



How Speech Recognition will Disrupt Enterprise BYOD Plans

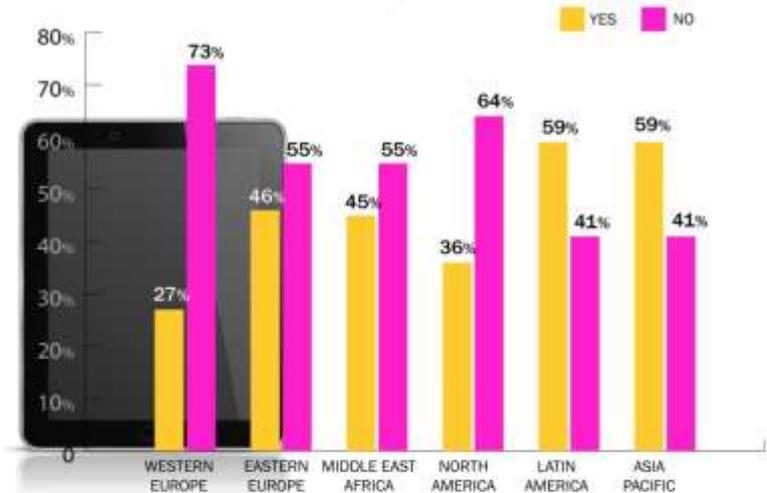
Presented at Mobile Voice
Conference 2014

Current State of BYOD

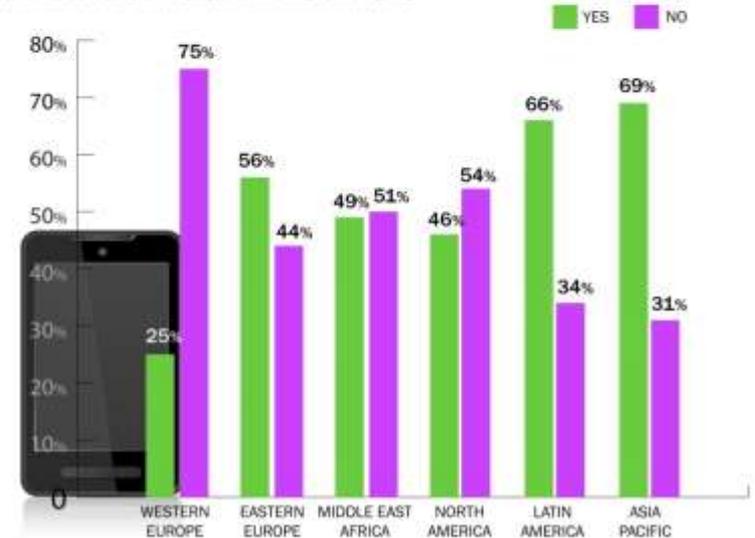
- * 36% of North American Employees utilizing BYOD (Bring Your Own Device) policies
- * Currently BYOD usually means access to email and calendar
- * Very few enterprises are deploying employee specific apps for personal devices
- * Gartner predicts by 2017 – 25% of companies will have an enterprise app store.

BRING YOUR OWN MOBILE DEVICE TO WORK

IS YOUR PERSONALLY / PRIVATELY PURCHASED / OWNED TABLET DEVICE FOR WORK PURPOSES? E.G. THE DEVICE IS FULLY SUPPORTED BY YOUR COMPANY'S IT (COMPANY EMAIL, NETWORK, ETC.)



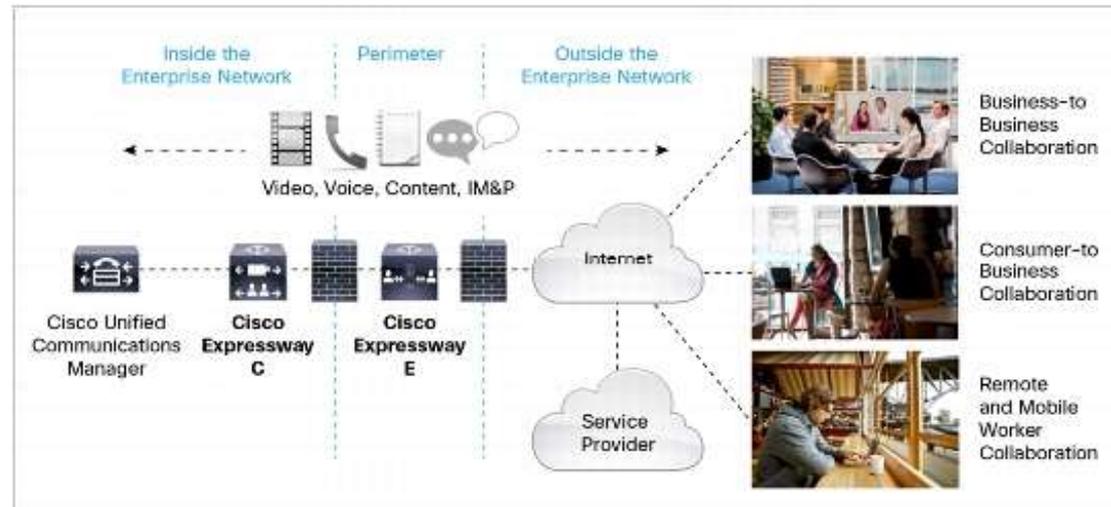
IS YOUR PERSONALLY / PRIVATELY PURCHASED / OWNED SMARTPHONE FOR WORK PURPOSES? E.G. THE DEVICE IS FULLY SUPPORTED BY YOUR COMPANY'S IT (COMPANY EMAIL, NETWORK, ETC.)



Enterprise IT wants to make Personal Mobile devices into UC endpoints

Problem – Rich collaborative apps require more intrusive access into the enterprise than Exchange Server (Calendar and Email)

- * SIP has an authentication protocol at the session border controller. More proprietary apps may not be supported by this.
- * Cisco UCM – Required full VPN access to create UC client on device – Now there is Cisco Expressway – Gateway into UC servers
- * – iOS 7 has developed “App Level VPN” – Not controlled by enterprise users – It’s up to developers to implement.



Balance is between limitations of workarounds (using portals, gateways) vs. security of full access by personal devices.

Which Personal Device would you give full access to your network?



- * 333 Mhz Laptop
- * 3.2 GB Hard Drive

- * 1 Ghz Android Phone (3X the processing power of the laptop)
- * 32 GB Micro SD Card storage (10X storage of the laptop)



Speech is company data –

“IBM CTO for mobility Bill Bodin revealed his company’s plans to adopt the ‘bring your own device’ trend throughout next year. “

Silicon Angle

10/31/2011

“IBM Outlaws Siri, Worried She Has Loose Lips”

Wired 05/22/2012

- * Cloud based voice storage is “anonymous”
- * The more it recognizes natural language – the less anonymous the data becomes.
- * If voice data is useful for analytics, it may also be useful for security exploits

Example of HIPAA compliant Voice Data.

Nuance Healthcare Speech Recognition



- * End to end encryption
- * Connected to Nuance Healthcare cloud
- * Wherever there is a “cloud” security of that cloud must be evaluated.

The “Never Thought it Would Happen to Us” Club

Excerpts from SC Magazine Data Breach Blog (July 2013 to Dec 2013)

- * Nielsen staffer accidentally sends mass email containing employee data
- * Texas health system attacked, data on more than 400K compromised
- * FBI alerts Ohio company of breach involving Social Security numbers
- * Unsecured file leads to data compromise of 12,000 in Wyoming
- * Stolen laptop compromises more than 12,000 New Mexico patients
- * Undisclosed number of T-Mobile customers impacted in data breach
- * Coding error compromises data for thousands in Washington state
- * Officials seek cause of card breach affecting Boston convention attendees
- * Hackers access plain text info on nearly 500K JPMorgan Chase cardholders
- * Laptops stolen, data of 700k California hospital patients compromised
- * Nearly 50k patient credit cards compromised by insider
- * Technical error compromises information for storage company customers
- * Web server intrusion puts advisory clients at risk
- * Website programming error compromises personal information
- * Unauthorized third party compromises payroll card company data
- * Card information stolen in attack on hospital payment vendor
- * Shopping cart malware compromises credit card information
- * U.S. defense contractor sustains data breach
- * Hacker battles encryption, nabs card info from online retailer
- * Hackers breach US Airways to steal frequent flyer miles
- * SEC employee data inadvertently leaked
- * Theft of unencrypted laptops behind Coca-Cola breach impacting 74,000

Non-Cloud Option – Device based speech recognition

- * “Always on” speech recognition
– not dependent on data connection
- * Likely to become more intuitive over time
- * Creates device specific hardware requirements - Less candidates for BYOD

If you have to lock down a device, only allow specific models and apps, and only connect to specific destinations, what is the advantage of employee owned?

Bring Your Own Device –
As long as it's this device!

Form Factors and Wearable Tech



- * The real ROI for speech access by “any device” is customer facing (e.g. Banking, reservations, contact centers)
- * The ROI for speech recognition in the enterprise will be specific job functionality and proprietary devices

“Because of consumerization – the fact that the technology we have at home is often better, faster-moving, more agile, more mobile, etc. than the tech we are issued at work – we tend to assume now that **all** innovation will originate on the consumer side. Wearables 2.0 will upend that a bit, because the most useful enterprise devices are often highly specialized.” **JP Gownder, Forrester Research 01/06/2014**

Summary



- * BYOD will grow, mainly horizontally.
Email and calendar access is a no brainer;
Collaboration is trickier.
- * Do not position your enterprise to be governed by a BYOD policy. You may miss new opportunities for rich collaboration.

Contact: Robert Lee Harris
(800) 765-9497
robert.harris@comadvantage.net

Additional Reading:
<http://www.communicationsadvantage.com/library-and-links.html>