Virtual Assistants in the Enterprise

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The Promise of Enterprise Software

- Extensive Features
- Automated Workflows
- Tons of Information

Result: Improved Profitability
The Reality: Most employees have trouble using them

So little value is derived from many of these expensive systems
Why the missing link?

- Complicated UIs
- Stale and incomplete information
- Data on disparate applications
User-centric interactions for the mobile era

• Conversational speech focused UIs
  – Easier to access and capture information
  – Rethink stale old workflows

• Proactive notifications
  – Inform and recommend
  – Relevant and personalized
Enterprise use cases abound for Siri and Google Now style apps

Users can “Pull” information easier through spoken conversations

Systems can “Push” timely information via feeds without users needing to ask
My experiences in the Enterprise

Oracle Voice (Siri for Sales teams)
   – A conversational assistant for sales teams on-the-go

Sapho (Google Now for the Enterprise)
   – A platform to create notification driven mobile apps

Talking to Enterprise apps through Alexa
   – Could the Amazon Echo or Google Home be your next in-office assistant?
Oracle Voice (2014)
The problem with CRM applications

• Most sales reps have trouble using the software
  – Hard to access and navigate on the go

• So information about sales deals becomes stale

• And a company’s ability to make forecasts and draw insights suffers
Voice - A conversational assistant for sales teams

- Access and capture contacts, notes and activities for sales opportunities on the go
Fast, Friendly, Fun

- Speech-focused
- Conversational
- Multi-modal

Video
Sapho (2016)
Getting work done isn’t easy

- Useful data and events spread across various Enterprise applications
- Difficult for employees to find information and to remember the actions they need to take
- If only there was a virtual assistant that “pushed” across relevant information and actions to employees at the right time
Sapho - Google Now for Enterprise users

- Sapho notifies employees about information they need and actions they need to take from across all the business systems they use.
Work information, sent proactively to employees

Proactive BI

Consolidated Approvals

Aggregated Metrics

Video
Talking to Enterprise apps on an Echo
Is Alexa your next in-office virtual assistant?

• Alexa, the voice service that powers the Echo, offers myriad Enterprise use cases given it’s open Speech and NLU APIs

• Far-field voice recognition technology makes the Echo a better device than mobile around the office or in a conference room

[Video]
The nuts and bolts

Alexa Skill

AWS Lambda

Cloud Application
Takeaways
Where are we headed?

• With a fast increasing choice of enabling technology, expect an explosion in virtual assistant offerings in the Enterprise.

• The key to adoption for conversation assistants will the User Experience.

• Machine Learning and context driven assistants will seek to deliver information to users before they know they need it
Observations and lessons learned

• Users expect consumer grade experiences on enterprise apps.
  – Desktop style navigation menus, forms and workflows don’t carry over well to mobile
  – New interactions (Voice/NLU, Notifications/Feed) need to be well tested to avoid user frustration

• Less is more. Focus on what is relevant to the user.
  – Ask only for key inputs when capturing information (default or pre-fill as much as possible)
  – Deliver personalized, actionable information (limited screen space, less cognitive load)

• Where identifiable patterns exist, move thinking from the user to the system.
  – Automatically prompt user to capture information (right after meeting for a sales person)
  – Deliver information before users know they need it (meeting briefing, earnings reports)
Thank you