Deliver high-quality messaging, screen sharing, audio, and video capabilities in your own apps

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Senior Solutions Architect

Amazon Web Services

38.5%

"38.5% of internet users worldwide used their mobile to make a video call in the past month [2nd qtr, 2021]" – Hootsuite, October/21

1.4 million voice or video calls per minute globally

319 billion emails sent globally in 2021

2.2 billion SMS messages sent in 2020 in the US alone

38x⬆

"Telehealth utilization has stabilized at levels 38x higher than before the pandemic"

McKinsey, July/2021

AWS communication developer services empower customers to **build communications-enabled applications and services**

Applications for many industries, use cases

Healthcare | Financial services | Retail | Hospitality | Travel | and more

Build faster

Remote health and fitness

Distance education

Focus groups

Unified communications

Marketing promotions | Order status | Invoices | Password resets
Bulk notifications | Announcements | Scheduling | Appointments | Meetings

Extend your existing apps

Video

Voice

Text/SMS

Email

Mobile in-app placement

Push notifications

Simplify operations

Communication developer services

Amazon Chime SDK

Amazon Pinpoint

Amazon SES

Current AWS customers

slack

NETFLIX

salesforce

reddit

Blackboard

bsmartlabs
GROWING IDEAS

careMonitor

coinbase

CMNTY

GameTime
A PLAYCORE Company

habitnu

High Attendance

hulu

MEDHOST

mindbody

Mitel

PLAYERLYNC™

Amazon Chime SDK

Amazon

Chime SDK

Media services
Media sessions and services to support audio calling, video calling, and screen sharing

Phone integration
Inbound and outbound calling controlled by apps you build in AWS Lambda functions; SIP trunking

Messaging SDK
Highly scalable persistent messaging enabling AI/ML-enhanced workflows

Video enhancement

AMAZON CHIME SDK

Original video frame

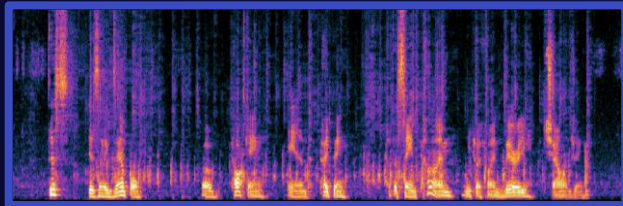Foreground/background probability estimates

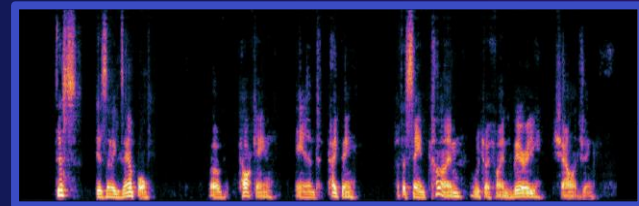Foreground/background decision

Background blur filter output

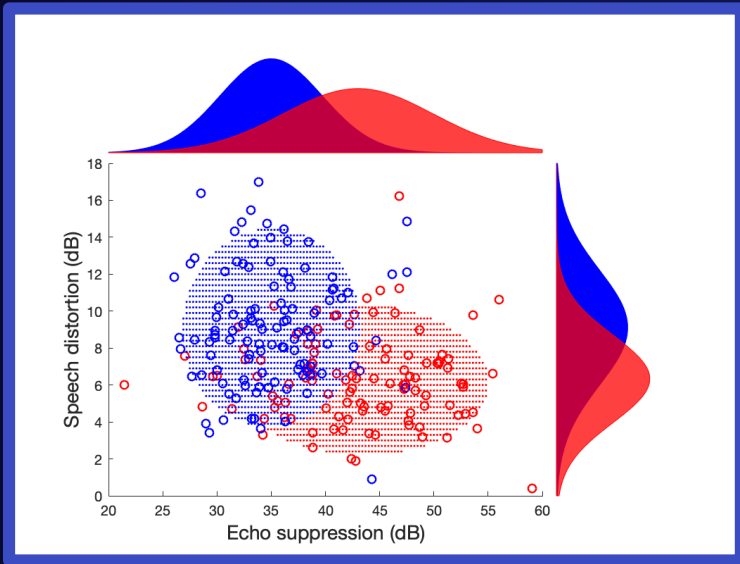# Speech enhancement

AMAZON CHIME SDK

Noisy signal

Cleaner signal

Speech enhancement

AMAZON CHIME SDK

Microphone input:

Noise reduction output:

Personalized voice focus output:

Enhancement set

AMAZON CHIME SDK

Media services

Live transcriptions, media capture, and background blur

Messaging

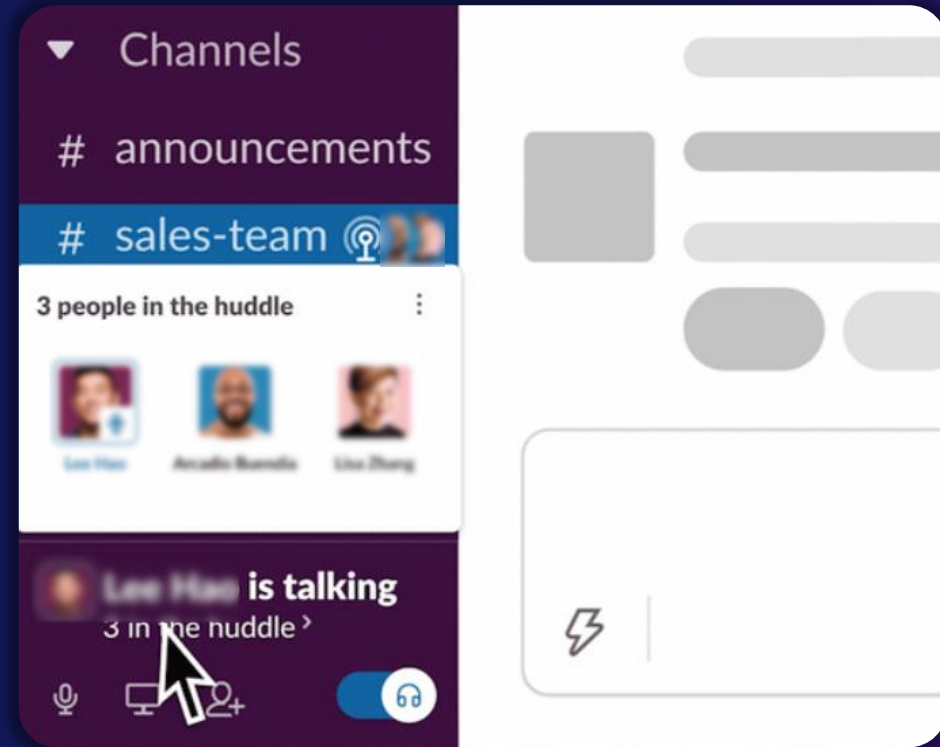Push notifications and channel processors

PSTN audio

International number support, bridging, call recording

Slack

AMAZON CHIME SDK

Slack and Amazon Chime SDK
Live transcription

Amazon Pinpoint

Amazon Pinpoint

Segmentation
Dynamic or static lists

Sending across channels
SMS, email, push, voice

Analytics
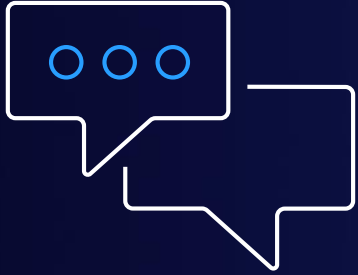Campaign and sending results

Campaigns and journeys
Automate and orchestrate

Personalization
Static or ML attributes

Enhancement set

AMAZON PINPOINT

SMS capabilities

10-digit-long codes, toll-free numbers, sandbox
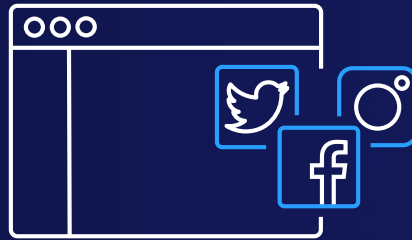
Engagement investments

Journey controls, granular segmentation features

New channels

In-app messaging

Provincial Health Services Authority

AMAZON PINPOINT

Built digital provincial vaccination system in less than 2 months

PHSA and the Ministry of Health were able to lower their costs by over 30%

More than 50 million vaccination-related SMS messages successfully delivered to citizens

Provincial Health Services Authority
Province-wide solutions.
Better health.

Amazon Simple Email Service (Amazon SES)

Amazon SES

Send transactional messages
Keep customers up to date by sending automated emails

Send marketing communications
Promote products by sending content your customers want to see

Send notifications
Keep users informed by sending timely information, reports, alerts

Receive incoming emails
Close the loop by receiving inbound email

Enhancement set

AMAZON SES

Assign configuration sets per email identity

Assign a configuration set to an email identity
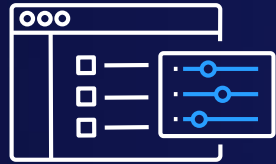
Redesigned service console

New console helps to manage resources, collect activity data, and monitor reputation health

Add attachments of up to 40 MB

Request a limit increase to send/receive emails with a message size of up to 40 MB

Enhanced security with DKIM 2048

Allows senders to sign email messages with a cryptographic key

Netflix

AMAZON SES

"We evaluated several email delivery solutions and decided on Amazon SES because it is flexible, affordable, highly scalable, has global reach, and promises excellent deliverability. Through a combination of the SES Dedicated IP offering and some strategies implemented on our end, after migrating to Amazon SES, we were able to streamline operations, improve Inbox Placement and increase our email sender reputation score."

Devika Chowla
Director of Messaging & Contact Engineering, Netflix

Demo

Under the hood

AMAZON CHIME SDK

AWS Cloud

Doctor initiates a real-time audio and video call

AWS Lambda
Server-side application uses AWS SDK

AWS SDK
Amazon Chime APIs are invoked to create media sessions and manage attendees

Patient interacts with the Doctor from the chat and from the call

Amazon Chime SDK
JavaScript client SDK embedded in customer-side application initiates, controls, and terminates media session

Amazon Chime media services
Media sessions and services are created to support real-time audio, video, and screen sharing

Amazon Chime SDK
JavaScript client SDK embedded in customer-side application initiates, controls, and terminates media session

Messaging SDK

Build quickly with high quality

Moderator controls – built-in moderator controls like kick and ban

Control messages – create typing indicators, message reactions, and more

UI components – React components to accelerate front-end development

Identity – integrate with your existing identity provider; scope access as needed with IAM policies

Public and private channels – allow all users or only specific users to access channels

Edit and redact messages – allow users to edit and redact messages they send

Unread indicators – indicate to users when there are new unread messages in a channel
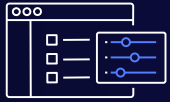
Scale without heavy lifting

Scale – up to 100K members in a channel; unlimited users, channels, and connections

Message export – stream chat data in real-time via Amazon Kinesis for analysis and archival

Retention policies – custom retention policies for anywhere from 1 day to 15 years

Maintain control of data – manage the complete lifecycle of users, channels, and messages

Built-in compliance – compliance built in, including HIPPA eligibility and FedRAMP moderate status

Extend your apps with AWS machine learning

Moderation – moderate text and images with Amazon Comprehend and Amazon Rekognition

Bots – build conversational interfaces powered by Amazon Lex

Search – search chat content using Amazon Kendra or Amazon Elasticsearch Service (Amazon ES)

Attachment processing – process shared files with Amazon Rekognition and Amazon Textract

SIP phone integration

Build quickly with high quality

Efficient development – build apps like IVR, voicemail, and voice notifications with a few lines of code

Serverless – app runs in a serverless AWS Lambda function

Primitives – play audio file, collect digits, record audio, mute/unmute, route calls identity

Interoperability – Works with PSTN and SIP trunking (Amazon Chime Voice Connector)
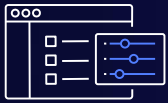
Scale without heavy lifting

Multi-country support – support for phone numbers across 8 countries

Phone number options – Amazon-provided telecom or BYOT

Phone number purchasing – self-service phone number purchasing and porting

Extend your apps with AWS machine learning

Amazon Polly – text-to-speech for IVRs

Amazon Transcribe – transcribes calls

Amazon Comprehend – detects call sentiment

AWS Communication Developer Services

Audio/video

Email

Programmable telephony

Chat and messaging

Transactional | asynchronous | real time

Amazon Chime SDK

Amazon Pinpoint

Amazon SES

Build and host your own **OR** build your own and host with AWS

How to get started

AWS Communication Developer Services
Learn more at https://aws.amazon.com/business-applications/cds/

Amazon Chime SDK
Learn more at
https://aws.amazon.com/chime/chime-sdk

- Sample apps on GitHub
- Multiple use cases
- Explore samples

Amazon Pinpoint
Learn more at
https://aws.amazon.com/pinpoint/

Amazon SES
Learn more at
https://aws.amazon.com/ses

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Access **new** exam guides

Thank you!

Jorge Fonseca

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the session survey