
AWS
re:Invent

AIM212

Create sophisticated conversational experiences using Amazon Lex

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AWS re:Invent

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Agenda

Conversational interfaces

What we've learned

Dropbox approach

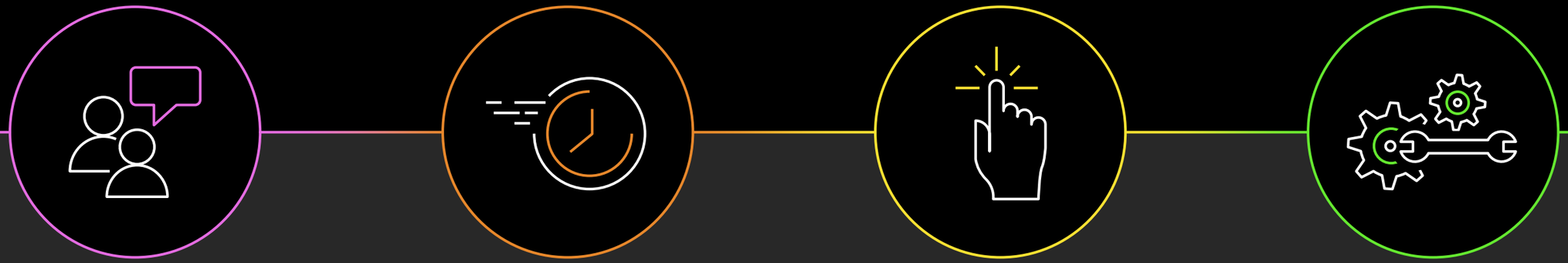
Recap

Next steps



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The need for conversational interfaces



Natural

On demand

Accessible

Efficient

Evolution

Initial



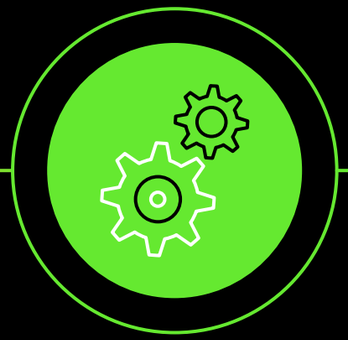
Concepts, innovations, POCs

Intermediate

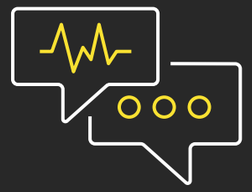


Customers willing to invest

Today



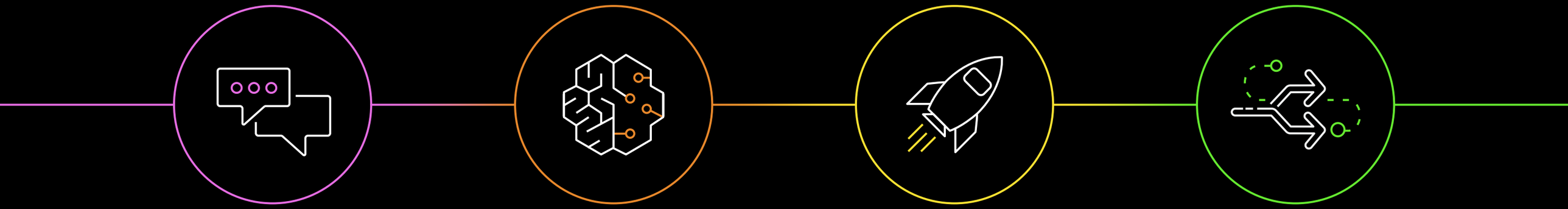
Mainstream use for scale



Voice is efficient; language is natural

Necessary for businesses to scale and provide simplified experience

Amazon Lex



High-**quality** text and speech language understanding

Easy to use – fully managed AI service on AWS platform

Seamlessly **deploy** and scale

Natively **integrate** with AWS services: Amazon Connect, Amazon Kendra, AWS Lambda

A service for building **conversational** interfaces using voice and text

Mission

Quickly and easily build **sophisticated**, natural language conversational interfaces (“chatbots”)

Machine learning

Comprehensive language understanding and speech recognition

Deployment

Integrate with contact centers and channels

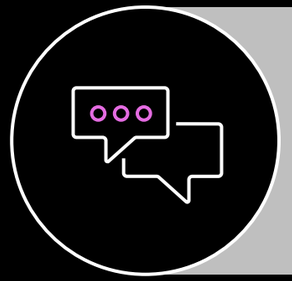
Analytics

Monitor and improve bots continuously

Experience

Simplify the creation and management of bots

Customer needs



Multiple languages

Customers want to deliver the experience to a diverse user base



Multiple channels

Users want to converse through their preferred channels, sometimes concurrently



Builder productivity

Customers want to build, test, and iterate quickly through a self-service interface

Stakeholders



End user

Contact center UX

Speech accuracy

Language understanding



Author

Design flows

Quick iterations

Collaborate

Closest to the user

Copywriter interaction



Developer

Build and deploy

Simplify design

Less code

Technical skill set

Manages code



Operator

Governance

KTLO

Low OPEX

Focus on CI / CD

Hands off



Owner

Analytics

Actionable insights

Investments

Dropbox story



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Dropbox overview

> **To design a more enlightened way of working**

600 million customers

180 countries

450,000 teams

Designing tools for home and work

Drew Houston

Co-founder and CEO



What is CX?

A unique customer experience for users in all segments and through a variety of channels

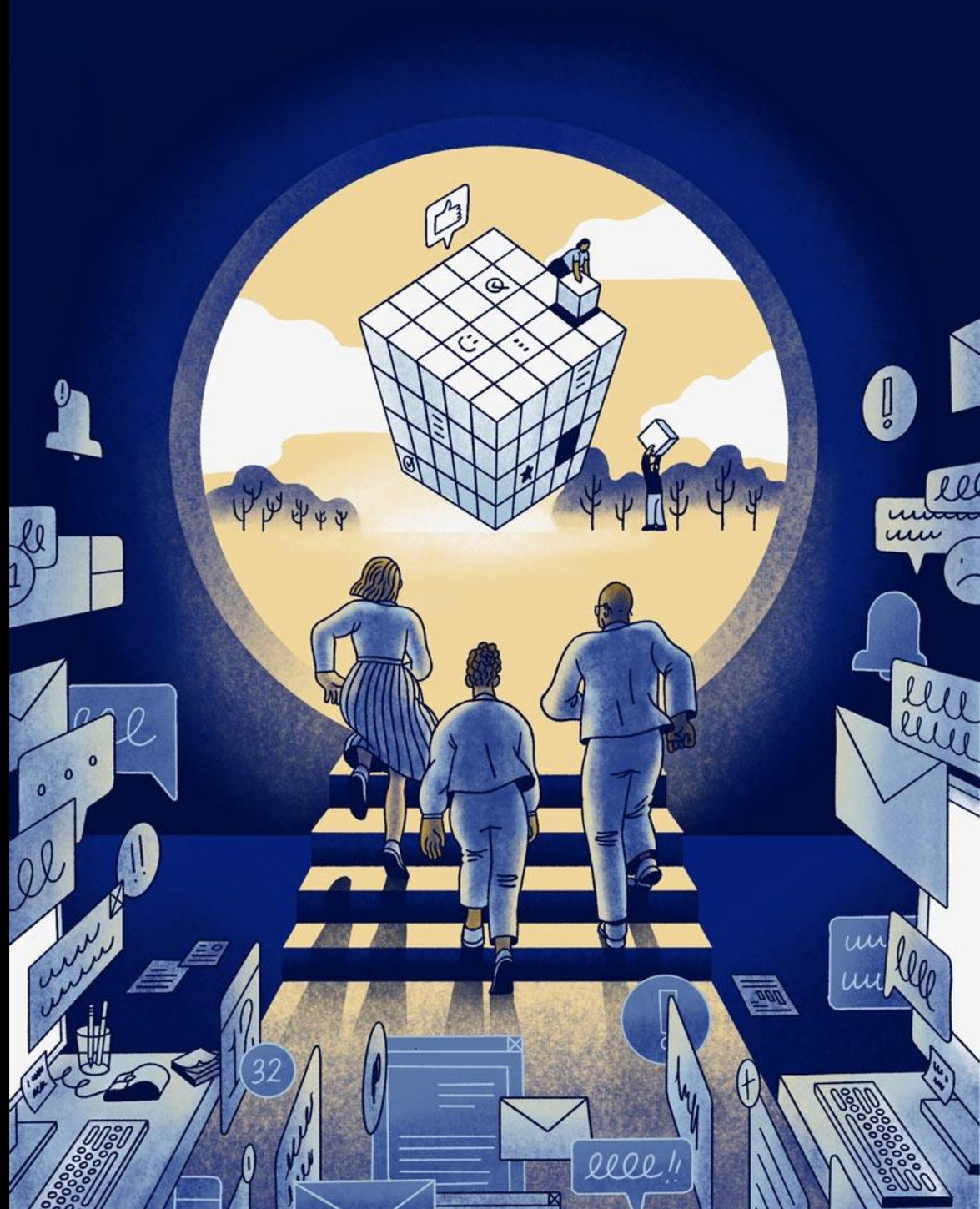
Customer-centricity in both operations and product decisions

Customer intelligence to shape strategy across Dropbox



Opportunity

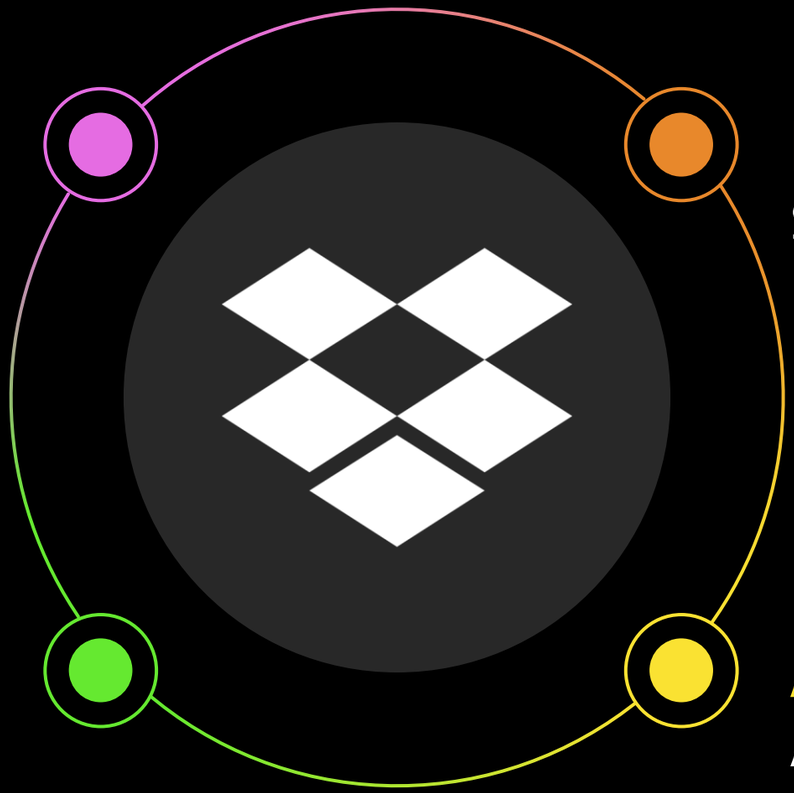
- Create a scaled experience that matches the quality and ease of an agent-supported one
- Develop a bot that focuses on our customers’ needs
- Define a differentiated strategy for each customer segment
- Automate resolution of top customer issues



Building the project team

Content designer
Global support program managers

Bot developers
Software development team



Business owners
Senior leadership team

Analytics
Analytics team

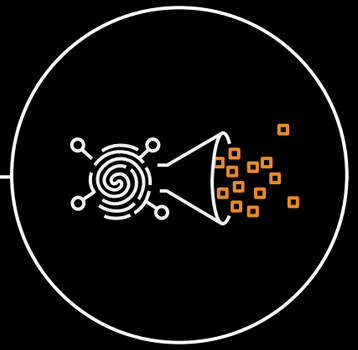
Why we choose Amazon Lex

Product benefits



- Ease of integration with our products and other AWS products
- Security
- Rich feature set

Additional benefits

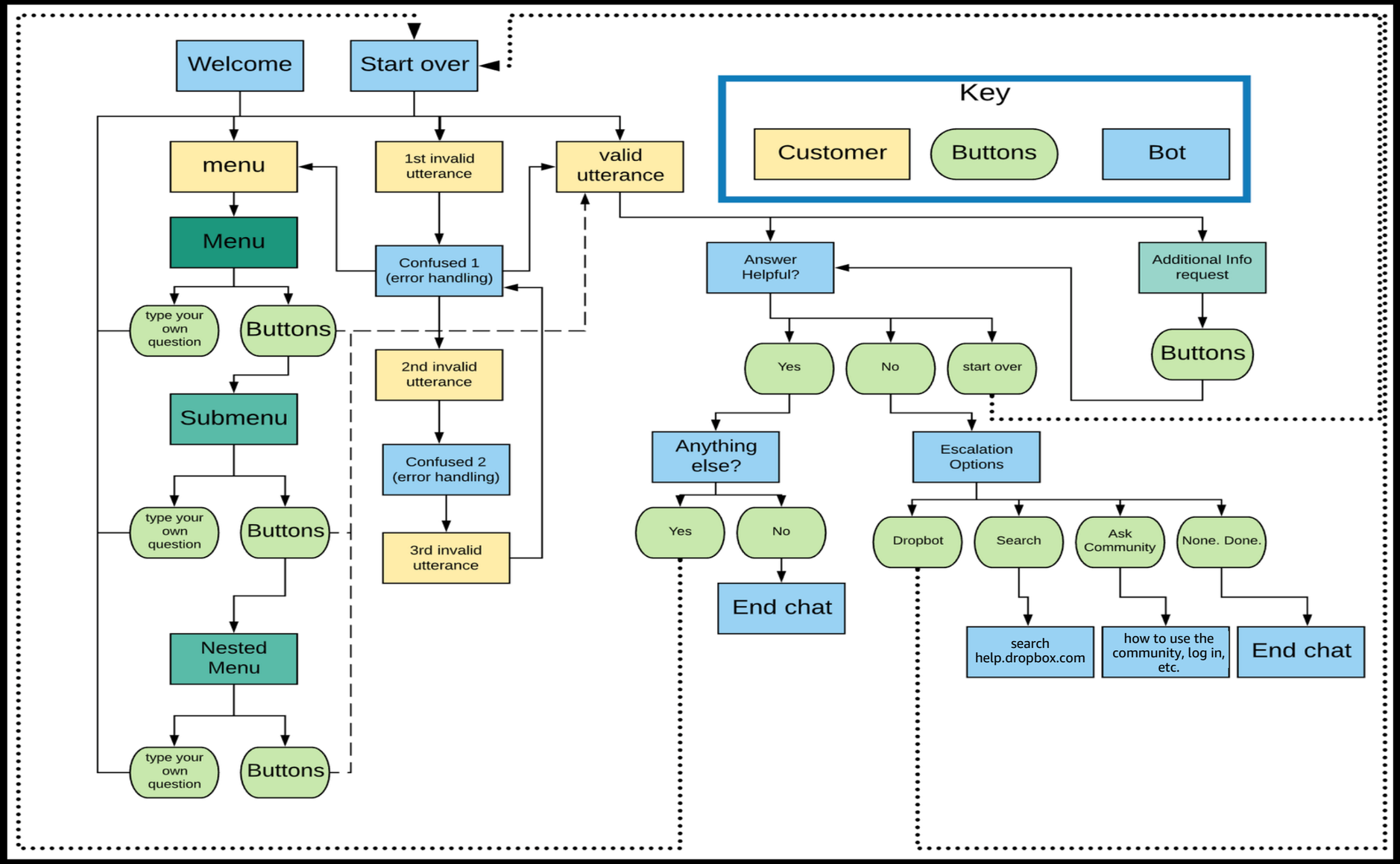


- High level of assistance and support
- Speed to market – MVP delivered earlier than expected
- Ease of testing, publishing, and returning to previous versions

Technical architecture



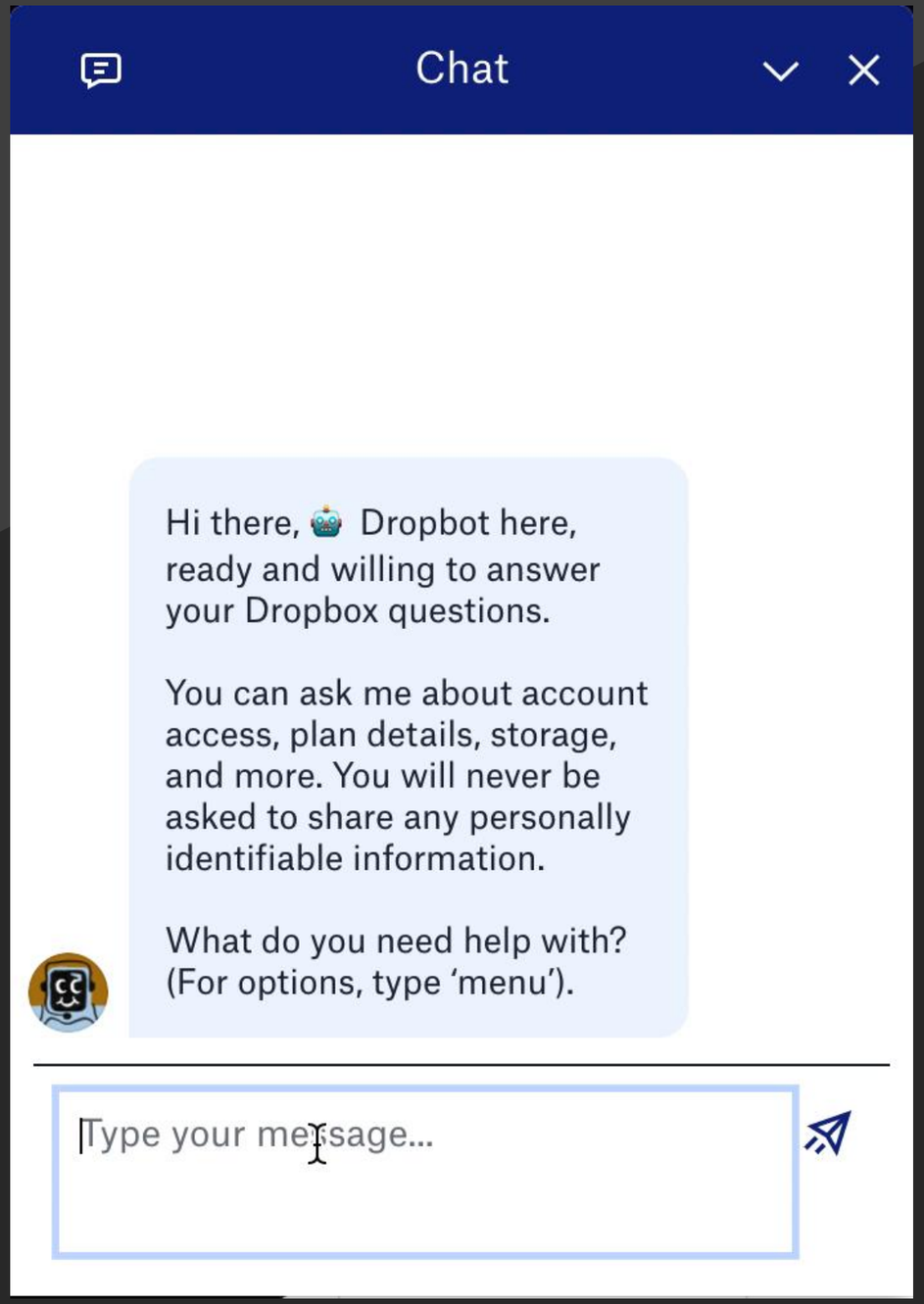
Conversational model



- Initially an FAQ bot
- Continually expanding supported topics
- Open-ended prompts
- Flow architecture

Meet Dropbot

- Usefully intelligent
- Respectfully empathetic
- Happy to help
- Pleasantly expressive



Conversational design best practices

- Style guide
- Language audit
- Conversational model



“Integrating with Amazon Lex aligns with Dropbox’s mission to design a more enlightened way of working by allowing our project team to work asynchronously, focus on what we do best, come together, and deliver our best support experience.”

Amanda Mata

CX Global Support Program Manager
Dropbox



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Quick recap



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Languages

Multiple languages | Support a diverse customer base

- English (US)
- English (AU)
- English (UK)
- Spanish (US)
- Spanish
- French (CA)
- French
- Spanish (LATAM)
- Italian
- German



Language understanding

Simplify the builder experience

Context management

Dynamic context
Default values

Productivity

Confidence scores
Express testing

What were my expenses this month?

$1000

How about last month?



Context is still **expenses**

Language understanding

Simplify the builder experience

Context management

Dynamic context
Default values

Productivity

Confidence scores
Express testing

When is my next payment due?

Is this on your credit card ending in 1234?

Yes



Confidence scores help disambiguate caller intent

Contact center

Improved experience in the contact center

Barge-in support

Ability to interrupt

Adjustable timeouts

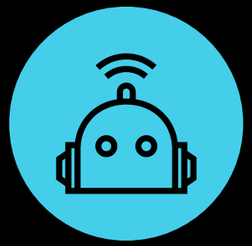
Voice activity, silence timeouts

Caller interrupts the bot prompt (e.g., date of birth)

“My date of birth is Jan. 1, 2000.”

Caller asks the bot to wait while she retrieves info (e.g., credit card number)

“Can you hold a sec? Let me get my wallet. “



How we can help



Solutions architects

- Engage with a solutions architect dedicated to your account
- Brainstorm use cases and get support for solution implementation
- https://aws.amazon.com/contact-us/



ML Solutions Lab

- Identify key areas where machine learning could help you with an AWS AI expert
- Let AWS experts build POCs and custom solutions for your use case



AWS Partner Network

Let certified AWS Partners help you with POCs and build integrations with your current systems to productionize

https://aws.amazon.com/machine-learning/contact-center-intelligence/



Build a bot today!

Click here

https://aws.amazon.com/lex

Thank you!



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