

#### AGENDA

- Introductions
- Why Build an Alexa Skill?
- API Architecture



- Considerations for building an Alexa skill
- Opportunities to extend the implementation
- Demo
- Questions?







#### ABOUT VITAMIX



- 4th generation family owned Company founded in 1921
- Designs, manufactures, and sells high performance blending solutions for household and commercial use
- Sales in 100+ countries
- Mission: We create relationships for life by developing and producing the world's best performing and most reliable blending systems.
- Purpose: Liberate and nourish the zest for life.
- Significant Technology Change: In a span of 18 months implemented a new ERP (Oracle EBS), re-platformed all web properties (Oracle ATG Web Commerce), and implemented a global data center



#### ABOUT BRIAN SWAB



- Joined Vitamix (www.vitamix.com) as Director, Information Technology in 2013
- Primary scope includes application portfolio
- Direct reports include Business Analysts, Developers, and DBAs
- Prior Experience:
  - ~14 years in consulting: Large scale technology implementations, process redesign and shared services, procurement strategy and execution, Procure to Pay excellence
  - Above includes >3 years at Interactive Marketing Agency; primary focus in consumer products and retail using custom apps and IBM WebSphere Commerce
  - 3+ years as Global Process Owner, Procurement including Oracle EBS R12 implementation (four sites in China) and upgrade (>25 sites in North America)



## ABOUT COMMERCE ARCHITECTS



- Founded in 2008 and headquartered in Spokane, WA
- Long track record of on-time, under-budget delivery
- Commitment to quality and speed
- Build long-lasting partnerships with clients
- Ruthless honesty with recommendations
- Specialized in global, multi-site Oracle Commerce implementations
- Increasingly working with AWS and GCP implementations
- 100% client satisfaction and referenceability



# ABOUT JOE CONATY



- Co-founded Commerce Architects in 2008
- Has implemented Oracle Commerce for world class brands such as HEB,
  Vitamix, J. Crew, Nike, DIRECTV, Best Buy, and Coke
- Roles have included development, operations, sales, project management and client partner
- Spent 2 years as an ATG Professional Services Engineer
- Engineer at heart, just like all others at Commerce Architects



#### WHY BUILD AN ALEXA SKILL?

- Afford Vitamix customers additional ways to interact with Vitamix and Vitamix content
- Gain insight into how consumers want to interact with a voice user interface
- Build technology capability and gain experience exposing Oracle Commerce content via API



## EXPOSING ORACLE COMMERCE DATA

- Security considerations to lock down API layer
  - Virtual Private Cloud
  - Mutual TLS auth
- Technology options for accessing data
  - Use existing JSPs and scrape results
  - Use JSPs and render JSON
  - Build a REST API and return JSON
- We ended up using
  - Mutual TLS auth
  - ATG REST MVC module in Oracle Commerce 11.1

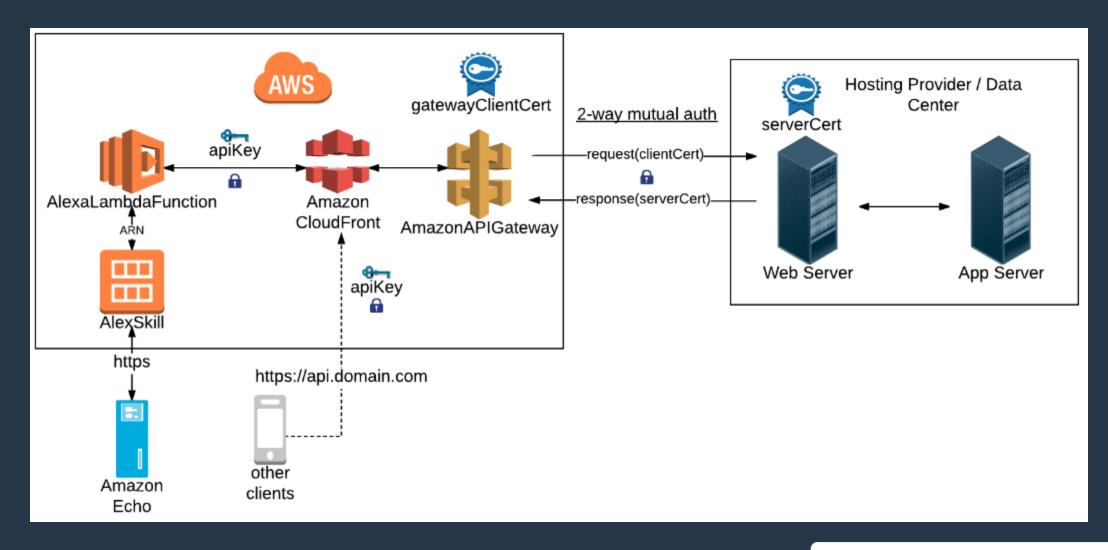


#### BUILDING THE ALEXA SKILL

- An Alexa skill is a set of configurations along with an invocation name and a reference to a cloud-based service for processing the request
- Speech recognition is handled by Amazon
- Speech Synthesis Markup Language (SSML) gives extra control over speech output
- SDKs for text to voice conversions
- Code for speed. Memory footprint, request processing time, and payload size are all critical
- Choose SDK carefully. Penalty for cold starts on java SDK relative to interpreted languages like NodeJS

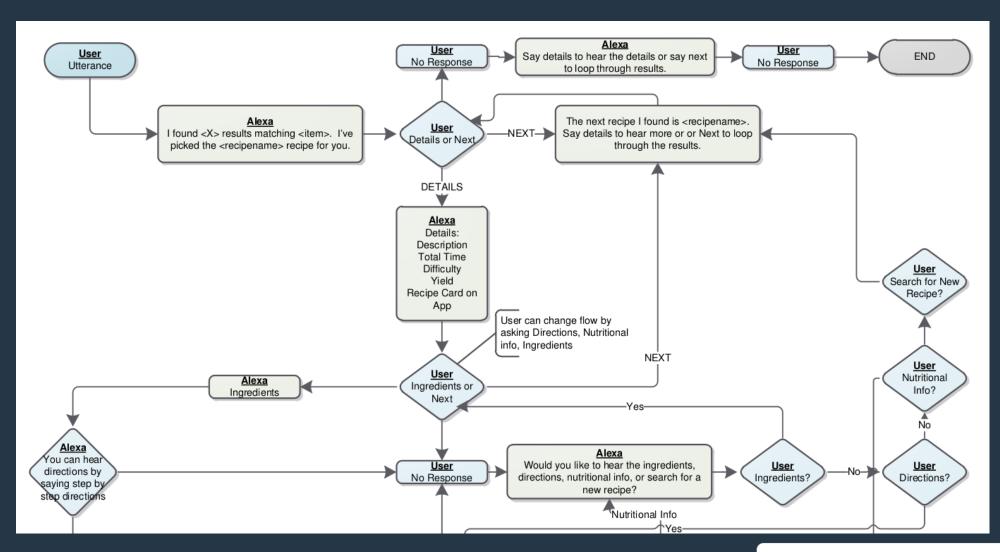


## API ARCHITECTURE





# VOICE USER EXPERIENCE (IT'S COMPLICATED)



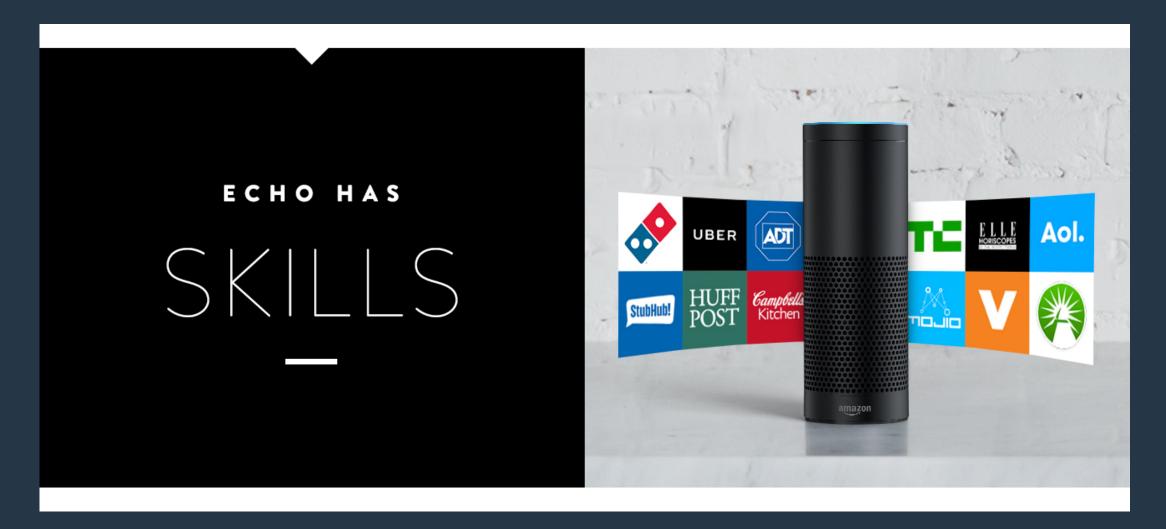


# OPPORTUNITIES FOR EXTENSION

- What content beyond recipes will customers want to experience via voice interface?
- How can use of Alexa increase how often our customers blend with their Vitamix?
- How can Alexa increase a customer's joy of using their Vitamix?
- What other platforms (e.g. Google Home) should we be exploring?



## **DEMO**





# QUESTIONS

If future questions come up:

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