Cygnus - Voice Interaction Model

Intents
- GetStockPrice
- GetNews
- OpenAccount

open cygnus

Skill Initialization

Intent: Get Stock Price

AMAZON.SearchQuery

what is the share/stock price of {stock}

Cygnus

Hi I am cygnus from saxo bank , I would be glad to assist you . You can ask me to look up any stocks , latest finance news or open an account with Saxo bank

Is Action Provided

No

Default Speech response

Sorry, I am unable to understand what you said. For help, ask Cygnus and say you need Help

Yes

Sorry I did not receive any input. Do you need any help ?

Error Speech response

Yes

Is response Provided

No

Again Prompt Speech response

Is Action Handled

No

Yes

was Yes or No said ?

No

Yes

Call Lamda Function

GetStock Price

www.alphavantage.co

GetNews

api.twitter.com @saxobank

Open Account

trading-accounts.herokuapp.com

Help

Service Response

End

It was nice talking to you. Good Bye , Do checkout more about us on www.home.saxo.com

Alexa Invocation Process

Alexa,

Wake Word

ask

Launch word ask,open,start

Cygnus

custom skill

Share price of

Utterance to match the Intent

{ INFY }

Slot Value Custom and built in

SEARCHING WITH VOICE IS 3.7x FASTER THAN TYPING

110-150
Words per min using voice search

38-40
Words per min typing

Faster searchers === faster answers

WHAT ARE THE REASONS YOU USE VOICE COMMANDS?

It's fast	70%
The answer is read back to me	58%
I don't have time to type	56%
It's accurate	30%
It's customised to my personal preference	25%

voices search is more convenient ,
this trend impoves SEO

BY 2020, 30% OF WEB BROWSING WILL BE SCREENLESS

*Gartner   Better NLP are providing hands-free or eyes-free search

PERCENT OF ALL SEARCHES AS VOICE BY 2020

50%
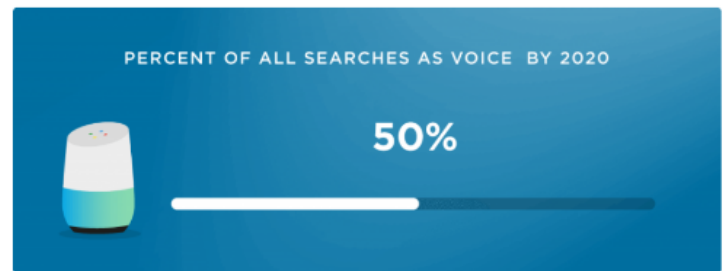
Voice Search Device Stats

Amazon controls 70% of the voice-enabled speaker device market
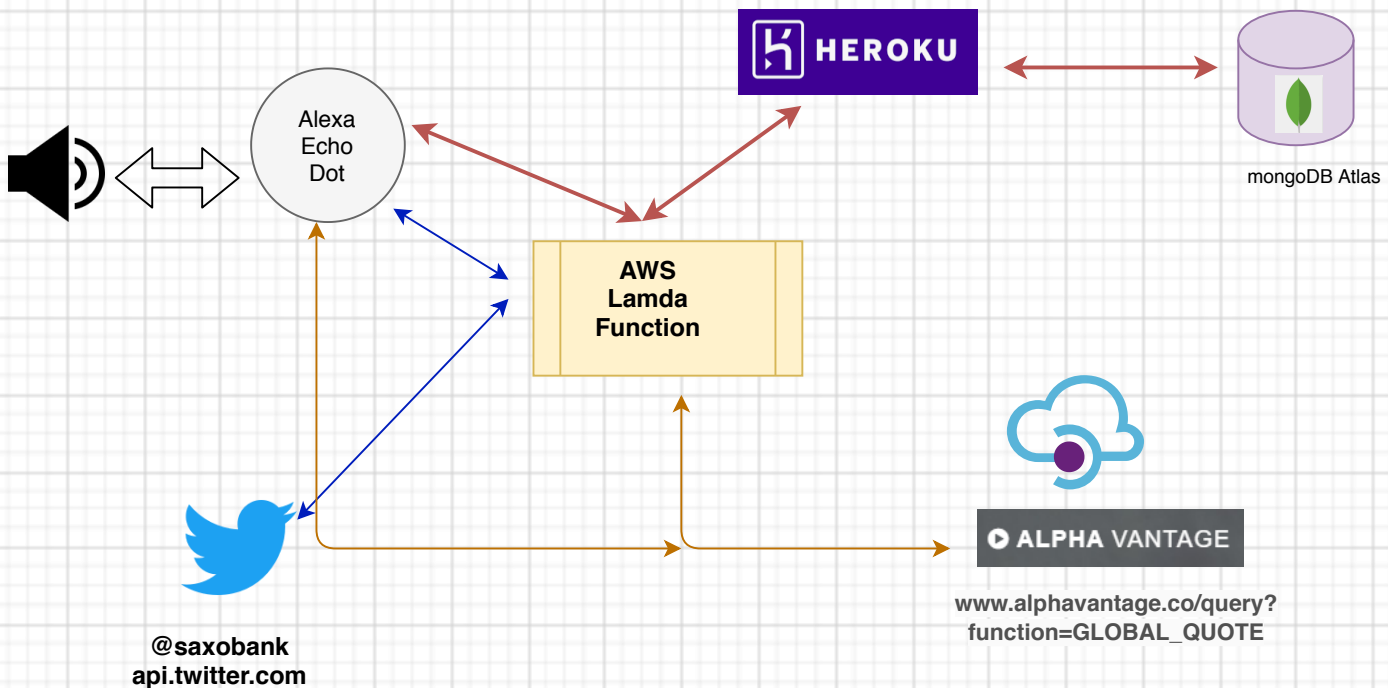
72° | 68°

Amazon's Echo family

Alexa Skill in Executing Trades

Alexa, ask cygnus to buy me some Amazon stock .

Alexa, ask cygnus to get the latest market updates.

Alexa, how do I open my Account with Saxo Bank

Alexa, what is my Profit & Loss ?

Alexa, what is my position in Tesla ?

*Cygnus is the Invocation name of the Alexa custom skill

Executing trades could be done by account linking to users
account in Go/Pro platforms with the custom skill

- Node JS : creating Api's and backend sevice in AWS Lamda
- Account with Amazon Developer portal to create Alexa Interaction Model
- Account with AWS to create a Lamda function
- Logs and monitoring though Amazon Cloud Watch
- Creating an Express API to connect backend Lamda function to mongoDB cloud Atlas Databse
- Node - Express API would be deployed on Heroku and create a pipeline from GitHub Repo for Auto Deploys

HEROKU

mongoDB Atlas

Alexa
Echo
Dot

AWS
Lamda
Function

ALPHA VANTAGE

www.alphavantage.co/query?
function=GLOBAL_QUOTE
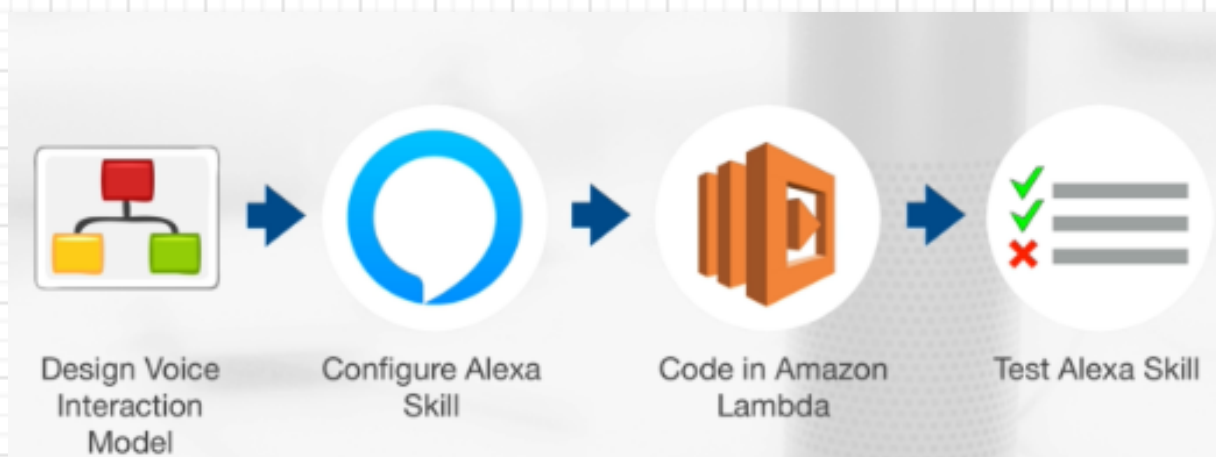
@saxobank
api.twitter.com

Alexa Intents

OpenAccount

Alexa , Create my account with SaxoBank

GetNews

Alexa , how is the market today ?

GetStockPrice

Alexa , what is the share price of INFY ?

Design Voice
Interaction
Model

Configure Alexa
Skill

Code in Amazon
Lambda

Test Alexa Skill
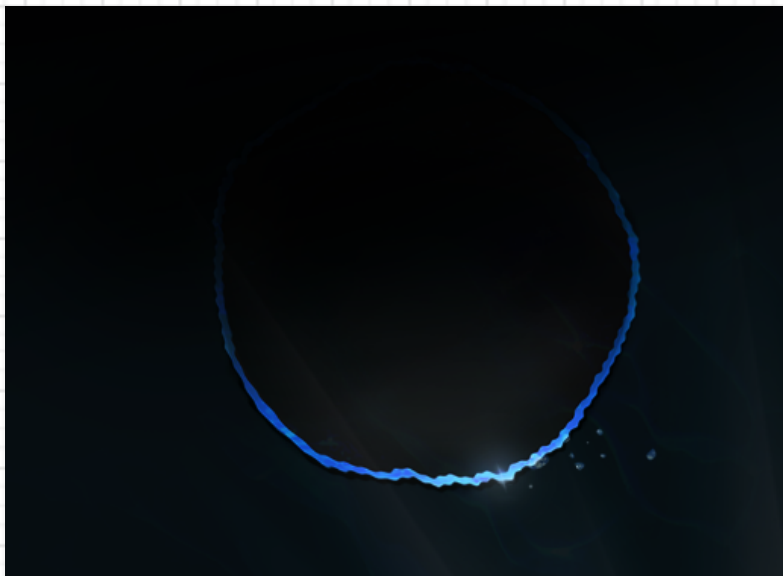
Connect with your portfolio with any Alexa enabled device while watching TV , driving or cooking

Non Saxo Bank account holders can also get latest market updates , saxo starts and based . Voice data could be used for marketing purpose and lead generation of potential clients

Alexa Skills can be monetized by in-app purchases (In Skill Purchasing) for premium features .

Alexa Skill can improve the convenience of the product and indirectly improving sales as it makes consumers to interact with a brand without interrupting daily routine.

Cygnus in action