



Building AI and ML powered applications without machine learning expertise

Walker Williams

Solutions Architect

AWS

At **AWS**, our goal is to put **machine learning**
in the hands of **business teams**





**Enhance
customer
experience**



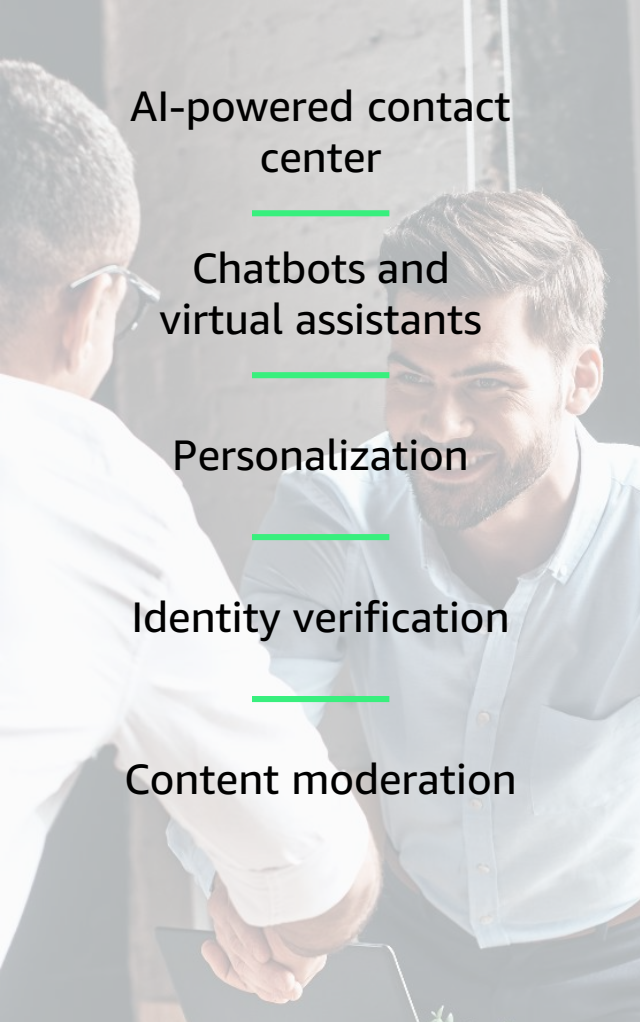
**Augment human
ingenuity**



**Improve business
operations**



**New products
and services**




AI-powered contact
center

Chatbots and
virtual assistants

Personalization

Identity verification

Content moderation



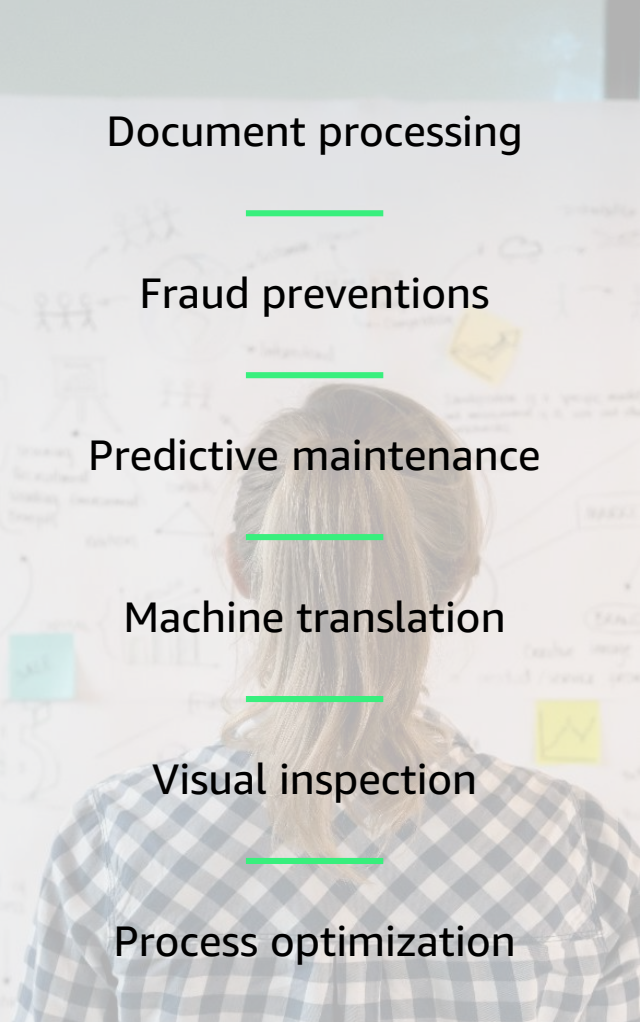
Employee assistants

Content generation

Forecasting

Code generation

Report generation



Document processing

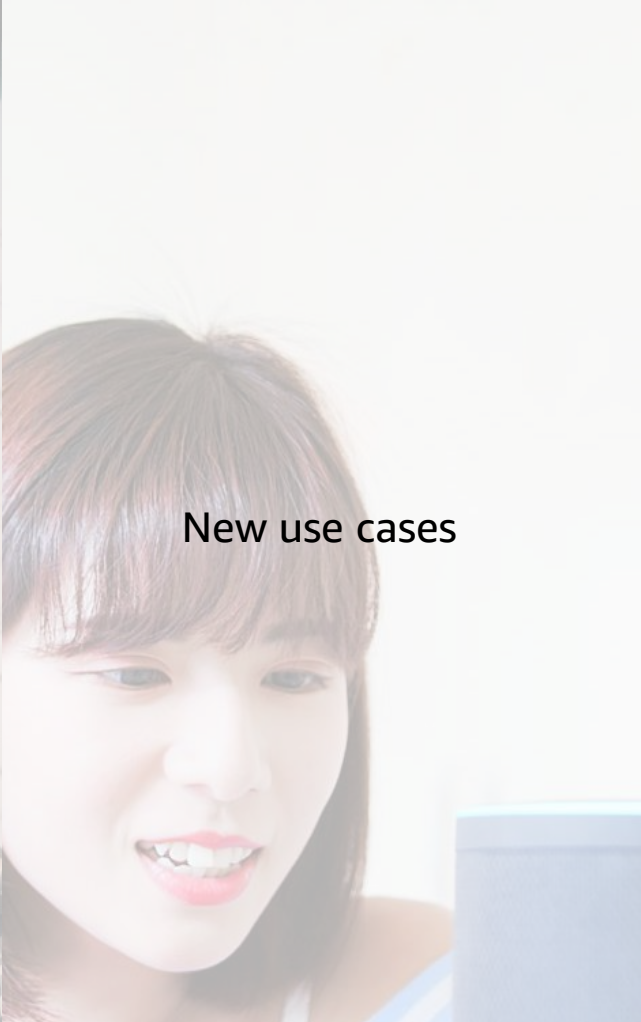
Fraud preventions

Predictive maintenance

Machine translation

Visual inspection

Process optimization



New use cases

**Enhance
customer
experience**

**Augment human
ingenuity**

**Improve business
operations**

**New products
and services**

Low-code/ No-code AWS AI/ML Services

EASILY ADD INTELLIGENCE TO YOUR BUSINESS APPLICATIONS

AI SERVICES

SPECIALIZED

BUSINESS PROCESSES

Amazon Personalize

Amazon Forecast

SEARCH

Amazon Kendra

CONVERSATION

Amazon Lex

Moderation

Amazon Augmented AI

CORE

TEXT

Amazon Translate

Amazon Comprehend

SPEECH

Amazon Polly

Amazon Transcribe

VISION

Amazon Textract

Amazon Rekognition

AWS Panorama

ML Services

AMAZON SAGEMAKER CANVAS

No-code ML for business analysts

Generative AI

AMAZON

Bedrock Studio

Build Gen AI applications faster and more securely

Amazon Q

A gen AI-powered assistant

Amazon Q Business

Amazon Q Developer

Amazon Q in QuickSight

Amazon Q in Connect

AI Enhanced Services

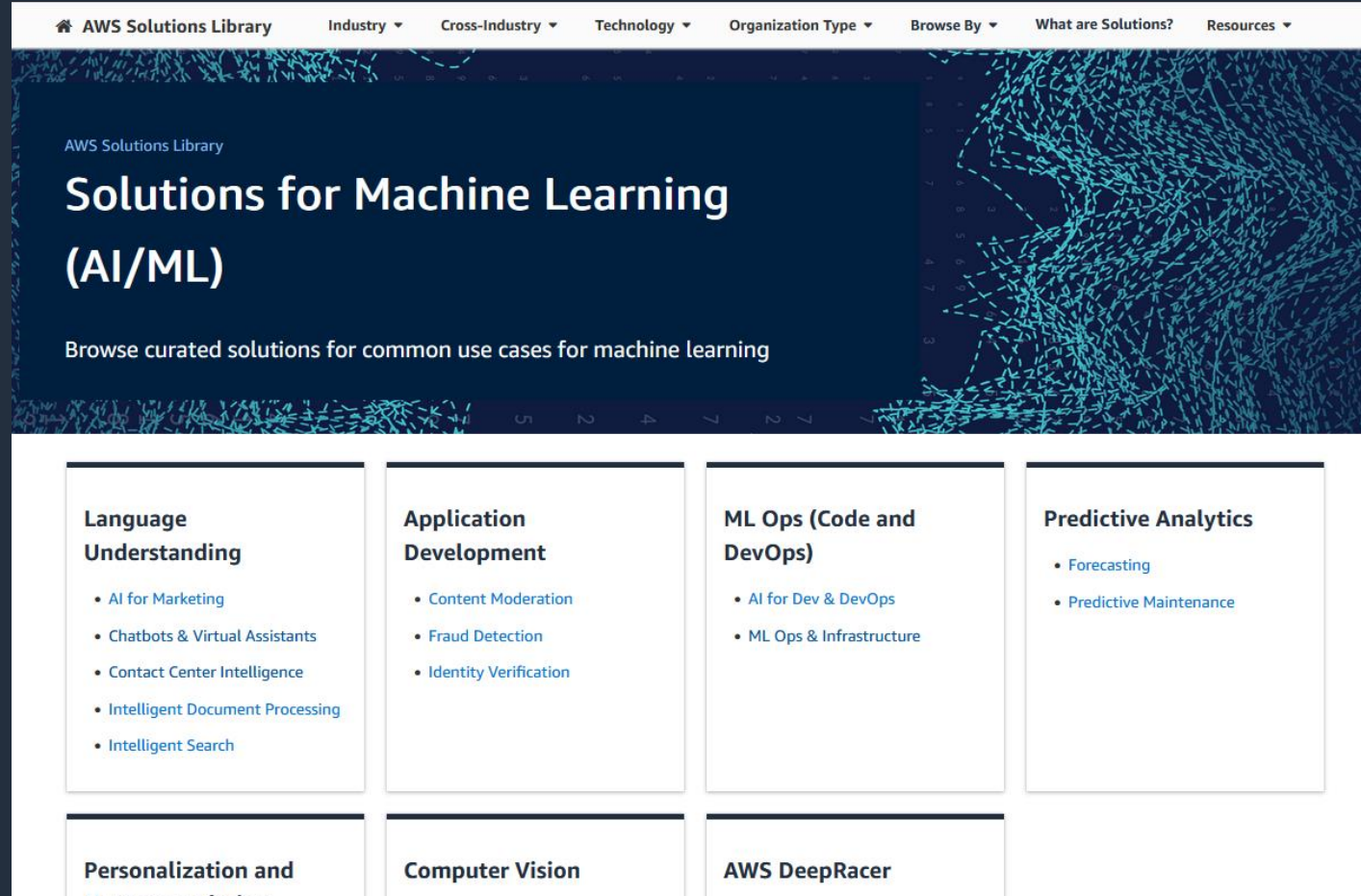
AMAZON CONNECT

AI Enhanced Contact center



Example use cases with AI Services

AWS AI/ML Solutions Library - Solutions



The screenshot shows the AWS Solutions Library website. The header includes navigation links: AWS Solutions Library, Industry, Cross-Industry, Technology, Organization Type, Browse By, What are Solutions?, and Resources. The main heading is "Solutions for Machine Learning (AI/ML)" with a subtext "Browse curated solutions for common use cases for machine learning". Below this, there are four columns of solution categories:

- Language Understanding**
 - AI for Marketing
 - Chatbots & Virtual Assistants
 - Contact Center Intelligence
 - Intelligent Document Processing
 - Intelligent Search
- Application Development**
 - Content Moderation
 - Fraud Detection
 - Identity Verification
- ML Ops (Code and DevOps)**
 - AI for Dev & DevOps
 - ML Ops & Infrastructure
- Predictive Analytics**
 - Forecasting
 - Predictive Maintenance

Below these columns, the following categories are partially visible:

- Personalization and Recommendation
- Computer Vision
- AWS DeepRacer

aws.amazon.com/solutions/ai-ml/



Conversational AI

- Voice and text-based interfaces to enhance end user experience and increase customer satisfaction

Use case categories

- Self-service bots
- Virtual agents and assistants
- Transactional bots
- Proactive help based on usage behavior

Benefits

- Enable new ways of engagement
- Increase customer satisfaction
- Reduce operational costs
- Streamline business processes

Underlying AI services



Amazon
Lex
Conversational AI



Amazon
Polly
Text to speech



Amazon
Kendra
Intelligent
Search



Amazon
Comprehend
Natural language
processing



Amazon
Translate
Machine
translation

Solution

QnABot on AWS



Intelligent search

- Get the most out of your data with Intelligent Search

Use case categories

- Improve customer interactions
- Accelerate research and development
- Minimize regulatory & compliance risks
- Equip employees with the data they need

Benefits

- Find answers faster across unstructured content
- Boost workforce productivity
- Enhance customer experiences
- Centralize access to knowledge

Underlying AI services



Amazon
Kendra
Intelligent
Search

Content moderation

- Create safe online environments, protect your brand, and minimize moderation costs

Use case category

- Gaming
- Social media
- E-commerce
- Advertising

Benefits

- Improve safety for users and brands
- Streamline content moderation operations
- Increase reliability and lower costs

Underlying AI services



Amazon
Augmented AI
Procedural
Human Review



Amazon
Rekognition
AI Computer
Vision



Amazon
Transcribe
Speech to text



Amazon
Comprehend
Natural language
processing



Amazon
Translate
Machine
translation

Guidance

[Guidance for Content Moderation on AWS](#)



Identity verification

- Enable secure and compliant digital experiences

Use case category

- Customer onboarding & verification
- Online proctoring
- Gig economy verification
- Event & airport check-ins
- Use challenges

Benefits

- Reduce onboarding friction
- Reduce fraud
- Lower costs and overheads

Underlying AI services



Amazon
Rekognition
AI Computer
Vision



Amazon
Textract
Intelligent Text
Extraction

Guidance

[Guidance for Identity Verification](#)



C-SPAN

Scaling video indexing

C-SPAN uses **Amazon Rekognition** to automatically index video news footage for search. With Rekognition, C-SPAN reduced indexing time per video from 1 hour to 20 minutes and uploaded 97,000 images in under 2 hours.

Personalization

- Generate personalized recommendations to increase customer engagement

Use case categories

- Deliver unique homepage experiences
- Help customers discover products faster
- Target customers more accurately
- Highlight new products, content, and promotion offerings

Benefits

- Implement a personalization engine in days, not months—no ML expertise required
- Adapt recommendations in real time
- Increase engagement and revenue through relevancy

AI services



Amazon
Personalize
AI personalization

ML Services



Amazon
SageMaker

Solution

Maintaining Personalized
Experiences
with Machine Learning

Solution

Personalized
recommendations



Intelligent document processing

- Make faster decisions by automatically extracting and analyzing data from documents

Use case categories

- Insurance forms text extraction
- Mortgage applications data extraction
- Medical forms processing
- Financial

Benefits

- Higher accuracy of data
- Faster data processing
- Improve employee productivity
- Cost savings

AI services



Amazon
Comprehend
Natural language
processing



Amazon
Textract
Intelligent Text
Extraction



Amazon
Augmented AI
Procedural
Human Review

Solution

Document understanding solution

Solution

Extract and analyze
data from documents



Forecasting

- Forecast inventory, product demand, financial metrics, and workforce staffing

Use case category

- Retail inventory forecasting
- Supply chain demand planning
- Revenue and financial metrics forecasting
- Workforce planning and staffing

Benefits

- Grow retail sales through fewer stockouts
- Lower costs by reducing wasted inventory
- Increase profitability through improved product allocation
- Optimize workforce productivity & staffing

AI Services



Amazon
Forecast

Guidance

Improving Forecast
Accuracy with ML

Solution

Demand
Forecasting

Amazon SageMaker Canvas

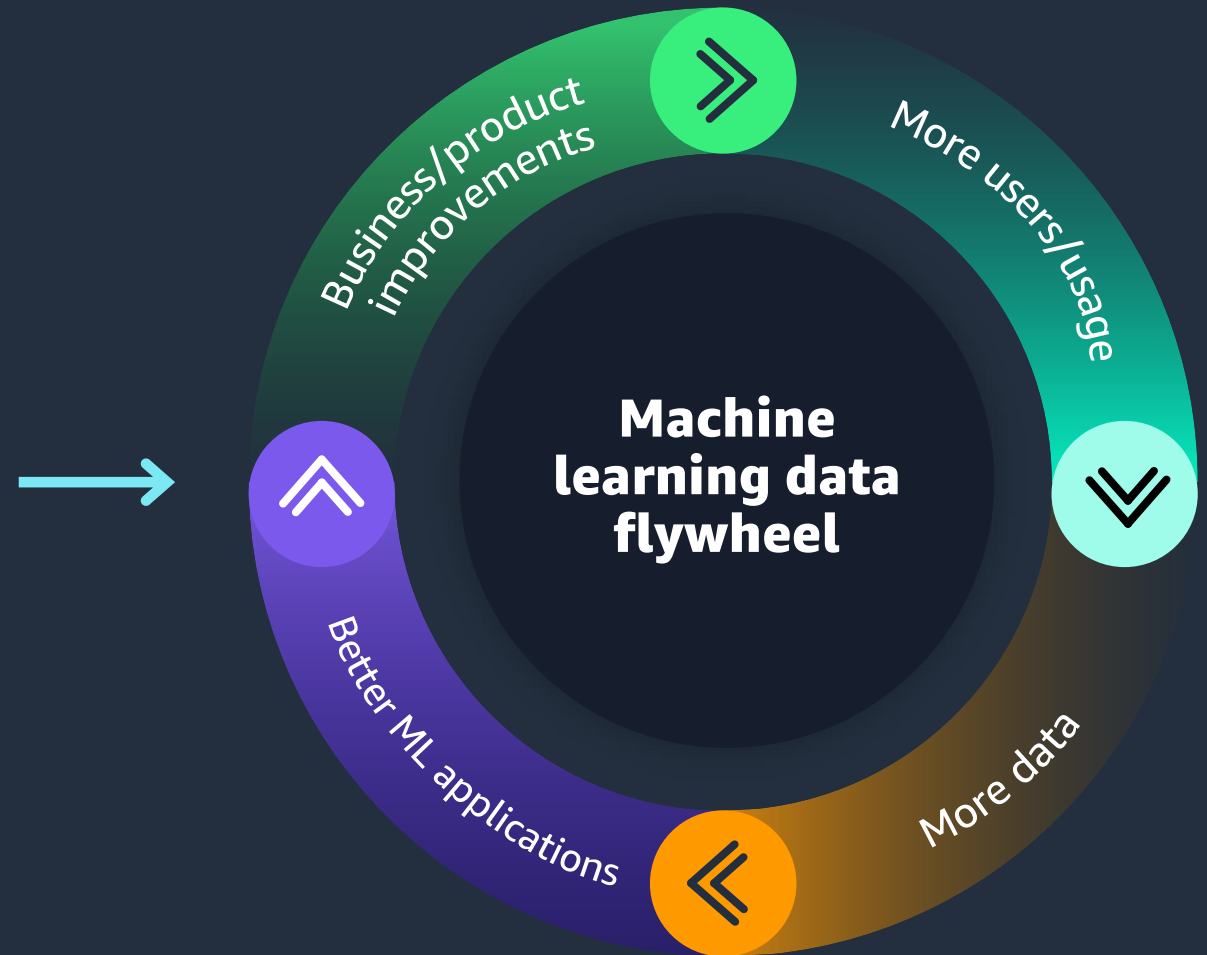


Building Practical ML Applications is hard

The bottleneck

BUILDING BETTER ML APPLICATIONS CAN BE THE BOTTLENECK BECAUSE:

- Line of business teams depend on data science teams to make ML powered decisions
- Data science teams are oversubscribed, while ML needs are only increasing
- High learning curve for technical users to learn how to code
- Friction points in the machine learning journey and prioritizing use cases



Amazon SageMaker Canvas

No-code workspace for
business teams to **build,**
customize, and deploy
ML and Generative AI models



Use ready-to-use models
Pretrained ML models including
Foundation Models



Build custom models
Prepare data, build custom models,
train and deploy models



Collaboration with ML experts
Interoperate with other tools

Ready-to-use ML models powered by **AWS AI Services**

- Foundation Models
- Intelligent document processing
- Natural Language processing
- Computer Vision

The screenshot displays the AWS AI Services console interface. At the top, there is a search bar labeled 'Search use case' and a link 'Can't find the right model? Create a custom model'. Below this, the 'Generative AI-powered foundation models' section is highlighted, featuring a card for 'Generate, extract and summarize content' powered by Amazon Bedrock. The 'Additional ready-to-use models' section follows, with a filter for 'Text' selected. This section contains ten cards arranged in two columns: 'Document queries', 'Document analysis', 'Sentiment analysis', 'Language detection', 'Object detection in images', 'Identity document analysis', 'Expense analysis', 'Entities extraction', 'Personal information detection', and 'Text detection in images'. Each card includes a brief description of the model's function and the AWS service it is powered by (Amazon Textract, Amazon Comprehend, or Amazon Rekognition).

Search use case

Can't find the right model? [Create a custom model](#)

Generative AI-powered foundation models

Our content generation models can help you craft engaging narratives, articles, answer questions, and more, tailored to your needs.

Generate, extract and summarize content New

Powered by Amazon Bedrock and publicly available models

Additional ready-to-use models

Our ready-to-use content extraction models can quickly distill insights from text, image, and document data.

Filter by data type: Text Image Document

- Document queries**
Extract information from structured documents such as paystubs, bank statements, W-2s, and mortgage application forms by asking questions using natural language.
Powered by Amazon Textract
- Document analysis**
Analyze documents and forms for relationships among detected text.
Powered by Amazon Textract
- Sentiment analysis**
Detect sentiment in lines of text, which can be positive, negative, neutral, or mixed.
Powered by Amazon Comprehend
- Language detection**
Determine the dominant language in text such as English, French or German.
Powered by Amazon Comprehend
- Object detection in images**
Detect objects, concepts, scenes, and actions in your images.
Powered by Amazon Rekognition
- Identity document analysis**
Extract information from passports, driver licenses, and other identity documentation issued by the US Government.
Powered by Amazon Textract
- Expense analysis**
Extract information from invoices and receipts, such as date, number, item prices, total amount, and payment terms.
Powered by Amazon Textract
- Entities extraction**
Extract entities, which are real-world objects such as people, places, and commercial items, or units such as dates and quantities, from text.
Powered by Amazon Comprehend
- Personal information detection**
Detect personal information that could be used to identify an individual, such as addresses, bank account numbers, and phone numbers, from text.
Powered by Amazon Comprehend
- Text detection in images**
Detect text in your images.
Powered by Amazon Rekognition



Custom Models - Comprehensive ML capabilities

Prepare data, build custom models, train and deploy models

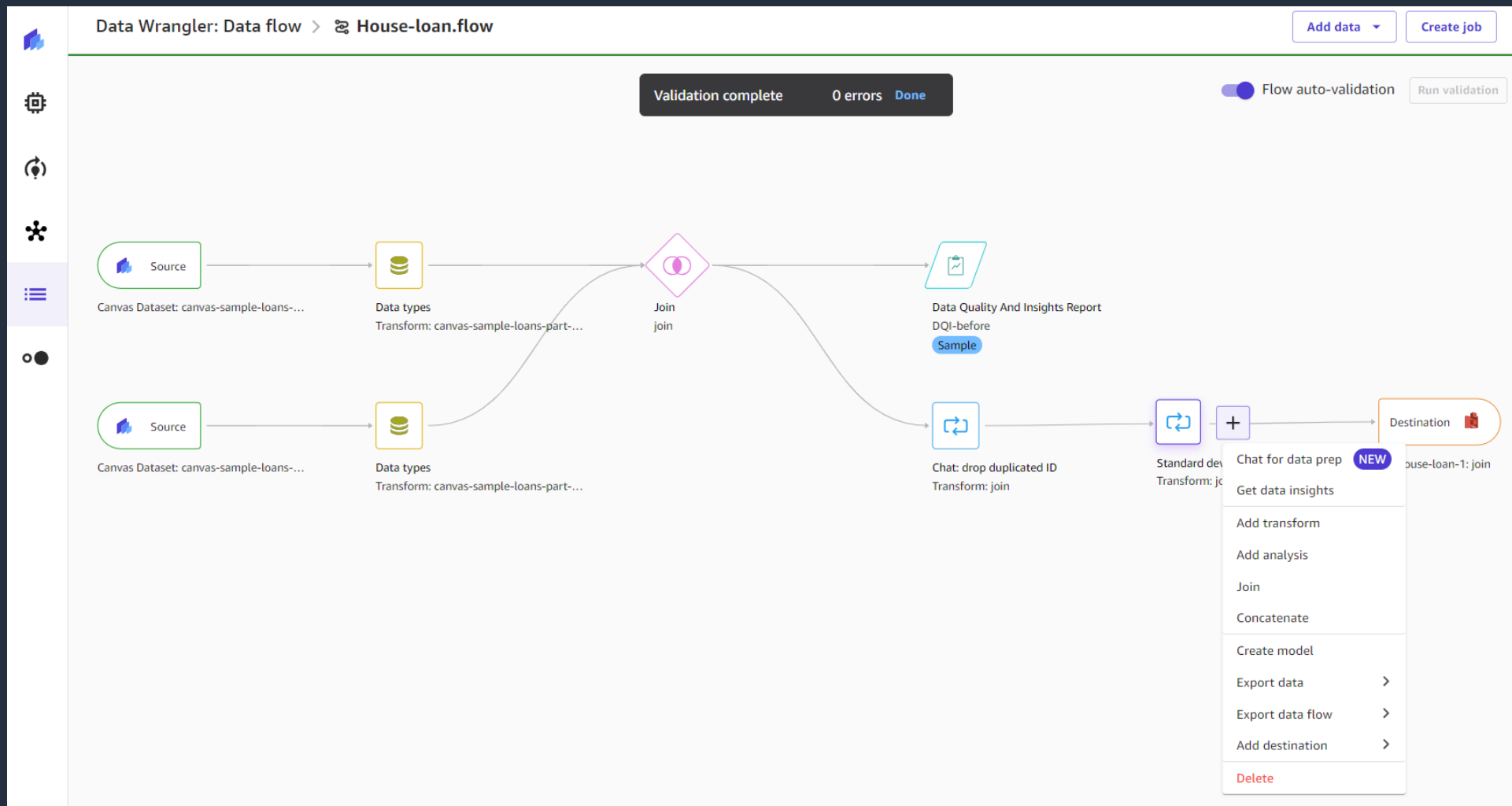
Prepare Data

- 50+ data connectors
- Rich data insights powered by ML
- Built-in visualizations
- 300+ build-in transforms

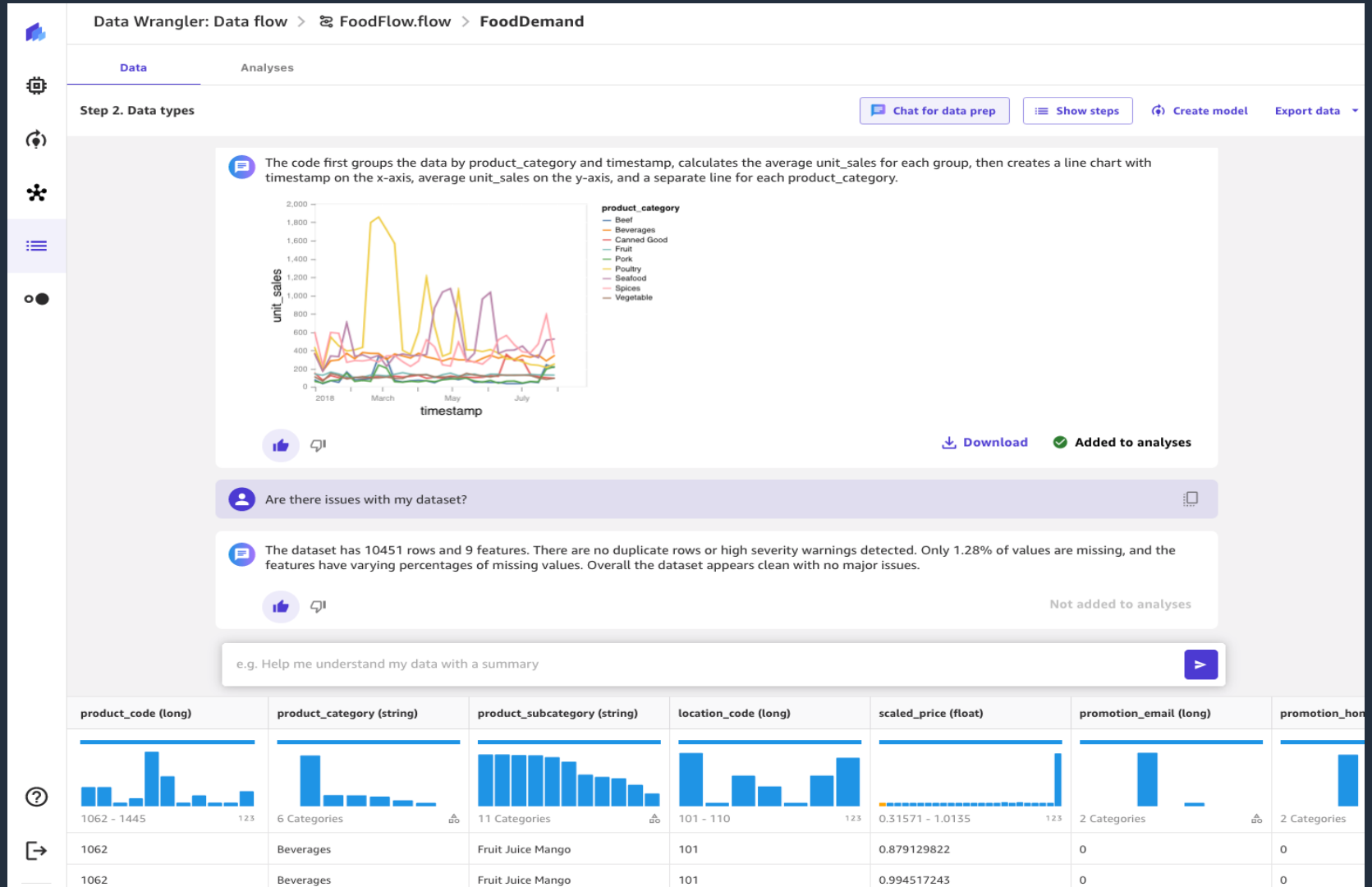
The screenshot displays the AWS SageMaker Canvas interface, which is used for preparing data and building machine learning models. The interface is divided into several sections:

- Data Wrangler: Data flow**: Shows the data source as `canvas-sample-loans-part-1.csv`.
- Data quality and insights report: DQI-before**: A report showing the target column `loan_status`, type `Classification`, dataset, and date (November 20, 2023 at 3:17 PM PST).
- Summary**: A section for building a model, showing the target column `readmitted` and the model type `3+ category prediction`.
- My models / Lab 1 - Churn / Version 2**: A section for building a model, showing the target column `Churn` and the model type `2 category prediction`.
- ChurnData**: A table showing the full dataset (5.0k rows) with columns `Vmail_Plan`, `Vmail_Me...`, `State`, `Phone`, and `Night_Mi`. The table includes a value distribution bar chart for the `Churn` column.
- Add transform**: A section for adding transforms to the data flow, including options like `Manage columns`, `Change data type`, `Custom formula`, `Replace missing values`, `Replace outlier values`, `Manage rows`, `Drop duplicate rows`, and `Drop rows by formula`.

Data Preparation Flow



Data prep using natural language



Build and evaluate custom models

- Choose model type
- Analyze model metrics
- Model leaderboard

The screenshot displays the Amazon SageMaker console interface. A 'Create new model' dialog is open, showing the 'Analyze' tab for a model named 'Customer Churn Version 2'. The model's status is 'Accuracy 97.303%' and 'F1 0.973'. Below this, a 'Model leaderboard' table is visible, listing various models and their performance metrics.

Create new model

My models > Customer Churn > Version 2

Model status

Accuracy 97.303% F1 0.973 Optimization metric

The model predicts the correct Churn 97.303% of the time.

Model leaderboard

	Model name	F1	Accuracy	AUC	Balanced Accuracy	Precision	Recall	Log Loss	Inference latency (s)
1	Night_Calls								
2	Eve_Mins	97.303%	97.303%	0.991	97.303%	97.206%	97.400%	0.200	0.514
3	CustServ_Mins	91.929%	91.808%	0.970	91.810%	90.504%	93.400%	0.251	0.222
4	Eve_Charge	97.114%	97.103%	0.993	97.103%	96.634%	97.600%	0.102	0.119
5	Vmail_Play	94.466%	94.406%	0.986	94.407%	93.359%	95.600%	0.155	0.111
6	Day_Mins	94.466%	94.406%	0.986	94.407%	93.359%	95.600%	0.155	0.107
7	Day_Calls	94.466%	94.406%	0.986	94.407%	93.359%	95.600%	0.155	0.108
8	Night_Mins	97.114%	97.103%	0.993	97.103%	96.634%	97.600%	0.102	0.121
9	Vmail_Mes	97.114%	97.103%	0.993	97.103%	96.634%	97.600%	0.102	0.121
10	Intl_Calls	94.466%	94.406%	0.986	94.407%	93.359%	95.600%	0.155	0.107
	Churn	97.114%	97.103%	0.993	97.103%	96.634%	97.600%	0.102	0.118

Generate highly accurate predictions

- In-app predictions & what-if analysis
- Automate predictions
- One-click model deployment
- Share predictions to Amazon QuickSight

The screenshot displays the AWS SageMaker console interface for a model named 'Customer Churn'. The top navigation bar shows 'My models > Customer Churn > Version 2'. The main content area is divided into tabs: 'Select', 'Build', 'Analyze', 'Predict', and 'Deploy'. The 'Predict' tab is active, showing options for 'Batch prediction' and 'Single prediction'. A modal window titled 'Automate batch prediction' is open, explaining that a new automatic batch prediction job runs whenever the selected dataset is updated. Below this, a 'Churn Prediction' chart shows a bar chart with 'New prediction' (blue) and 'Average prediction' (grey) bars. The chart indicates a 'True' prediction with a value of 70.423%.

Operations: Deployment / canvas-customer-churn-prediction-model

Details		Test deployment	
Deployment name	canvas-customer-churn-prediction-model	Status	✓ In service
Created	10/21/23 09:10 AM	Average predictions per day	--
Instance type	ml.m5.xlarge	Instance count	1
Deployment URL	https://runtime.sagemaker.us-east-1.amazonaws.com/endpoints/canvas-customer-churn-prediction-model/invocations		
View sample code			
Deployment type	Real-time	Last prediction	--
Inference response content	predicted_label, probability, probabilities, labels	Input format	text/csv

Churn Prediction

True. 70.423%

False. 29.577%

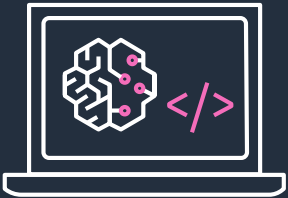
Download prediction

Amazon Bedrock Studio



Bedrock Studio

BUILD GEN AI APPLICATIONS FASTER AND MORE SECURELY



Easy to use playground



Projects based
collaboration



Easy access with
corporate SSO

Start building Gen AI apps in a playground mode

Amazon Bedrock Studio

Explore Build ? a

Model

- Anthropic Claude 3 Sonnet
- Select model
- Ai21 J2 Mid
- Ai21 J2 Ultra
- Amazon Titan Express
- Amazon Titan Lite
- Anthropic Claude 3 Haiku
- Anthropic Claude 3 Sonnet
- Anthropic Claude instant v1

Playground

Quick start prompts

- Rewrite the below email with a professional tone
- Summarize the following text for me
- Simulate a job interview with a candidate

Enter prompt

aws

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Experiment with model configurations

The screenshot displays the Amazon Bedrock Studio interface. At the top, the 'Build' button is highlighted with a red arrow. The main workspace is divided into three sections: 'System prompt & examples', 'Parameters', and 'Preview'. The 'Parameters' section is highlighted with a red rounded rectangle and contains three sliders: 'Temperature' (set to 0.5), 'Top P' (set to 0.5), and 'Top K' (set to 200). The 'Preview' section shows a chat assistant response: 'Hi! I am your developer advocate chat assistant.' Below the preview are 'Quick start prompts' and an 'Enter prompt' input field.

Amazon Bedrock Studio

Project: antje-project

Explore Build

antje-app

Saved

System prompt & examples

System prompt

You are a developer advocate, helping developers build generative AI applications on AWS by answering questions and demonstrating new Amazon Bedrock capabilities.

Examples

+ Add examples

Parameters

Temperature

0.5

Top P

0.5

Top K

200

Preview

Reset

Hi! I am your developer advocate chat assistant.

Quick start prompts

Create a list of 10 blog titles with...

Summarize the following text...

Write a blog post about...

Enter prompt

Securely bring your own data

The screenshot displays the Amazon Bedrock Studio interface. The top navigation bar includes the Amazon Bedrock Studio logo, a project dropdown menu set to 'antje-project', and buttons for 'Explore' and 'Build'. The left sidebar contains a menu with icons for a file, a document, and a data source. The main content area is divided into two panels. The left panel, titled 'antje-app', shows a system prompt, examples, and parameters. The right panel, titled 'Create Knowledge Base', contains a form for creating a new knowledge base. A red arrow points from the 'Data' section in the left sidebar to the 'Create Knowledge Base' dialog. The 'Data' section in the sidebar is highlighted with a red box and contains the following options: 'Use single file only' (unselected), 'Use Knowledge Base' (selected), 'Select Knowledge Base' (dropdown menu showing 'antje-gaia'), and 'Create new Knowledge Base' (button). The 'Create Knowledge Base' dialog includes fields for 'Knowledge Base name' and 'Knowledge Base description', both with placeholder text. It also includes a section for 'Add data sources' with a 'Click to upload' button and a list of supported file formats: .docx, .doc, .pdf, .txt, .md, .html, .csv, .xls, .xlsx. The dialog has 'Cancel' and 'Create' buttons at the bottom.

Amazon Bedrock Studio

Project: antje-project

Explore Build ? a

antje-app

Unsaved changes ⚠

System prompt

You are a developer advocate, helping developers build generative AI applications on AWS by answering questions and demonstrating new Amazon Bedrock capabilities.

Examples

+ Add examples

Parameters

Data

☐ Use single file only

☒ Use Knowledge Base

Select Knowledge Base

antje-gaia

+ Create new Knowledge Base

Guardrails

Guardrails are not available while data sources or functions are applied

Functions ⓘ

UI

Preview

Hi! I am your dev

Create Knowledge Base

Knowledge Base name

Add Knowledge Base name

Valid characters are a-z, A-Z, 0-9, _ (underscore) and - (hyphen). Up to 100 characters

Knowledge Base description

Add Knowledge Base description here

The description can have between 1 and 150 characters.

Add data sources

Click to upload or drag and drop

.docx, .doc, .pdf, .txt, .md, .html, .csv, .xls, .xlsx (max. 50 MB per file, 50 files)

Embeddings model

Cancel Create

Create Guardrails

antje-app

Saved

App name

antje-app

System prompt & examples

System prompt

You are a developer advocate, helping developers build generative AI applications on AWS by answering questions and demonstrating new Amazon Bedrock capabilities.

Examples

+ Add examples

Parameters

Data

Guardrails

Guardrails

None selected

+ Create new guardrail

Preview

Functions

Preview

Hil I am your dev

Quick start pro

Create

Summa

Write a

Enter promp

Create guardrail

Guardrail name

Add guardrail name

Provide a name up to 50 characters. Valid characters are a-z, A-Z, 0-9, _ (underscore) and - (hyphen). No spacing allowed.

Guardrail description

Add guardrail description here

The description can have up to 100 characters.

Content filters

Filter content that violates your usage policies by adjusting the strength of filters that block harmful user prompts and model responses.

Enable content filters

Filters for prompts

Reset

Hate

NoneLowMediumHigh

Use advanced filters

Cancel

Create

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8

Save and share apps

Amazon Bedrock Studio

Project
EduGov Assistant - Project

Explore

Build

?

EduGov Assistant - Project

Delete

Share

This is the project for the EduGov Assistant

Apps (3)

Last updated

Show all

+ Create app

Application 1

Last updated 6 minutes ago

Open

Application 2

Last updated about 2 hours ago

Open

EduGov Assistant

Last updated about 3 hours ago

Open

Components (3)

Last updated

Show all

Type

Show all

+ Create component

servicenow-kb-articles

Knowledge Base . Last updated 3 days ago

Unauthorized-System-Access-Blocker

Guardrail . Last updated 3 days ago

MyTestFunction

Function . Last updated 1 minute ago

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Amazon Q



Amazon Q, a generative AI powered assistant from AWS

AMAZON Q DEVELOPER



AMAZON Q BUSINESS

Embedded

Amazon Q
In Connect

Amazon Q
In QuickSight

Amazon Q in
AWS Supply Chain

Benefits

In-built privacy and security

Customizable to your business

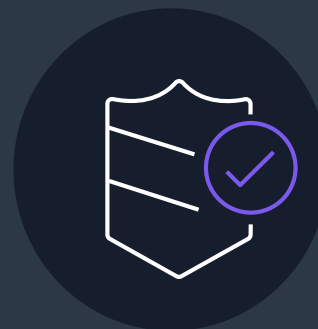


Amazon Q: Secure and private by design

YOUR DATA IS YOUR DIFFERENTIATOR



Respects existing governance
identities, roles, and permissions,
personalizing interactions
accordingly



When you sign up for Amazon Q
Developer Pro or Amazon Q Business,
**we don't use content to improve
underlying models for others**

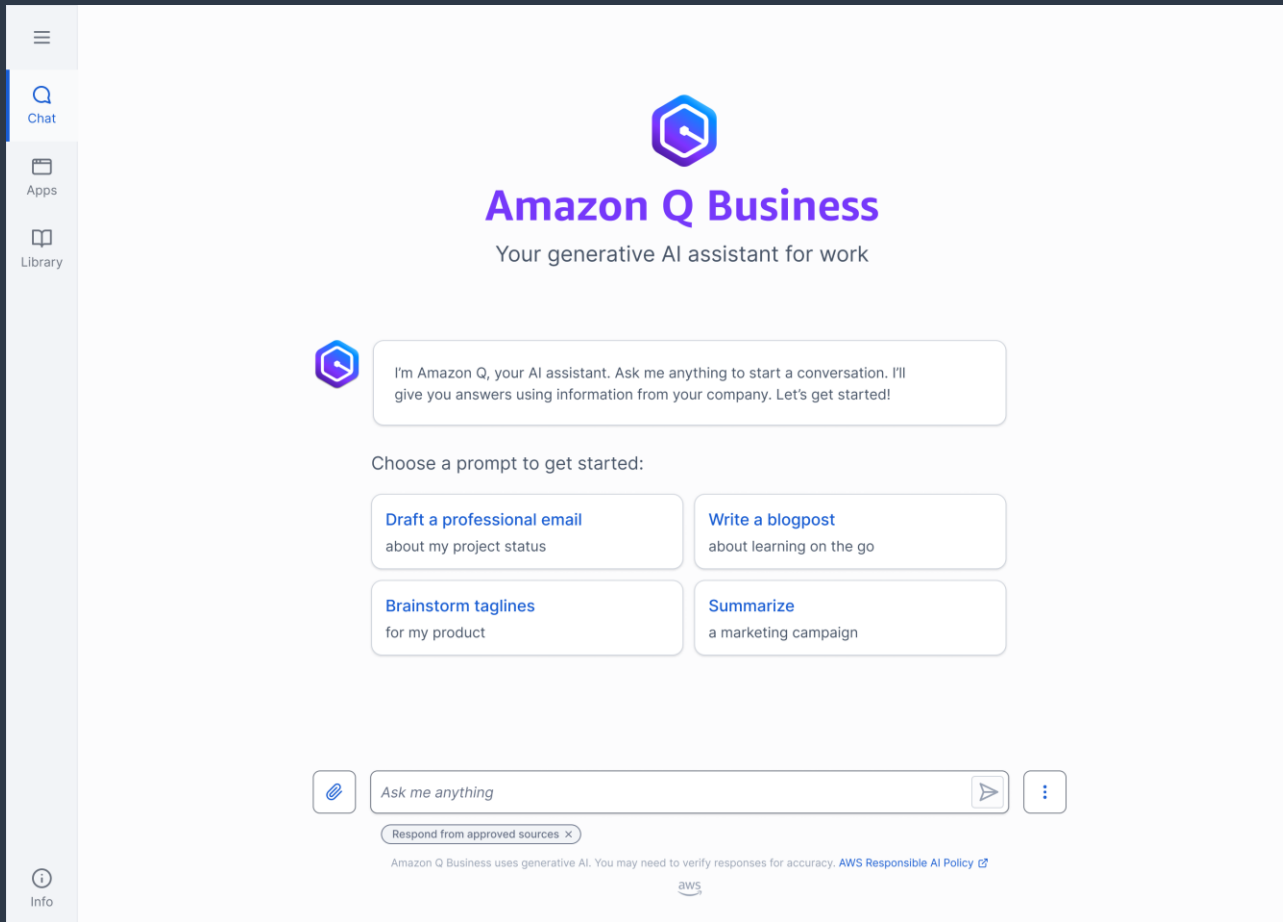
Amazon Q Business

- The generative AI assistant that empowers employees with your organization's knowledge and data



Amazon Q Business Overview

BOOST YOUR WORKFORCE PRODUCTIVITY WITH GENERATIVE AI



Delivers quick, accurate, and relevant answers to your business questions, securely, and privately

Execute actions using out-of-the-box or custom plugins

Respects existing access control based on user permissions

Connects to over 40 popular enterprise applications and document repositories

Enables administrators to easily apply guardrails to customize and control responses

Streamlines daily tasks with user-created lightweight applications



Amazon Q Apps

EASILY BUILD AND SHARE CUSTOMIZED, SECURE, LIGHTWEIGHT APPLICATIONS

The screenshot displays the Amazon Q Apps interface for an application named 'Outreach Assistant'. The interface has a light blue header with a 'Customize' button in the top right. On the left, a sidebar contains icons for 'Chat', 'Apps' (which is highlighted), and 'Library'. The main content area features the app's logo, a title 'Outreach Assistant', and a subtitle 'Generates tailored customer outreach emails'. Below this, there are three text input fields: 'Company' (with placeholder 'Enter company name'), 'Product' (with placeholder 'Enter product name'), and 'Account manager' (with placeholder 'Enter account manger name'). Under the 'Company' field is a file upload section titled 'File upload' with the filename 'Ideal email.docx' and a dashed box for dragging and dropping files, with a note 'Text based files are supported. File size limit is 10MB.' To the right of the file upload is an 'Outlook connector' section titled 'Email message' which shows a status 'Generating as soon as Company, Product, and Account manager are populated'. At the bottom, there is a 'Jira plugin' section titled 'Related Jira stories' and a 'Run' button with a play icon. A status bar at the very bottom indicates 'Generating as soon as Email message is'.

Easily convert an Amazon Q conversation into a lightweight application or describe what you want to build using natural language

Employees can share their applications with other employees or publish them to the organization's catalog for others to use as is, or modify them to their particular needs

Leverages your enterprise data through Amazon Q 40+ connectors

Inherits Amazon Q security and governance controls, including user authentication and access controls

Creating an app

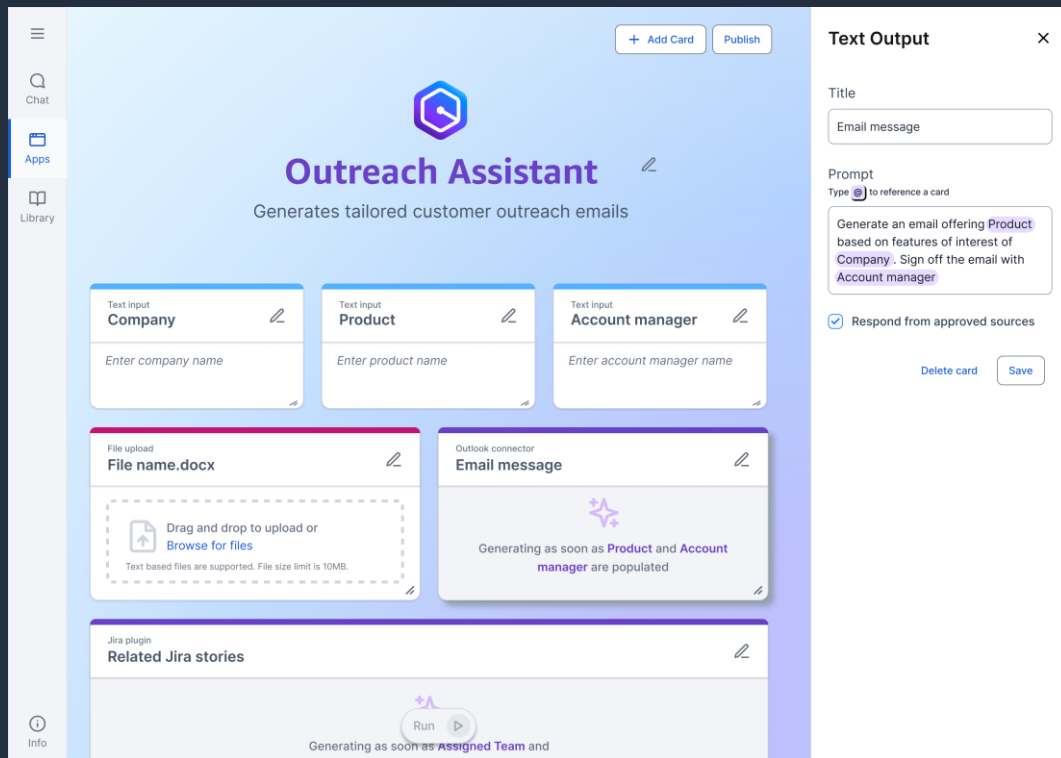
The screenshot shows the Amazon Q Business interface. On the left is a sidebar with 'Chat', 'Apps', and 'Library' icons. The main area is titled 'Amazon Q Business' and features a 'Create Amazon Q App' button in the top right. The chat history shows three messages: 1) A system message about management and supply chain management with a 'Sources' dropdown. 2) A user message: 'Generate an email offering the services they're interested in.' 3) An AI response listing 'Some key benefits of our cloud include:' followed by a bulleted list: 'Cost Savings - Pay only for the resources you use, avoiding overprovisioning. Savings can be up to 60% compared to maintaining your own data centers. [1]' and 'Reliability - Our global infrastructure of secure data centers ensures the highest levels of availability and disaster recovery for your critical workloads. [2]'. Below the list is a prompt: 'Please let me know if you would like a personalized demo on how our cloud can help accelerate your digital transformation. I'm happy to discuss your specific needs and use cases.' with another 'Sources' dropdown and three action icons (thumbs up, thumbs down, share). At the bottom, a purple banner says 'Try turning this conversation into an Amazon Q App! Save time in the future and share with your team. Learn more' with a 'Create Amazon Q App' button. Below the banner is a text input field with the placeholder 'Ask me anything' and a 'Respond from approved sources' toggle.

From a conversation

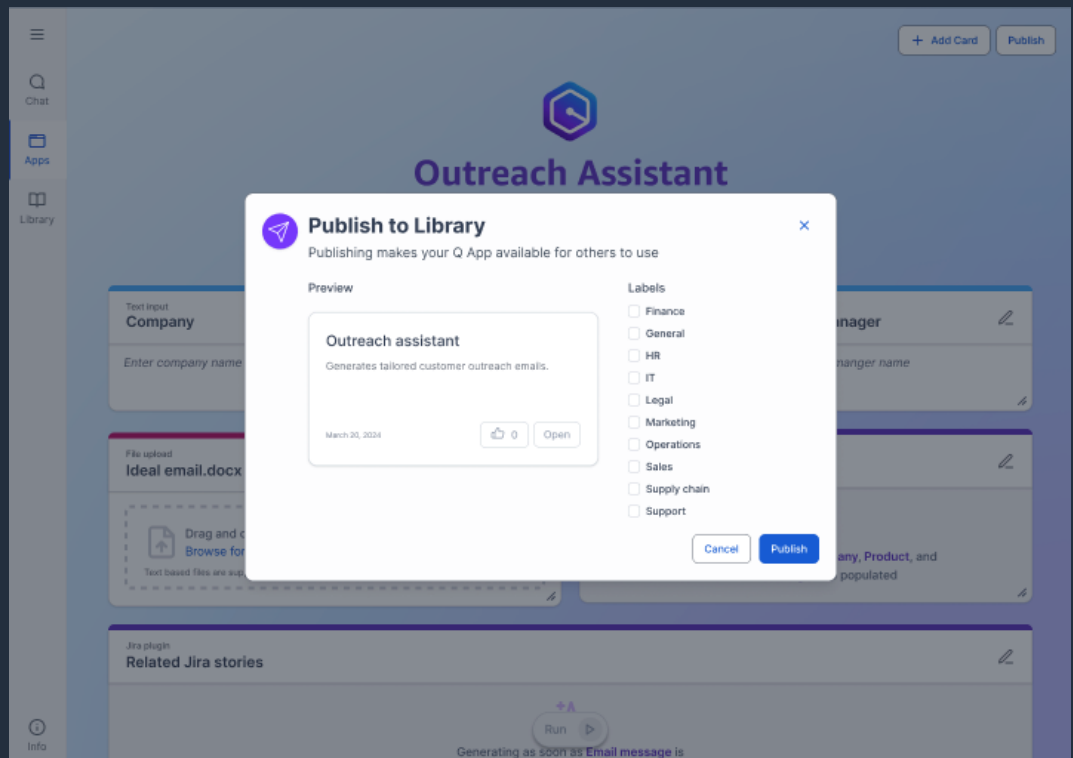
The screenshot shows the Amazon Q App Creator interface. On the left is a sidebar with 'Chat', 'Apps', and 'Library' icons. The main area is titled 'Amazon Q App Creator' with the subtitle 'Your generative AI productivity app generator'. The central part of the screen contains a text input field with the prompt: 'Tired of repetitive tasks? Tell me what you need done and I'll create a custom app tailored for your needs.' Below this is a note: 'You can also use the sparkle icon to turn a conversation in chat into an Amazon Q App. These apps can be reused and shared with your team!'. A second text box contains a detailed prompt: 'You are an expert at writing customer stories for the marketing website. Given a customer name, their business challenge, product used as a solution, and the resulting business impact, you craft a 1000 word customer success story narrative. In this story you cover mission of the customer and structure the story based on past examples.' Below the text boxes is a 'Character count: 0/10000' indicator and two buttons: 'Skip this step' and 'Generate'. At the bottom, a section titled 'Try out an example:' displays four app templates: 'Content Creator' (Crafts targeted marketing content), 'Interview Question Generator' (Forms questions from a job description), 'Meeting Notes Summarizer' (Summarizes discussion and action items), and 'Grammar Corrector' (Corrects grammar, spelling, and tone).

Describing it in natural language

Using, customizing, and publishing the app



Using or customizing the app



Publishing the app in the library


Discovering apps in the library

Chat

Apps

Library

Info



Amazon Q App Library

Get started with a collection of published Q Apps

All Q AppsFinanceGeneralHRITLegalMarketingOperationsSalesSupply chainSupport

Outreach assistant

Generates tailored customer outreach emails

MarketingSales

Published on
March 20, 2024

132

Open

Transformer troubleshooter

References the transformer troubleshooter guide

OperationsSupport

Published on
March 20, 2024

130

Open

Content creator

Crafts targeted marketing content

Marketing

Published on
March 20, 2024

129

Open

HR Assistant

Advises on HR related topics

HRSupport

Published on
March 20, 2024

125

Open

Newsletter Generator

Generates tailored newsletters

GeneralOperations

Published on
March 20, 2024

123

Open

Debugging Assistant

Assists and advises in debugging

IT

Published on
March 20, 2024

122

Open

Task Manager

Prioritizes tasks

Incident Processing Planner

Processes incidents

Promo Doc Assistant

Generates content for promotion documents

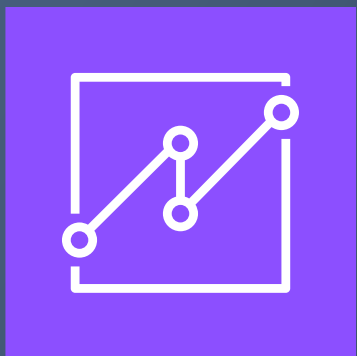
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Amazon Q in QuickSight

A new generative AI assistant for BI



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Amazon QuickSight

UNIFIED BI SERVICE
AT HYPERSCALE



Unified BI for all your analytics needs



Pay-as-you-go pricing



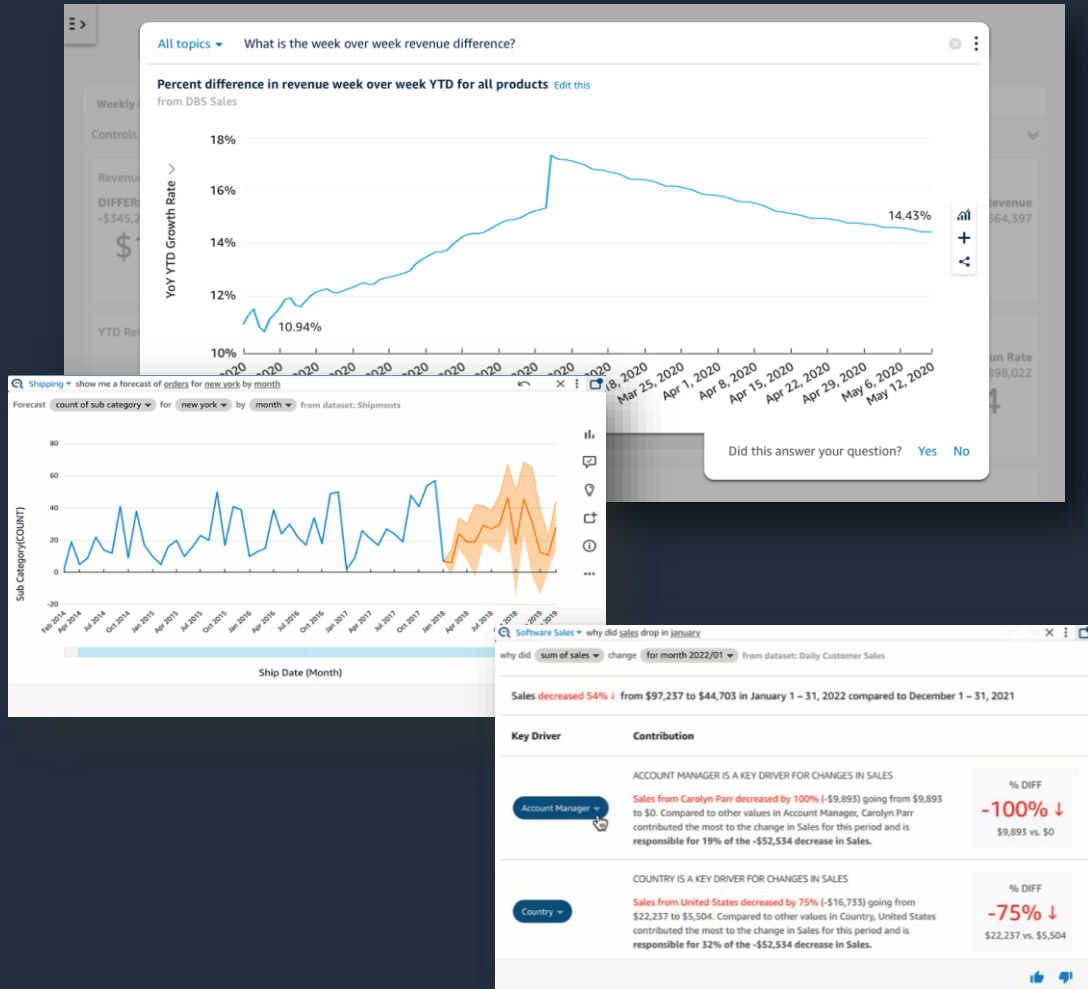
Consistent high performance with auto scaling



Augmented analytics with generative AI capabilities

Foster a data-driven culture with Q

SELF-SERVICE INSIGHTS FOR ANYONE USING ML-POWERED NLQ



- Ask questions in natural language
- ML-models interpret user question and intent to generate visualization
- AI-enhanced automated data preparation accelerates time-to-value

Forecast

- See what's likely to happen
- See future trajectories for up to 3 measures simultaneously

Ask 'Why'?

- Identify key drivers to changes in the data with contribution analysis
- Quantify contribution by each driver



Amazon Q Developer

Reimagine the experience across the entire software development lifecycle



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Build better and more secure software

AMAZON Q DEVELOPER



Amazon Q Developer assists developers and IT professionals with coding, testing, and upgrading applications, to diagnosing errors, performing security scanning and fixes, and optimizing AWS resources. Amazon Q has advanced, multistep planning and reasoning capabilities that can transform and implement new features generated from developer requests, and help build reliable, secure applications, faster



Amazon Q supports developers across the SDLC

Plan

- Amazon Q Developer in Console (best practices, WAF, EC2 instance optimization, etc.)
- Business-specific application
- Explain code via **conversational coding**

Create

- In-line coding companion in IDE and CLI
- Feature development
- **Conversational coding**

Test & secure

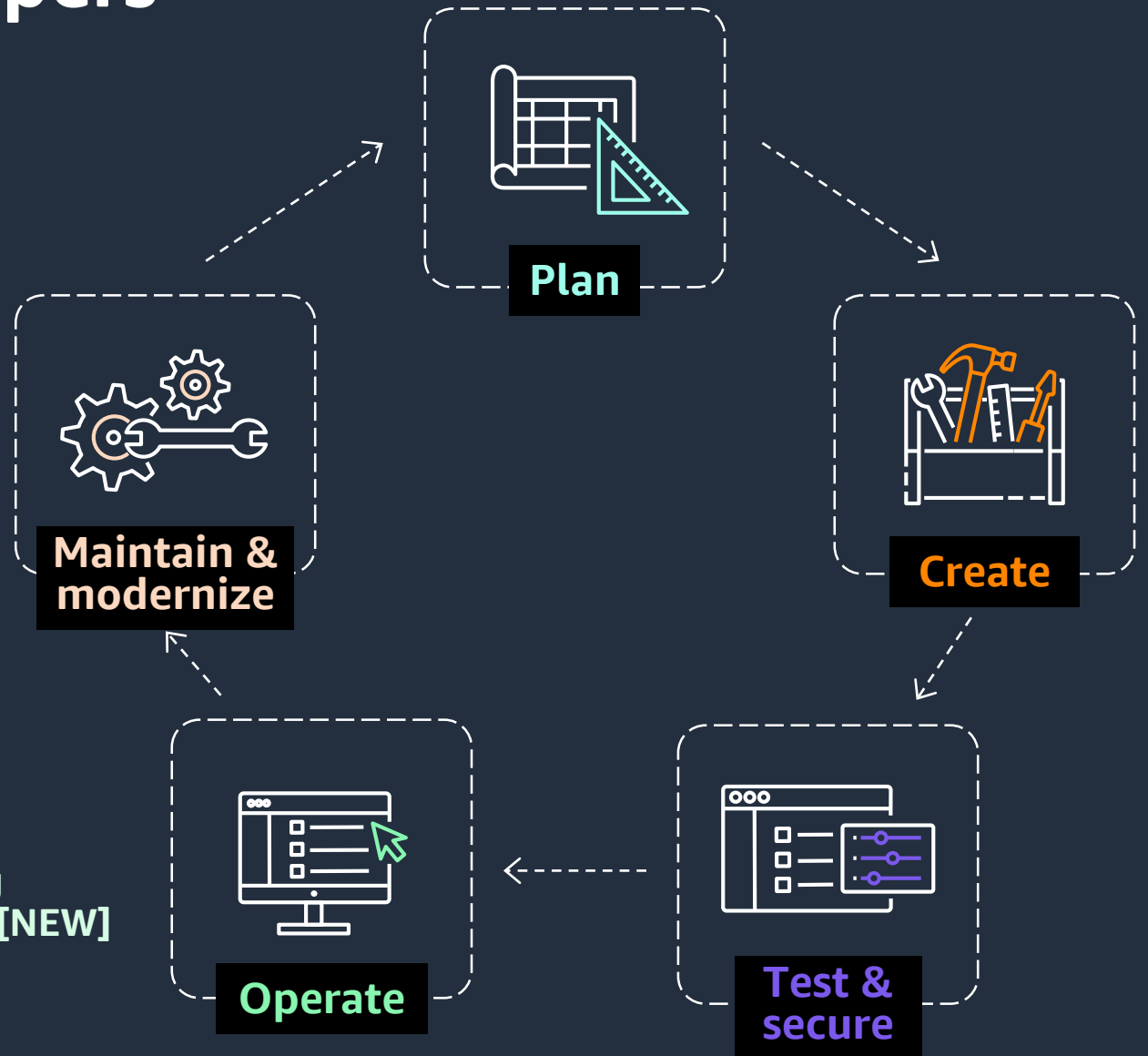
- Unit test generation
- Security scanning & remediation

Operate

- Troubleshoot errors (S3, Lambda, EC2, EKS)
- VPC Reachability Analyzer
- Debug and optimize code via **conversational coding**
- **Helps you optimize your AWS resources and costs [NEW]**

Maintain & modernize

- Update code with Q Code Transformation



Amazon Connect



Generative AI for immediate CX business value



CUSTOMER

Human-like conversations
Generate comprehensive FAQs



AGENT

Generate real-time answers
Personalize every interaction



SUPERVISOR

Accurate, concise summaries
Auto-fill agent evaluations



ADMINISTRATOR

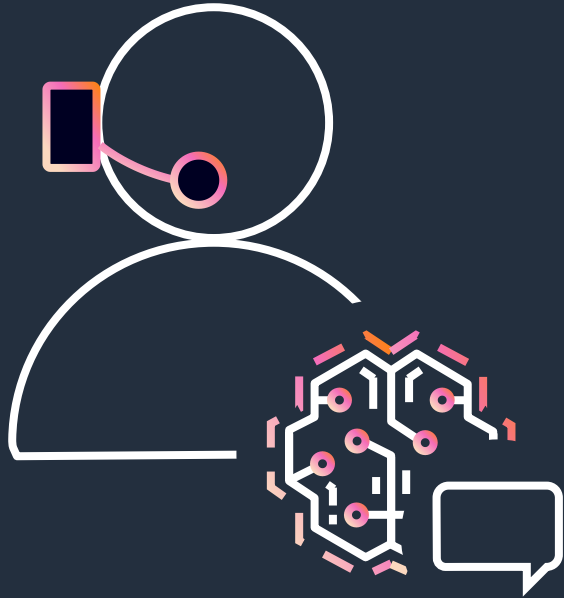
Auto-generated data mapping



Agent assist



Amazon Q in Connect uses generative AI to assist agents with recommended responses and actions



- Generate real-time responses that agents can deliver directly to customers, along with actions to take, based on context from the live conversation and relevant information from your organizations content (e.g., knowledge articles, FAQs, documents)
- Agents can also search across organization content to receive specific recommendations, like actions to take
- Source knowledge articles and documents are displayed so agents can access more detail if needed

Manager assist



Generative AI-powered post-contact summaries

NEW FEATURE IN AMAZON CONNECT CONTACT LENS



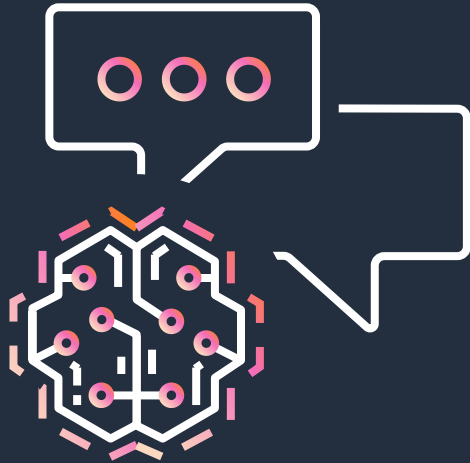
- Concisely summarize important information from customer conversations in a structured, easy-to-read format
- Quickly review customer interactions, understand context, address follow-up tasks, and provide precise feedback to agents without having to read through transcripts or listen to calls

Customer self-service



Generative AI-powered customer self-service experiences

MAKING SELF-SERVICE EXPERIENCES EASIER TO BUILD WITH GENERATIVE AI




- Enhance self-service experiences with conversational question and answer abilities that build on knowledge stores
- Build more effective bots using natural language prompts to describe the use case and automatically generate utterances to improve intent classification accuracy
- Understand more complex customer responses to enable more natural and human-like conversations



AI Use Case Explorer

Easily find the most relevant AI use cases with related content and guidance to make them real

aiexplorer.aws.amazon.com



About AWSContact UsSupportEnglishMy AccountSign InCreate an AWS Account

ProductsSolutionsPricingDocumentationLearnPartner NetworkAWS MarketplaceCustomer EnablementEventsExplore More

AIOverviewProductsLearnCustomersResources

AI Use Case Explorer

Explore the art of the possible in AI across industries and business functions

Get started with generative AIConnect with a specialist

Top generative AI use cases




Improve customer experiences	+
Boost employee productivity	+
Accelerate process optimization	+

Explore AI Use Cases

Clear all filters

Use Case Category

- Customer experience
- Employee productivity
- Process optimization





Explore Main features



Explore use cases

Explore curated list of AI use cases for your organization

100+ use cases and sub use cases



Discover success stories

Discover how organizations across the world are using AI to drive business outcomes

400+ customer success stories



Mobilize your team

Follow our expert-curated action plan to realize the power of AI

50+ resources (ebooks, videos, demos)

aiexplorer.aws.amazon.com



Please Provide Your Feedback



Step 1: Select Artificial intelligence and machine learning

Step 2: Select Build AI and ML powered applications without machine learning expertise



Thank you!

Walker Williams

walkgwil@amazon.com