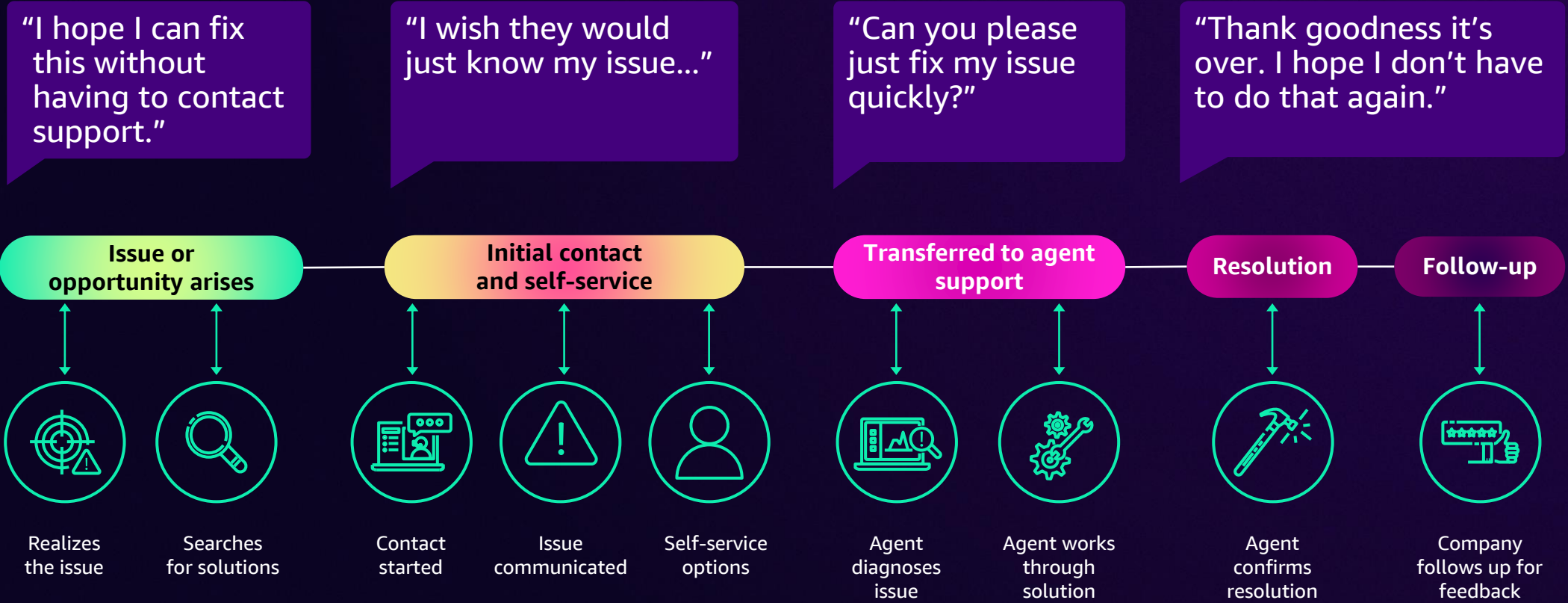
- | Enjoys vacation planning (almost as much as the vacation itself)
- | First time using AnyCompany Travel for her vacation plans
- | Needs to change her and her family's flight plans and hotel accommodations



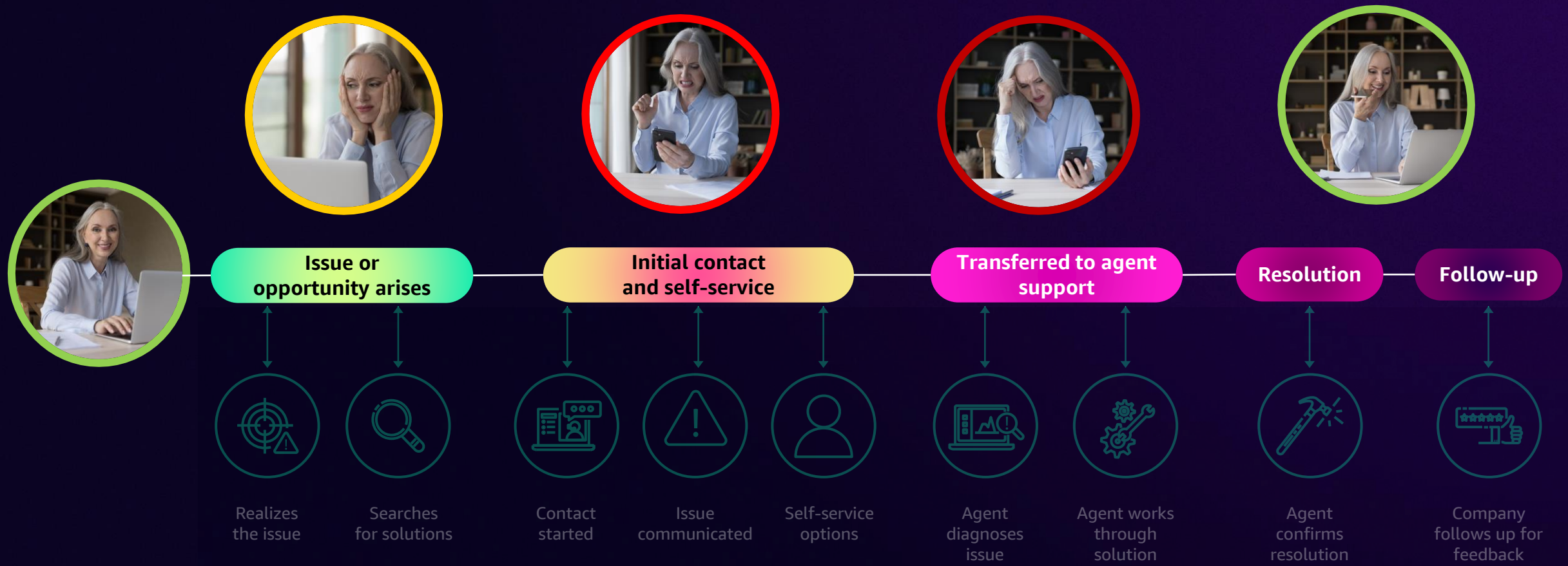
A typical customer journey...

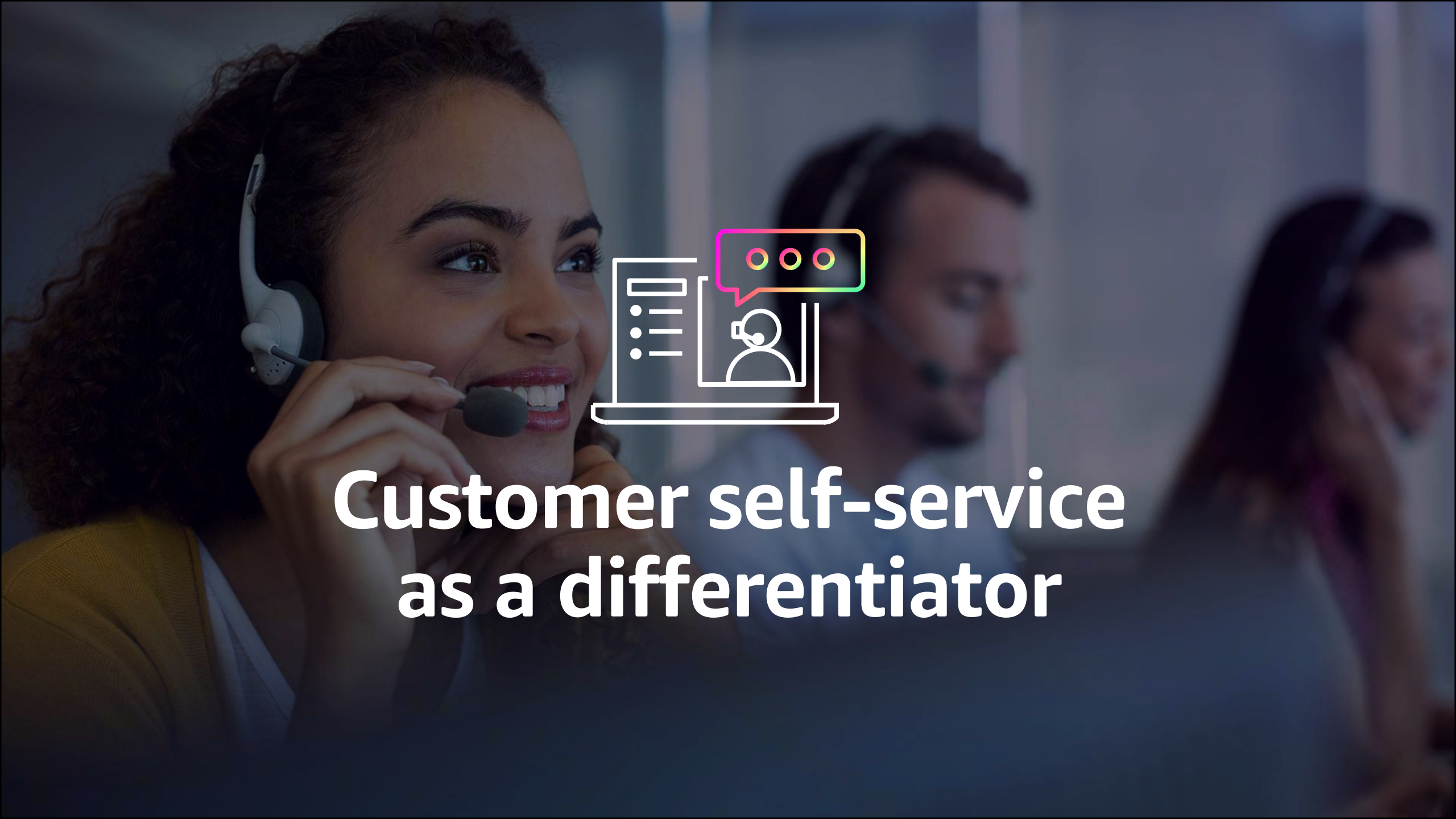


Mary



...can be a mix of emotions





Customer self-service as a differentiator



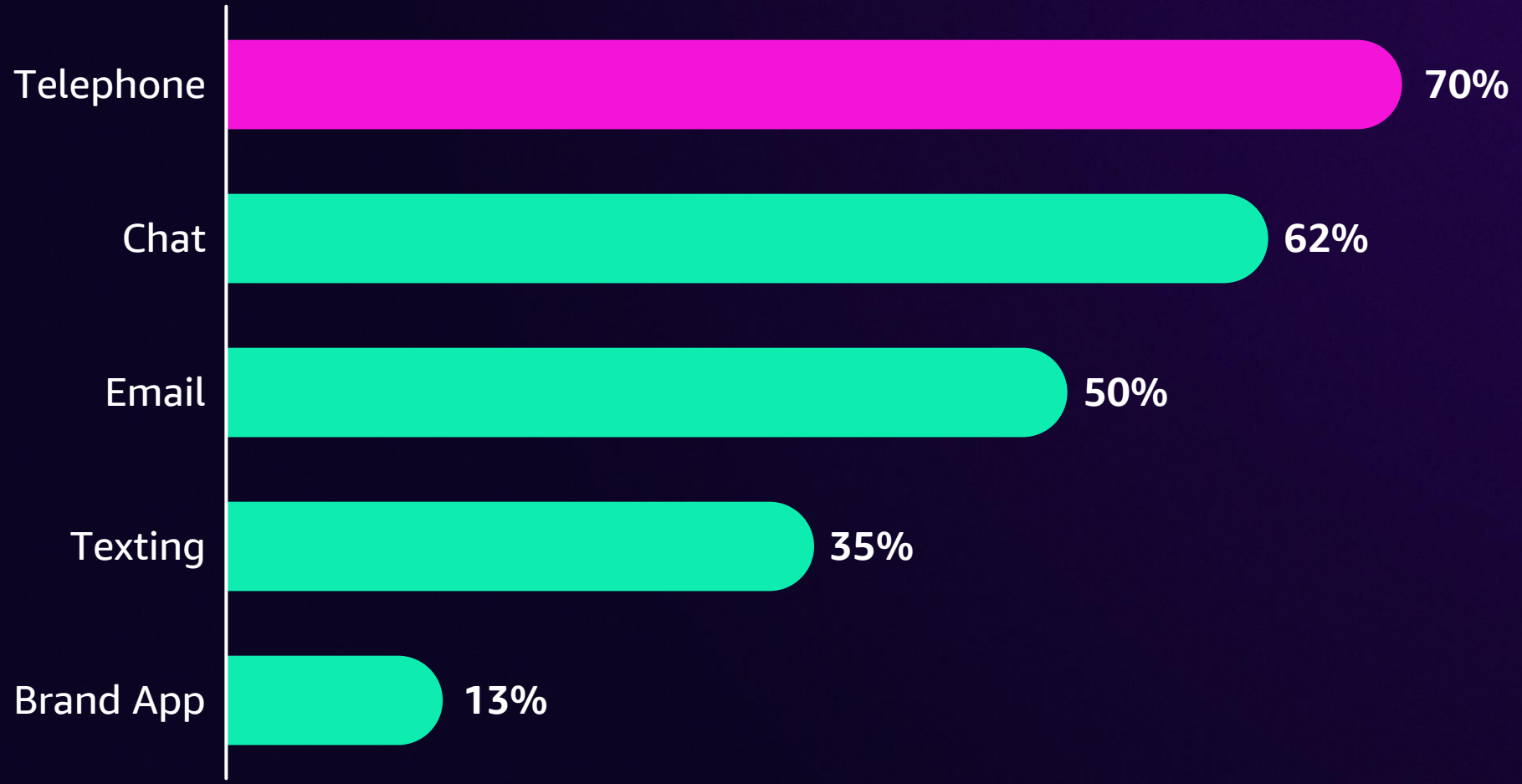
46%

of customers would rather go to the dentist than call customer support

Source: "Achieving Customer Amazement" study, Hyken, 2022

Customers prefer phone support

Preferred methods of communication for customers in 2024



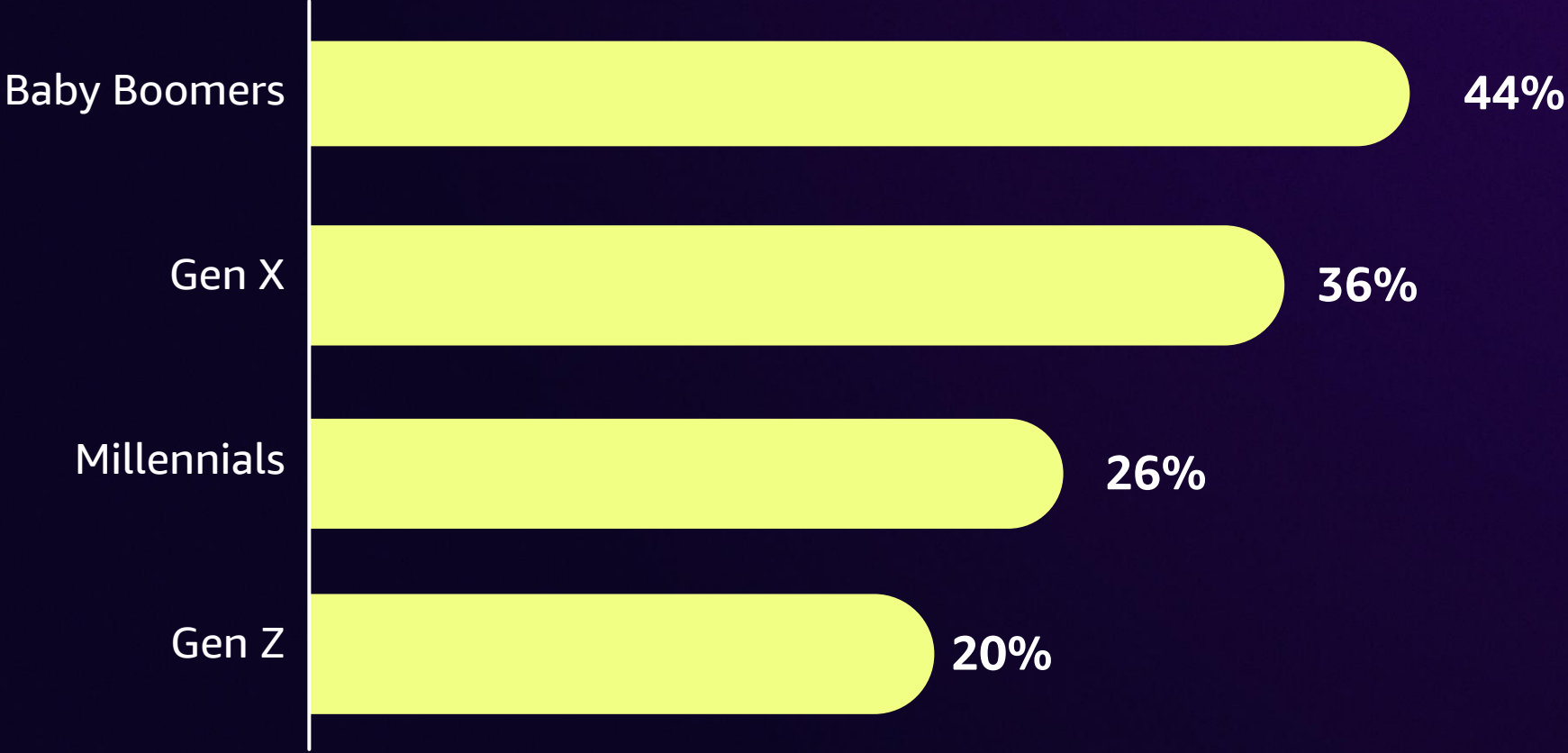
Source: "Achieving Customer Amazement" study, Hyken, 2024



© 2024, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Generations have different preferences

Percentage of people who prefer phone support as the number 1 method of communication



Source: "Achieving Customer Amazement" study, Hyken, 2024





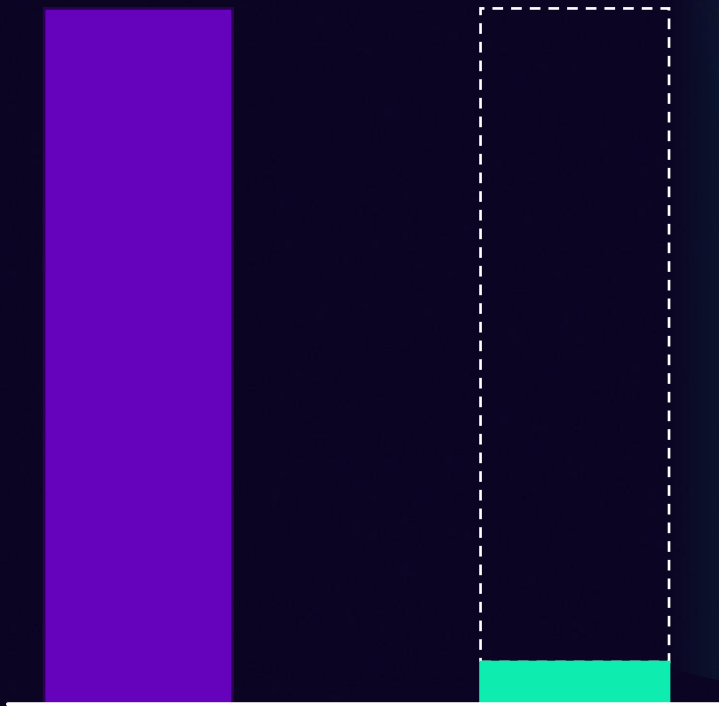
26%

**of customers in 2024 have stopped
doing business with a company
because self-service options were
not provided**

Source: "Achieving Customer Amazement" study, Hyken, 2024


Effective self-service can save millions

Interactive voice response (IVR) is **88-93% less expensive**



Cost of voice contact with agent Cost of IVR contact

Source: ContactBabel



\$2-3M
in cost savings for each percentage point of IVR containment

Source: McKinsey & Company



\$100M

in cost savings from North America bank by automating 50% of their calls





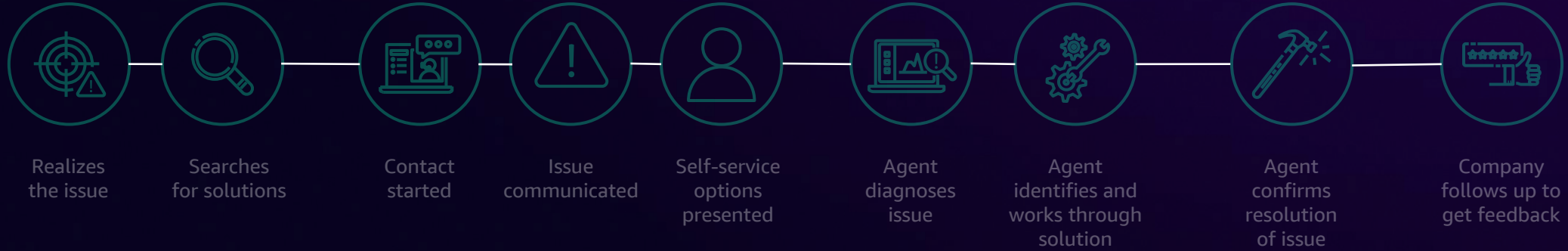
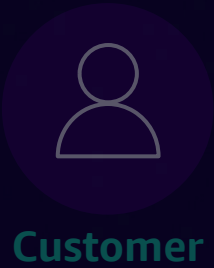
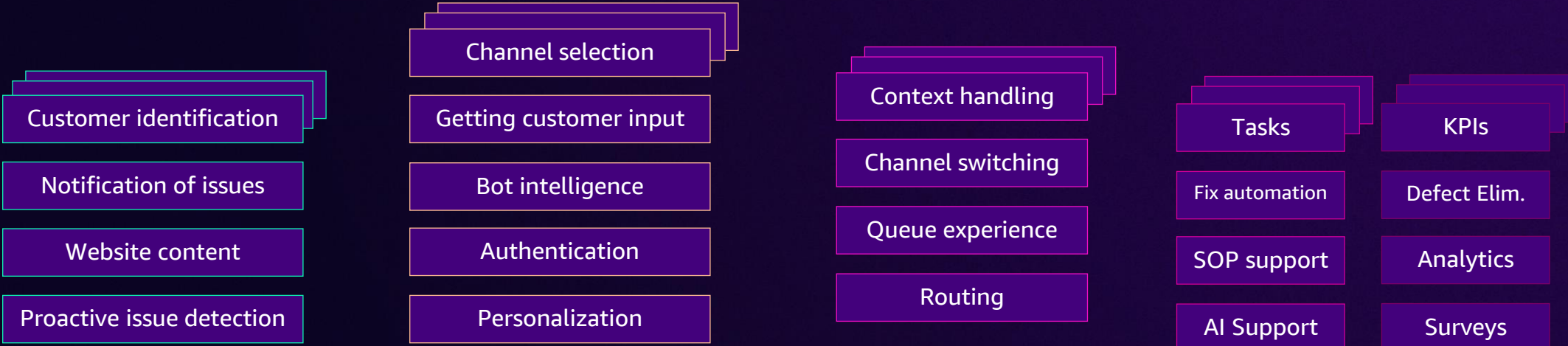
But creating personalized self-service experiences can be frustrating and expensive . . .

“

We are managing way too many applications. The amount of integrations and complexity is causing us to delay development and miss launch dates.

Senior technology leader
Financial services industry

Delivering self-service can be complex and complicated





Amazon Connect

One application. One seamless experience.

TENS OF THOUSANDS
OF CUSTOMERS

MORE THAN 10 MILLION CONTACT
CENTER INTERACTIONS A DAY

USED BY +100,000 AMAZON
CUSTOMER SERVICE ASSOCIATES





Amazon Connect differentiators

ACCELERATE CX INNOVATION WITH AMAZON'S NATIVE CLOUD CONTACT CENTER

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



Make real-world impact with **AI at the heart** of every interaction



Accelerate your innovation using **simple, self-service UI**



Scale to tens of thousands of agents



Drive continuous optimization with **native analytics and insights**



Pay only for what you use

Globally redundant telephony +30 providers, +110 inbound, and +230 outbound countries

Instant access to **+200 fully featured AWS services**





Amazon Connect has **tens of thousands of customers** supporting more than **10 million contact center interactions a day**



Companies of all industries and sizes use Amazon Connect to deliver self-service and automation



Companies of all industries and sizes use Amazon Connect to deliver self-service and automation



Reduced transfer rates

50% ▼

Financial Services customer

49% ▼

Technology customer

80% ▼

Telecomm customer

20% ▼

Financial Services customer



Lower time in the IVR

90% ▼

Financial Services customer

70% ▼

Financial Services customer

600 options

Telecomm customer



"How can I help you?"



Improved resolution rates

Containment

70%

Financial Services customer

Containment

95%

Telephone Banking customer

Cost Reduction

\$3M

Technology customer

Containment

80%

Financial Services customer



Speed of updates

"...changes that typically took 6-7 weeks on the legacy platform were done in a day"

Travel & Hospitality customer

Easily create self-service customer journeys



Outbound and proactive engagement



Omnichannel self-service and automation



Step-by-step guides for issue resolution



Back-office process automation and tasks



Built-in AI at the heart of every interaction

Built-in capabilities to deliver self-service and automation

Outbound and proactive engagement

Omnichannel self-service and automation

Step-by-step guides for issue resolution

Back-office process automation and tasks

Design the experience



Amazon Connect flows

Add personalization and automation



Customer Profiles



Tasks



Outbound Campaigns

Leverage AI for better outcomes



Text-to-speech



Conversational AI



Amazon Q in Connect



Contact Lens

Meet customers where they are



Voice



Chat



Email



SMS



Web and video calling

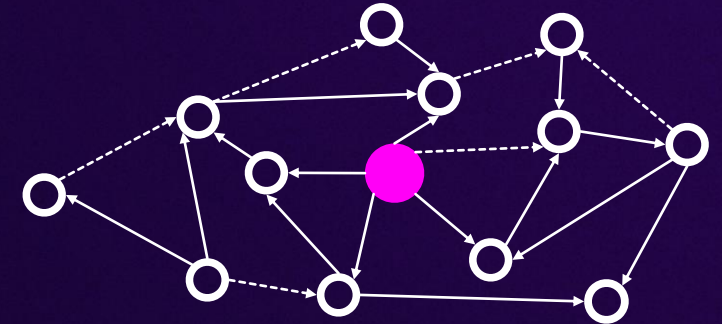
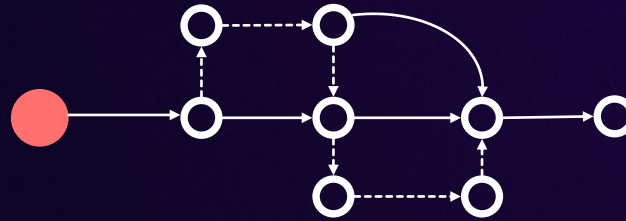


3P messaging



Deciding on *what* to automate

Figuring out what to automate (and how) can be tricky...



Highly structured

- | Bill payment
- | Password resets
- | Prescription refills
- | Booking changes

Mixed

- | Returns / refunds
- | Account changes
- | Warranty claims
- | Document submissions

Highly fluid

- | Outage support
- | Troubleshooting
- | Complaint resolution
- | Recommendations

Introducing Terry

- | Has been a customer of AnyCompany Financial for 10 years
- | Has a bill coming up that he wants to pay
- | Just before his call, Terry received a targeted message about a change in credit score





Terry makes a call to AnyCompany Financial...

Make your assistants more human

- | Latest text-to-speech model offering human-like, conversational voices
- | Personalized greeting using Customer Profiles and other data

Hello Terry. Thank you for being a valued AnyCompany Financial member for the last 10 years.

I am Martha your virtual assistant!

I'm here to help you with things like card services, managing your funds, or answering your banking questions.



Anticipate customer needs

- | Tailored interaction based on customer's history and recent activities

Hello Terry. Thank you for being a valued AnyCompany Financial member for the last 10 years.

I am Martha your virtual assistant!

I'm here to help you with things like card services, managing your funds, or answering your banking questions.

It looks like you have a bill coming up, are you calling about paying this bill?





Hello Terry. Thank you for being a valued AnyCompany Financial member for the last 10 years.

I am Martha your virtual assistant!

I'm here to help you with things like card services, managing your funds, or answering your banking questions.

It looks like you have a bill coming up, are you calling about paying this bill?



Hi Martha. Yes, and I got this text about changes to my credit score and I wanted to know why that happened



Disambiguation of multiple intents

- | Ability to handle complex, multi-part customer queries
- | Contextual understanding of customer priorities



Hi Martha. Yes, and I got this text about changes to my credit score and I wanted to know why that happened

Sure Terry! I'm happy to help you. First, let's get that bill paid so you don't have anything to worry about.





Hi Martha. Yes, and I got this text about changes to my credit score and I wanted to know why that happened

Sure Terry! I'm happy to help you. First, let's get that bill paid so you don't have anything to worry about.

For your security, please say or press your PIN or your Account number.



Meet the customer where they are

- | Ease of use with natural language
- | Allow touch-tone input to communicate sensitive information or increase accuracy in noisy environments



Hi Martha. Yes, and I got this text about changes to my credit score and I wanted to know why that happened

Sure Terry! I'm happy to help you. First, let's get that bill paid so you don't have anything to worry about.

For your security, please say or press your PIN or your Account number.

1111 2222 3333 4444

Thanks for authenticating Terry!



Your current balance is \$292. Would you like to pay this with the account ending in 1234? This is the same account you used last time.



Provide expected values in real time

- | Use runtime hints to tell the model the values you're expecting the customer to say
- | Retrieve complex values like names, addresses, and more, the first time

Your current balance is \$292. Would you like to pay this with the account ending in 1234? This is the same account you used last time.



No, can you actually use the account ending in 5678 today?



Your current balance is \$292. Would you like to pay this with the account ending in 1234? This is the same account you used last time.



No, can you actually use the account ending in 5678 today?

Sure, I can use that existing account. Would you like me to process the payment now using account 5678?



Sure, I can use that existing account.
Would you like me to process the
payment now using account 5678?



Actually, what is my APR? What
happens if I only pay \$50?



Meet the customer's needs, whenever they ask

- | Use intent classification during conversation to meet your customer's needs
- | Use previous context to make your experience smarter



Sure, I can use that existing account. Would you like me to process the payment now using account 5678?

Actually, what is my APR? What happens if I only pay \$50?

Your current APR is 15%. If you only pay \$50 dollars, you will meet the minimum required payment. This means you won't incur late fees, but the remaining balance of \$242 would be subject to interest charges.



Sure, I can use that existing account. Would you like me to process the payment now using account 5678?



Actually, what is my APR? What happens if I only pay \$50?

Your current APR is 15%. If you only pay \$50 dollars, you will meet the minimum required payment. This means you won't incur late fees, but the remaining balance of \$242 would be subject to interest charges.



Would you like to pay \$50, the full amount of \$292, or another amount?



Would you like to pay \$50,
the full amount of \$292,
or another amount?



I'll pay the full amount today.



Would you like to pay \$50,
the full amount of \$292,
or another amount?



I'll pay the full amount today.

So to confirm, you'd like me to pay
the full amount of \$292 using
account 5678, correct?



Yep—that's right!





Yep—that's right!

Great let me get that transfer started. This may take up to ten seconds. Please stay on the line for your confirmation.





Yep—that's right!

Great let me get that transfer started. This may take up to ten seconds. Please stay on the line for your confirmation.



I'm still working on that transfer. Please wait just a few more moments for your confirmation.



Keep customers engaged during fulfillment

- | Keep customers engaged and updated during long-running processes
- | Mask your existing backend long-running APIs with conversation



Yep—that's right!

Great let me get that transfer started. This may take up to ten seconds. Please stay on the line for your confirmation.

I'm still working on that transfer. Please wait just a few more moments for your confirmation.

Your payment for \$292 has been completed. We have sent you a confirmation email to the address we have on file.



Earlier you mentioned wanting to learn more about changes to your credit score. Is now a good time to follow up on that?



Amazon Q in Connect utilizes contextual information

- | Use of generative AI to create tailored, conversational responses
- | Incorporates customer data from multiple sources in real-time
- | Seamless transition from problem-solving to value-added services



Earlier you mentioned wanting to learn more about changes to your credit score. Is now a good time to follow up on that?



I wanted to know why my score changed and what that means for me



Your credit score has improved by 50 points due to your history of on-time payments and lower credit utilization.



We know this is something you've been working on for a while, and I wanted to congratulate you on sticking to the financial plan you created earlier this year.



As a result, you're now eligible for our Platinum card. Would you like to sign up for this card?



Amazon Q in Connect personalizes the conversation

- | Seamless blending of product information with personalized insights
- | Showcasing how AI can improve customer experience while driving business growth
- | Customer information augments knowledge content



As a result, you're now eligible for our Platinum card. Would you like to sign up for this card?

I would like to know more about the benefits.

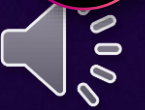
The Platinum card provides several exciting benefits, including 3% cashback on all travel purchases, complimentary airport lounge access, and a dedicated 24/7 concierge service.



Why should I choose this card? I already have your Silver card.

We think this would be a great fit for you because of your frequent business trips to New York and your recent increase in dining expenses. Additionally, it would provide you with a sign-up bonus of 50,000 reward points, equivalent to \$500 in travel credit, when you spend \$3,000 in the first three months.

Is there anything more you would like to know about the Platinum card?



Multichannel conversations

- | Seamless transition between voice and digital channels
- | Conclusion to the interaction, demonstrating how the system can handle call closure



Is there anything more you would like to know about the Platinum card?



Thanks for that. I'd like to sign up.



Let me send you a text to help get you started. If you want, I can stay on the line with you and help you walk through the experience.



No, I got it. Thanks!



It's been a pleasure helping you. Have a great day!



Dynamic, human-like interactions deliver better outcomes and higher satisfaction



Issue or opportunity arises

Initial contact and self-service

Transferred to agent support

Resolution

Follow-up

Dynamic, human-like interactions deliver better outcomes and higher satisfaction



Issue or
opportunity arises

Initial contact
and self-service

Resolution

Follow-up

Human-like assistant interaction

Anticipation of customer's needs

Disambiguation of multiple
intents

Provide expected values in real
time

Meet the need, whenever it's
asked

Keep the customer engaged

Utilize context and personalize
the contact

Multichannel conversations



**Create, edit, and
manage self-service
experiences**



**Enhance experiences
with Amazon Q in
Connect**



**Optimize experiences
with integrated
analytics and
dashboards**



**Create, edit, and
manage self-service
experiences**



**Enhance experiences
with Amazon Q in
Connect**



**Optimize experiences
with integrated
analytics and
dashboards**



Create, edit, and manage self-service experiences

New

| Design and edit conversational self-service with simple tools

| Use step-by-step guides to resolve issues consistently

| Automate back-office tasks and processes

Update

| Create these experiences with the drag-and-drop flow designer

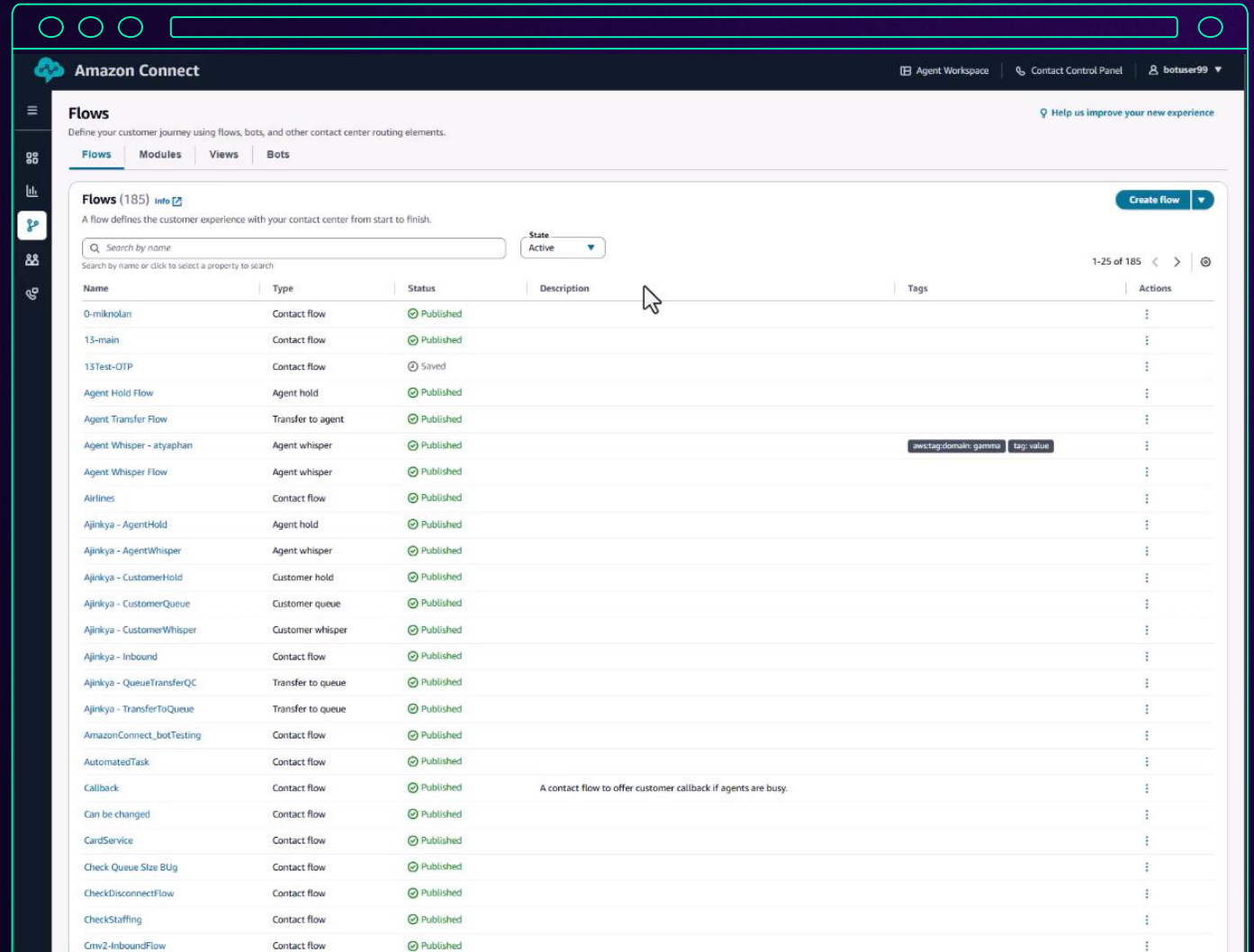
New

Design conversational self-service with simple tools

Easily create human-like self-service directly in Amazon Connect

Automate conversations in 25+ languages

Quickly edit and test to improve outcomes



The screenshot shows a customer service interface for a travel rewards card issue. The interface is divided into several sections:

- Header:** Includes a status bar with "Available", a search bar with "Ask Amazon Q", and navigation tabs for "Customer Profile", "Cases", and "Upsell - Travel Rewards C...".
- Customer Profile:** A sidebar on the left shows the customer's name "Nikki Wolf" and a chat icon.
- Summary:** A central section titled "Upsell - Travel Reward Card" provides a summary of the customer's eligibility and the upgrade process.
- Details Table:** A table with three columns (Reference ID, Customer name, Case ID) and three rows (Creation date, Assigned queue, Card pre-approved?, Credit Limit, Date of request, Current card, Tenure of membership, Case status).
- Actions:** A row of buttons below the table includes "Close case", "Add task", "Edit case", and "Go to case details".
- Recommendations:** A bottom section with four cards offering actions like "Unlock Card", "Apply for a new credit card", "Start SMS session", and "Add travel notice".
- Footer:** A chat control bar with "Accept chat" and "Reject chat" buttons.

| Reference ID | Customer name | Case ID |
|--|---------------------------------------|---|
| 79529120 | Nikki Wolf | nikki.wolf@example.com |
| Creation date May 31, 2024 | Last updated May 31, 2024 | Contact phone 1.212.555-5400 |
| Assigned queue Credit card upgrades | Assign user John Stiles | Account number 233455 |
| Card pre-approved? Yes | Date of request May 31, 2024 | Tenure of membership 10 years 3 months |
| Credit Limit \$15,000 | Current card Platinum Rewards Card | Case status Open |

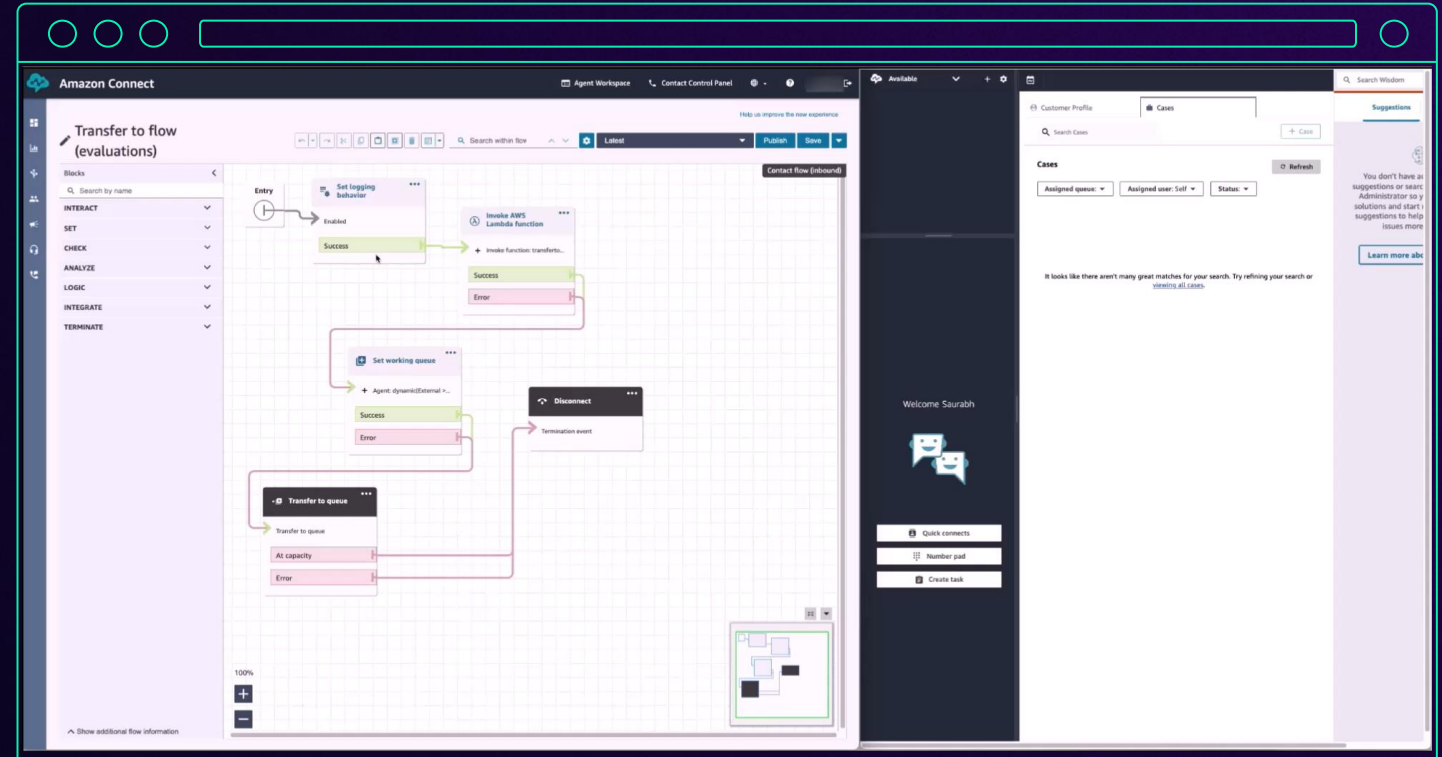
Use step-by-step guides to resolve issues consistently

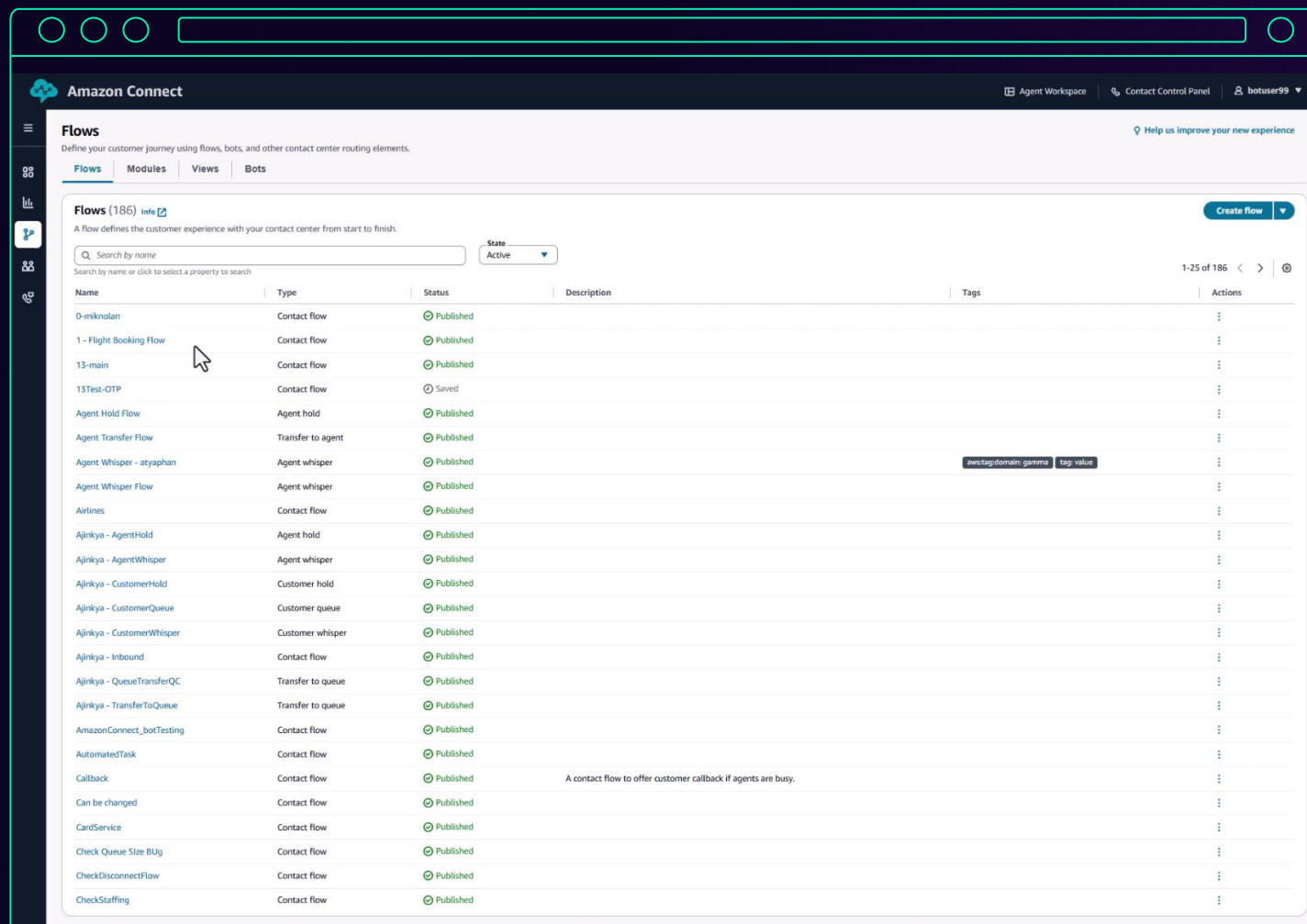
Use visual workflows to standardize agent and customer issue handling

Help agents reach issue resolution proficiency quicker

Automate back-office tasks and processes

- | Easily route, track, and automate work
- | Automatically generate tasks for agents and supervisors
- | Track tasks to completion with real-time updates





Update

Create experiences with the flow designer

Build omnichannel self-service with a drag-and-drop interface

Personalize experiences using native capabilities

Easily integrate with 3P applications

Make updates in minutes



**Create, edit, and
manage self-service
experiences**



**Enhance experiences
with Amazon Q in
Connect**



**Optimize experiences
with integrated
analytics and
dashboards**



**Create, edit, and
manage self-service
experiences**



**Enhance experiences
with Amazon Q in
Connect**



**Optimize experiences
with integrated
analytics and
dashboards**



Amazon Q
Generative AI assistant designed
for work that can be tailored to
your business, data, code, and

Amazon Q in Connect is your generative AI assistant for customer service



| Deliver real-time personalized responses and recommended actions to agents

New

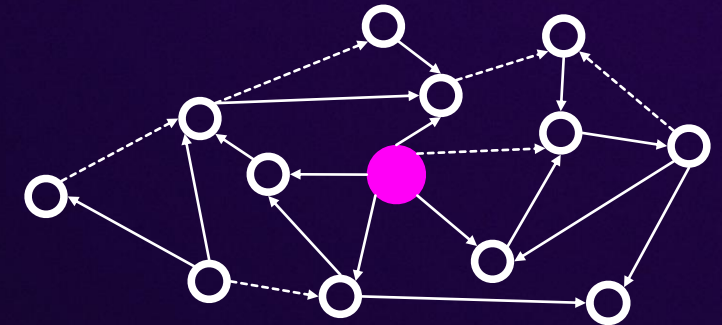
| Empower end-customers to self-serve via voice and chat with personalized guidance and actions

New

| Customize AI prompts and configure guardrails to modify Q in Connect's behavior, tone, and content access for secure, responsible deployment

When is generative AI most helpful for self-service?

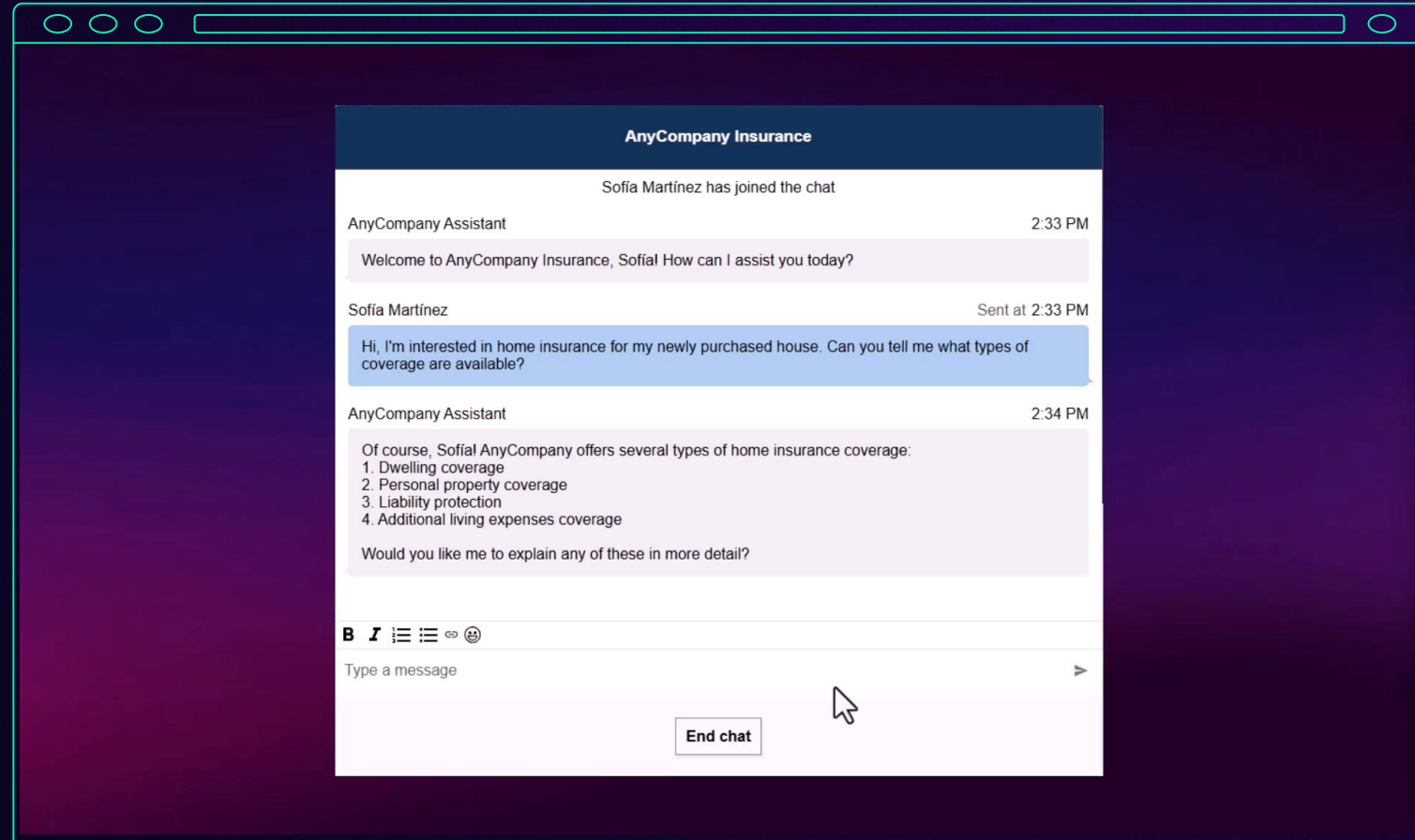
- | Disambiguate complex customer issues
- | Leverage contextual information to provide more accurate answers and actions
- | Tailor personalized responses and recommendations based on the customer's needs and history

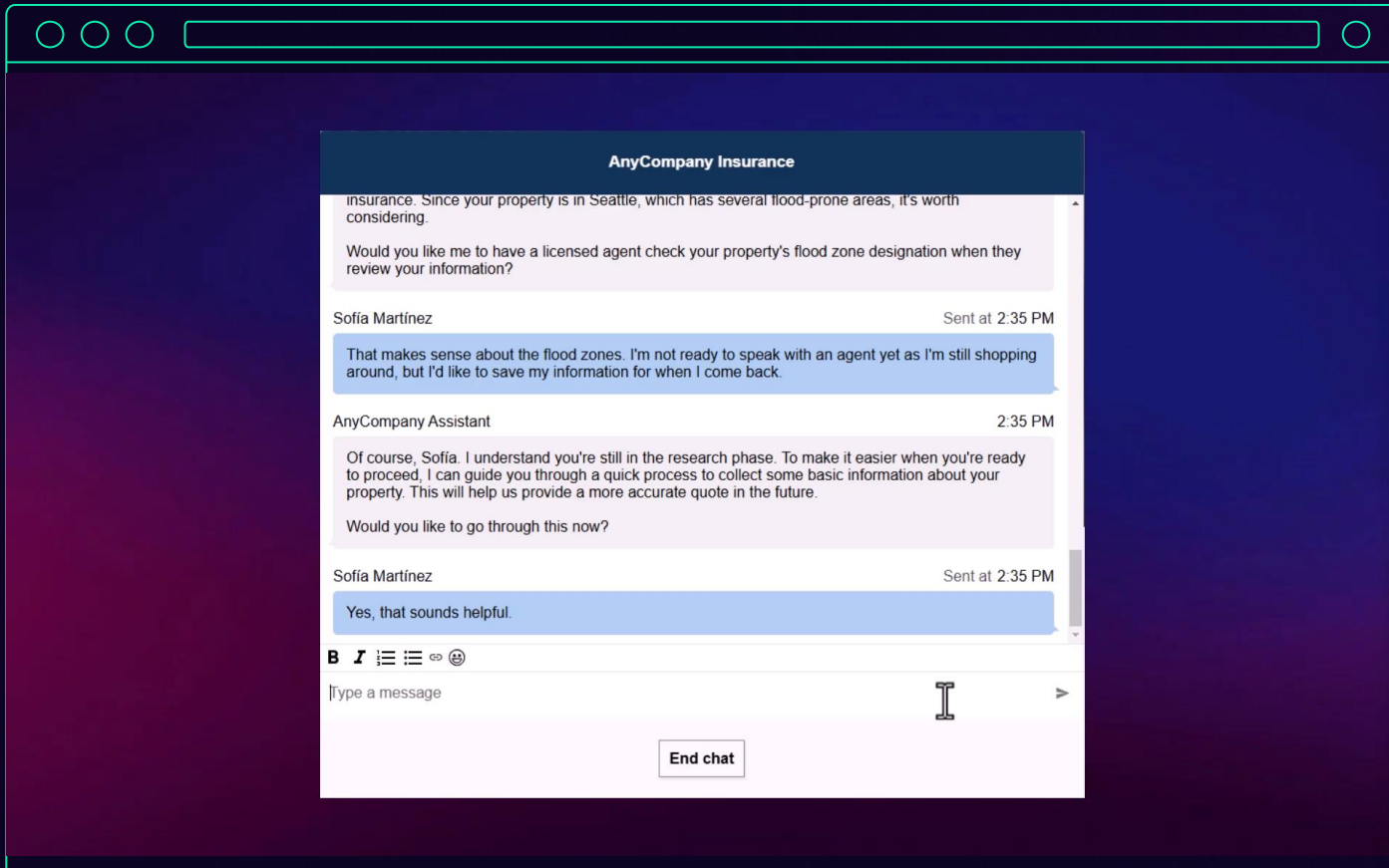


Highly fluid

Self-service Q&A

- | Provide customers dynamic answers generated from knowledge bases
- | Provide personalized answers based on contextual data and customer history
- | Support multi-turn back and forth conversations



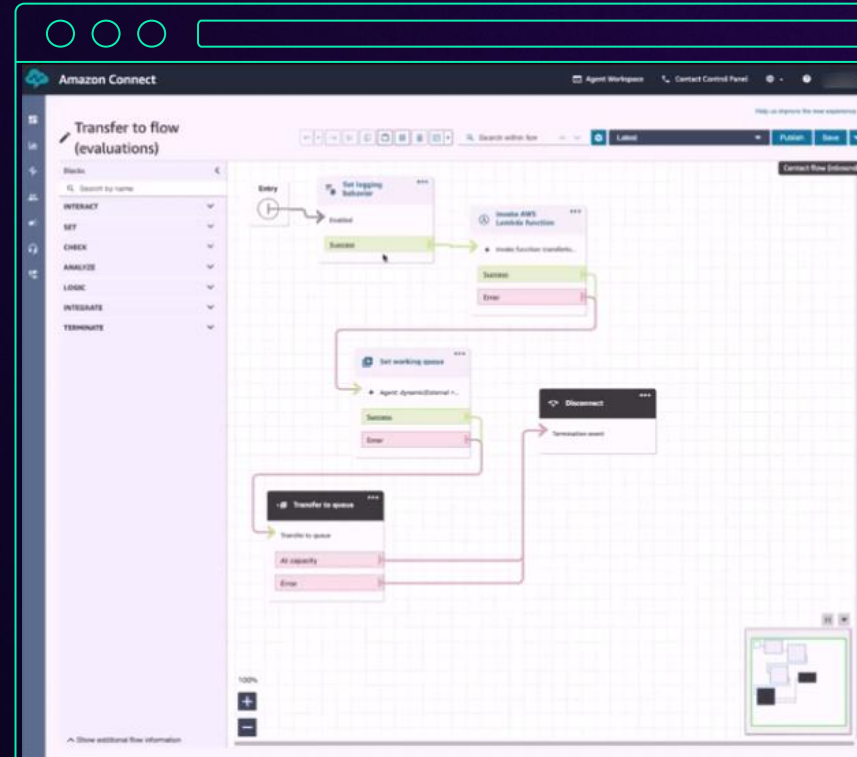


Recommend step-by-step guides to customers

- | Provide actions to customer to take via step-by-step guide
- | Build UI workflows in Amazon Connect for all personas using the same flow designer
- | Safeguard generative AI with pre-defined workflows

Drive automation with a human in the loop

- | Use the same flows to power automation
- | Have Amazon Q in Connect select and complete actions
- | Let customers Verify and Confirm first



MyRides

half the daily rate, plus \$0.01 for weekly rentals. If your return is delayed due to a flight or other extenuating circumstances, you should contact the specific return location to discuss your options. MyRides also offers membership programs that can help you avoid late return fees.

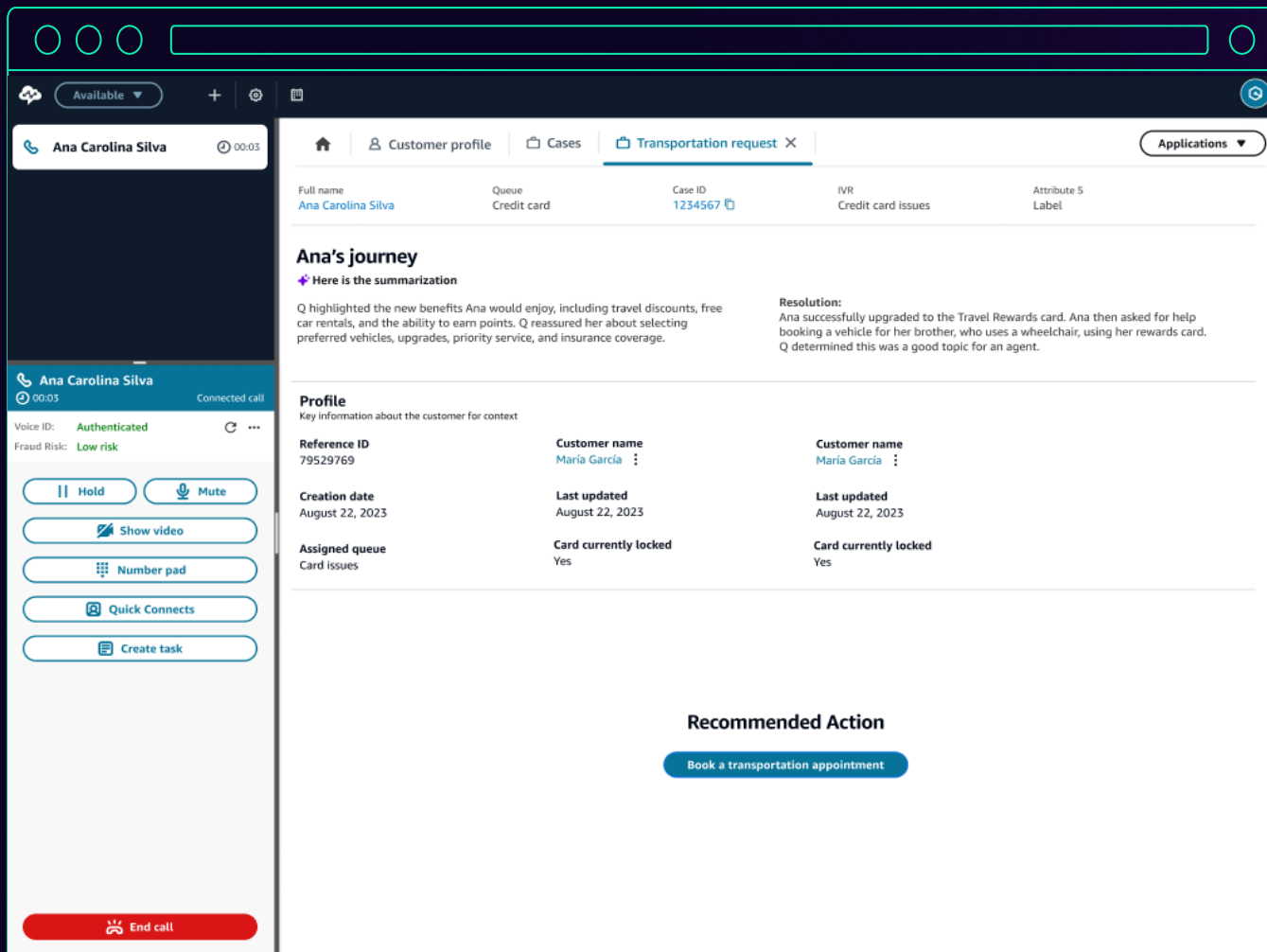
RiderBot 1:42 PM

Anything else you need help with?

B *I* ☰ ☰ ☰ ☺

Type a message

End



Seamless transitions to agents

- | Automatically escalate to customer service agents if necessary
- | Provide agents with a summary of the self-service engagement
- | Provide agents with a recommended next-best action at the start of the contact

Customizing Amazon Q in Connect



AI agent

- Configure end-to-end functionality
- Associate prompts, knowledge bases, and guardrails
- Segment by persona or line of business



AI prompt

- Customize instructions to the LLM
- Control answer generation, action recommendation, action execution
- Personalize responses based on contextual and customer information

Customizing Amazon Q in Connect



AI guardrails

- Block undesirable topics
- Filter harmful and inappropriate content and words
- Redact sensitive information (PII)
- Detect hallucinations in model responses using contextual grounding checks

Amazon Q

- Judging distance
- Respectful driving
- Performing specific maneuvers like arm signals, emergency stops, parking on a hill, and parallel parking [1]

▾ Sources

[1] [what-expect-your-drive-test](#)

RELATED ARTICLES

- [driver-training-and-testing](#)
- [do-i-need-take-test](#)

Which stocks should I invest in?

Blocked input text by guardrail

Ask Amazon Q

Max 500 characters

Enable Q in your self-service

The image displays the Amazon Connect console for configuring a bot named "Hotel booking Bot". The console is in the "Configuration" tab, showing options to define the bot, configure supported languages, and manage intents. A mobile chat interface is overlaid on the left, showing a customer's query and the bot's response. A callout box highlights the "Enable Amazon Q intent" toggle.

Amazon Q in Connect Info
Use Amazon Q in Connect assistant to handle customer queries.

Enable Amazon Q intent

Amazon Connect
Flows > Bots > Hotel booking Bot

Hotel booking Bot Info
Personalize your bot and customer experience.

Cancel

Details | **Configuration** | Analytics | Aliases | Versions

Define your bot Info
Add supported languages, user intents, and how your bots handles user inquiries.

Dutch (NL) × English (US) × English (Z)

Configure your supported language Info
Define intents within the language, gather information from user inquiries, and set the intent classification confidence score threshold.

Confidence score threshold Info
Intent classification confidence score threshold

0.00

Intents Info
An intent represents an action the user wants to perform.

- Activate book room
- Request upgrade
- Enquire credit card benefits
- Pay balance
- Report change of dates
- Amazon Q in Connect
- Fallback

Intent: Activate book room

Details Info
Modify your intent details

Intent name
Activate book room

Description
Responses to phrases that indicate that users want to book a room.

Additional bot configuration Info
Modify using advanced configuration option or directly in Amazon Lex.

Fulfillment Enabled

Code Hooks Disabled

Input Context Enabled

Output Context Enabled

9:41
Amazon Connect >

Hi, I need to book a hotel room for myself, my husband and my son.

Virtual assistant:
Hi Nikki, thanks for being a platinum rewards member. Let's get your room book for 3 people.

What dates will be visiting?

March 1-10

Type a message ...



**Create, edit, and
manage self-service
experiences**



**Enhance experiences
with Amazon Q in
Connect**



**Optimize experiences
with integrated
analytics and
dashboards**



**Create, edit, and
manage self-service
experiences**



**Enhance experiences
with Amazon Q in
Connect**



**Optimize experiences
with integrated
analytics and
dashboards**



Optimize experiences with integrated analytics and dashboards

New

- | Contact Lens dashboard and analytics for:
 - Self-service and automation flows and tasks
 - AI-powered self-service interactions

New

- | Deep dive conversation performance

New

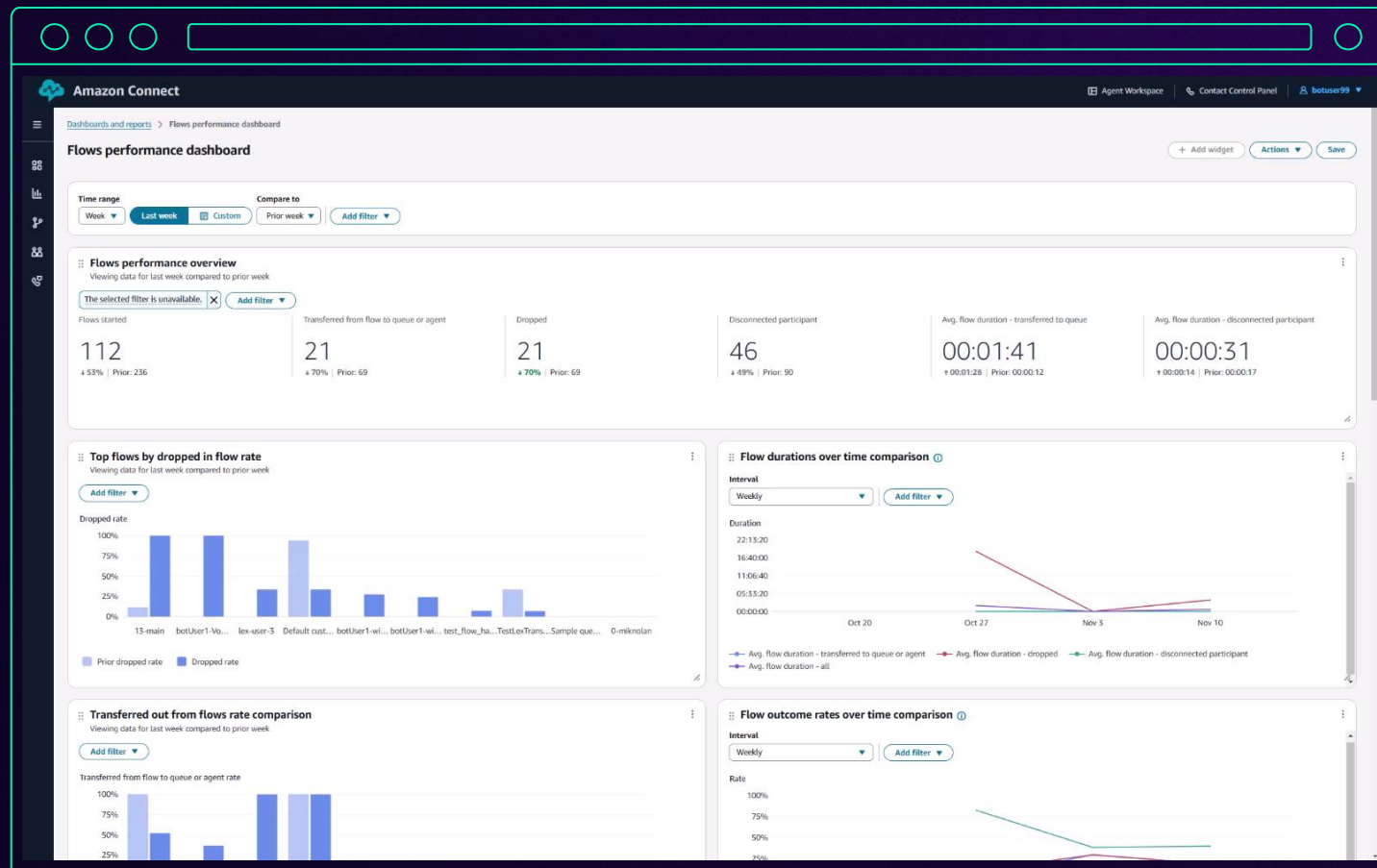
- | Record and review IVR interactions

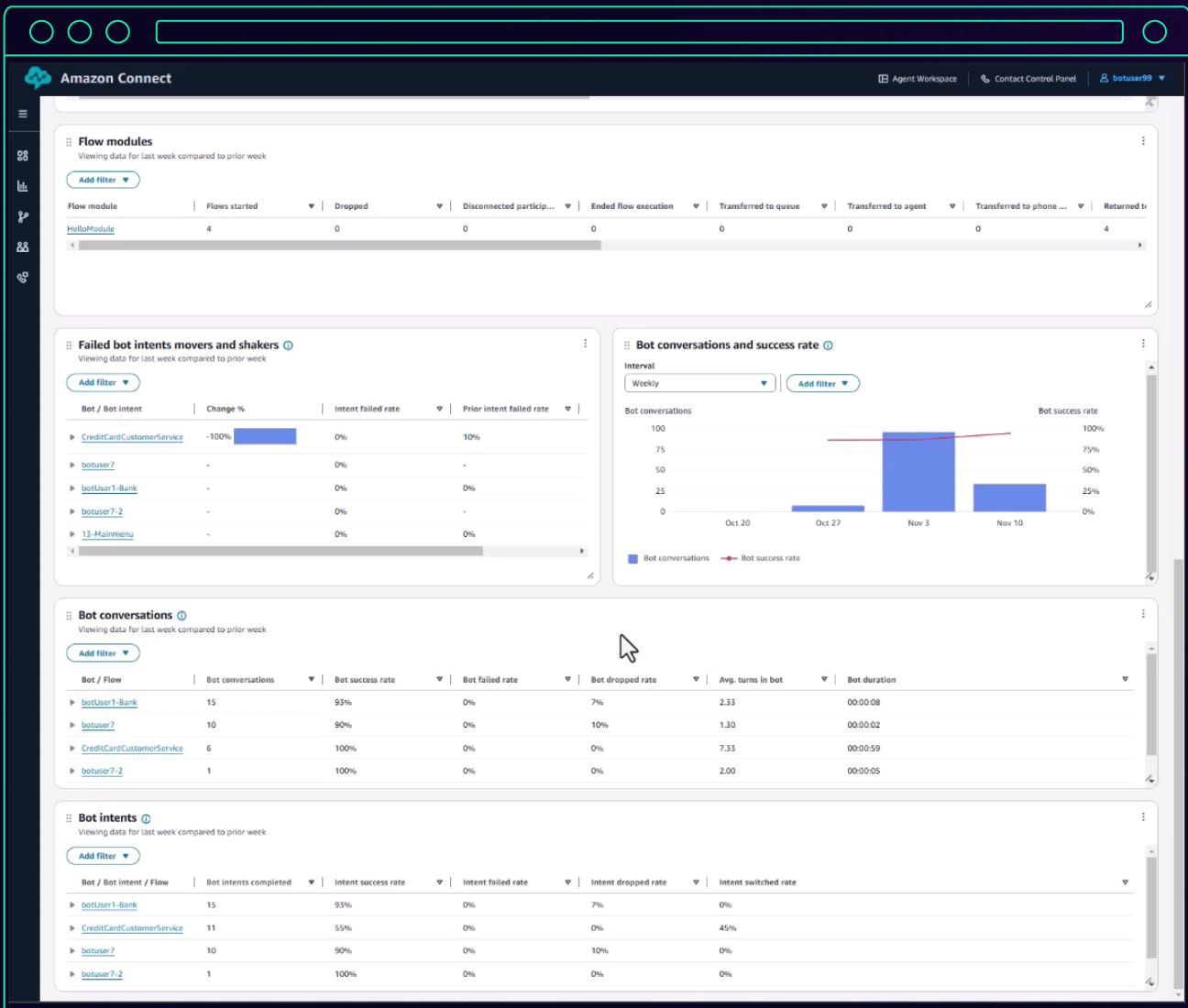
Contact Lens dashboards and aggregated analytics

Analyze usage and outcomes of your flows-powered experiences

New

At-a-glance AI performance for quick identification of failures, usage patterns, and conversation outcomes





New

Deep dive conversation performance

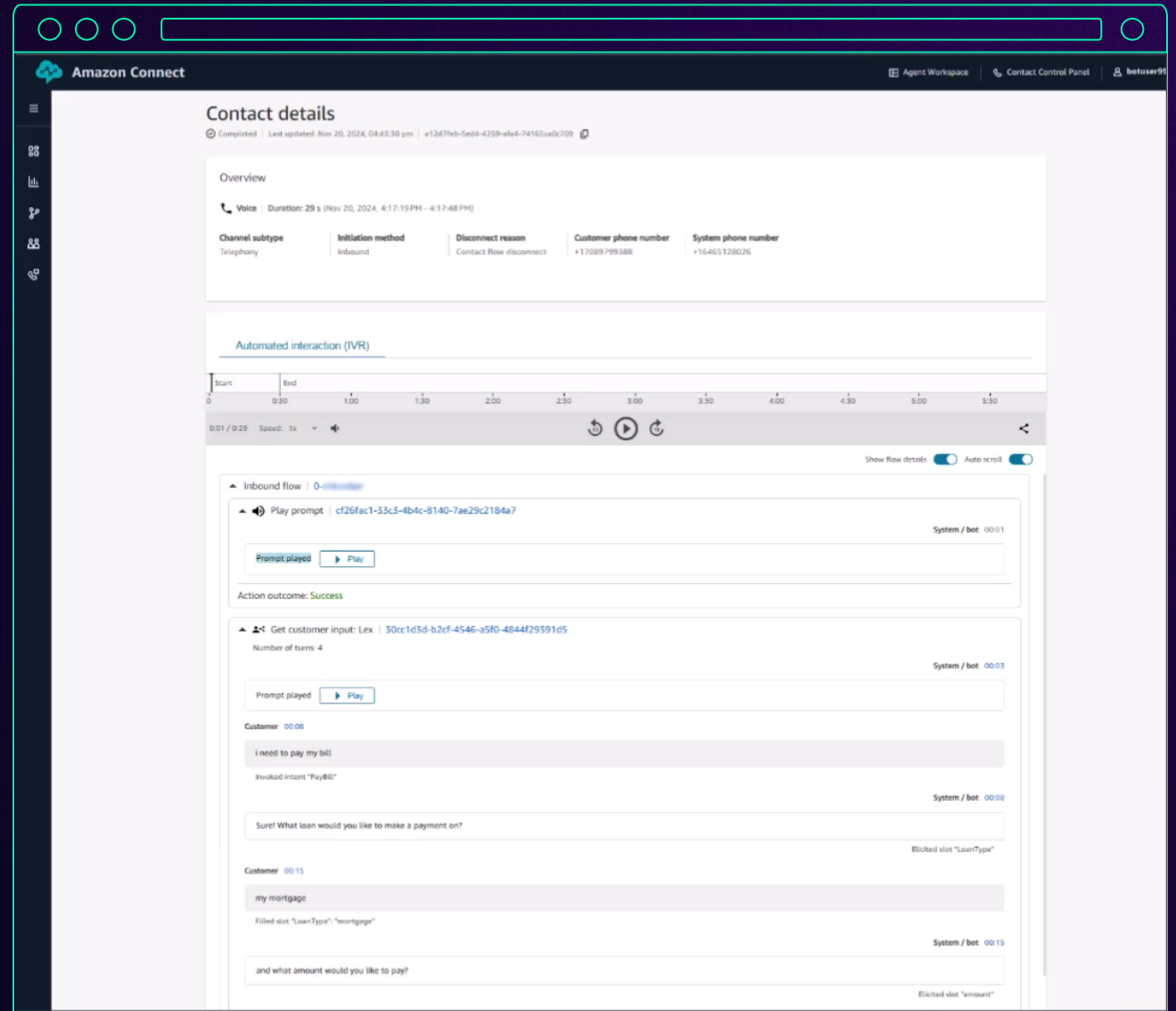
- Identify the most common issues customers contact about
- Review how successful self-service is at resolution
- Explore individual conversations and easily identify areas of improvement



New

Record and review IVR interactions

- | Record audio during voice interactions
- | Listen to the interaction and review logs in the Contact details page
- | Record interactions for compliance or optimization purposes





**Create, edit, and
manage self-service
experiences**



**Enhance experiences
with Amazon Q in
Connect**



**Optimize experiences
with integrated
analytics and
dashboards**



Amazon Connect

One application. One seamless experience.

TENS OF THOUSANDS
OF CUSTOMERS

MORE THAN 10 MILLION CONTACT
CENTER INTERACTIONS A DAY

USED BY +100,000 AMAZON
CUSTOMER SERVICE ASSOCIATES



Register to join us Tuesday evening!

AWS re:Invent

**CUSTOMER EXPERIENCE
NETWORKING RECEPTION**

Tuesday, December 3 | 6–9PM PST

Mayfair Supper Club, Bellagio

3600 S Las Vegas Blvd., Las Vegas, NV 89109



Thank you!

Keith Ramsdell

Principal Product Manager

LinkedIn:



Please complete the session survey in the mobile app

Jack Hutton

Principal Product Manager

LinkedIn:

