



Mobility First

How Tomorrow Moves for Education

Presented by:

aruba[®]
a Hewlett Packard
Enterprise company

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datanetworks
Simplifying Enterprise IT.



GENMOBILE IS AT THE HEART OF OUR TECHNOLOGY STRATEGY



THE RISE OF

2005

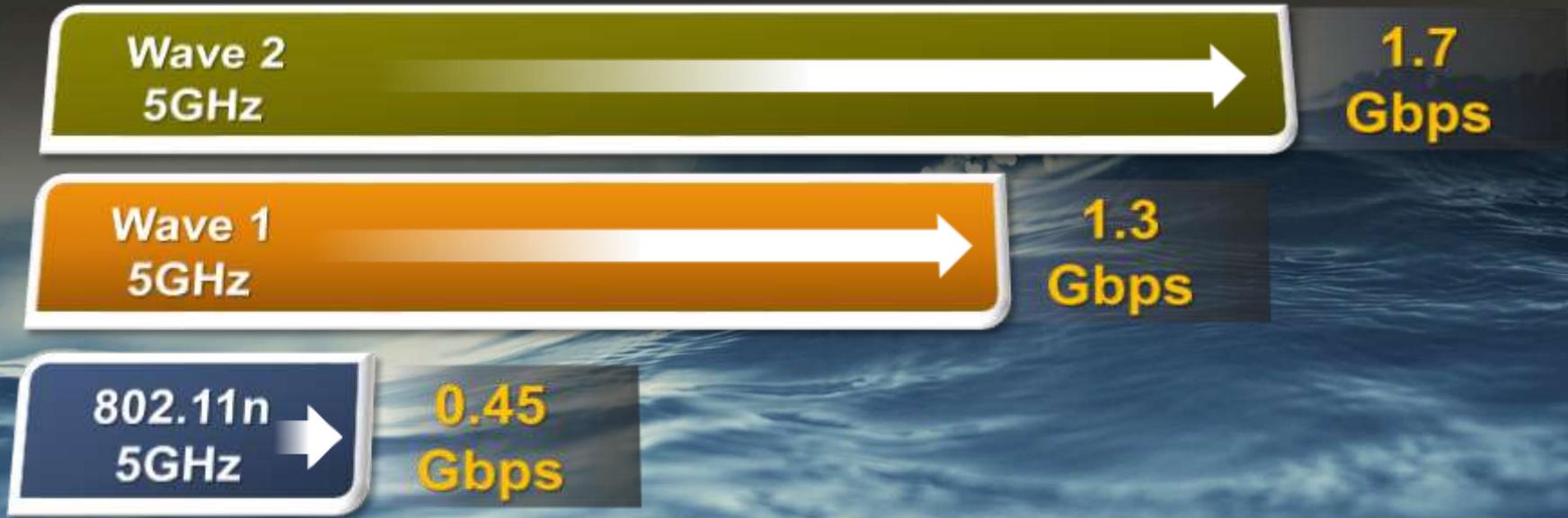
GENMOBILE

2013

THE PERFECT STORM: MOBILE, IoT and CLOUD



Reading the Waves – 802.11ac



Gigabit Wi-Fi makes it possible to unplug the cord

\$750K annual savings & 350 tons of Co2 reduction
by moving to primarily Wi-Fi access for employees
KPMG case study

Learning is **Transforming**



What's changed

Curriculum

Digital, Online,
Blended

Adoption

By Teachers
and Students

Funding

Federal/State/
Local

Results

Student
Performance

Supporting the **Digital Classroom**



1:1
initiatives



Project based
learning



Cloud apps



Guest
Access



Online
assessment



Student
collaboration



The Education Evolution

Past

Face-to-face
Low or minimal tech
Traditional in classroom instruction
Minimal competitive challenges

Present

Any place, anywhere, anytime
BYOD, Digital Content
Innovative programs
Alternative programs



INSTITUTIONAL

Perception of degree low ROI
Graduates lack readiness for the workplace
Student security and safety

Today's Challenges



IT AND APPLICATIONS

Role of technology in education
Multi-vendor solutions (SIS, HCM, etc.)
Accelerating services



Building an Environment for **Student Success**

Mobile-First Campus

Uninterrupted experience

Optimized Gigabit Wifi and connectivity for user, device, and environment

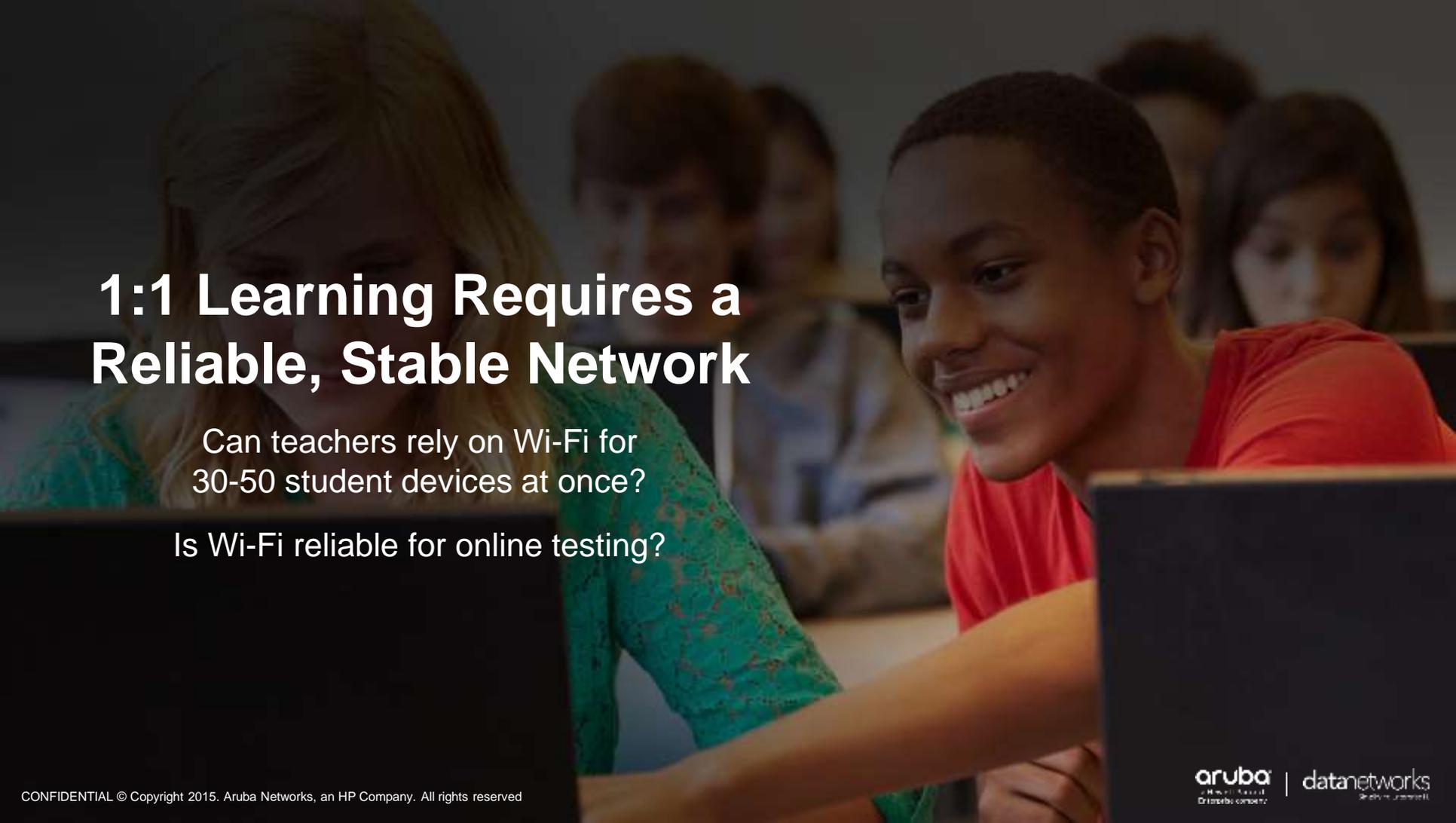




Improving **Digital Learning** with a Mobile-First Experience

Uninterrupted learning

Connectivity optimized for BYOD

A photograph of a classroom where students are using laptops. The image is dimmed to serve as a background for the text. In the foreground, a young woman with dark hair, wearing a red shirt, is smiling and looking at her laptop. To her left, another student with long blonde hair, wearing a green patterned top, is also looking at a laptop. Other students are visible in the background, some looking at their screens.

1:1 Learning Requires a Reliable, Stable Network

Can teachers rely on Wi-Fi for
30-50 student devices at once?

Is Wi-Fi reliable for online testing?

OUR APPROACH



Legacy

Separate architectures
Port, VLAN aware
Proprietary systems



Mobile First

Single set of hardware
App, device, user aware
Multi-vendor software



SCALE NETWORK OPERATIONS FOR WIRED ACCESS

Future proof wired infrastructure

Wired is aggregation for WLAN and IoT

User, device aware “colorless” ports
with Aruba ClearPass

Zero touch provisioning at the branch
with Aruba AirWave



SOFTWARE CONTROLS FOR “COLORLESS” PORTS

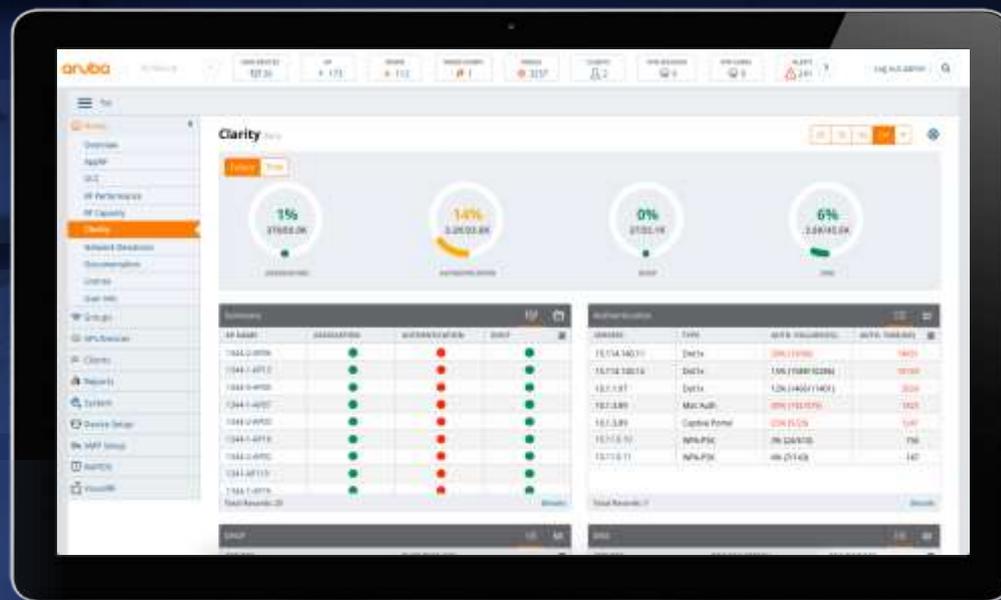


SCALE NETWORK OPERATIONS FOR WI-FI ACCESS

Eliminate complaints on Wi-Fi
with Aruba 802.11ac and ClientMatch

Predict, not troubleshoot, issues
with Aruba Clarity and AirWave

Optimize Wi-Fi per application
with Aruba AppRF



SOFTWARE CONTROLS FOR END-TO-END NETWORK HEALTH





Connectivity That Adapts to **New Requirements**

Can the infrastructure easily accommodate
new mobile use-cases with
the necessary controls?

A More Intuitive User Experience

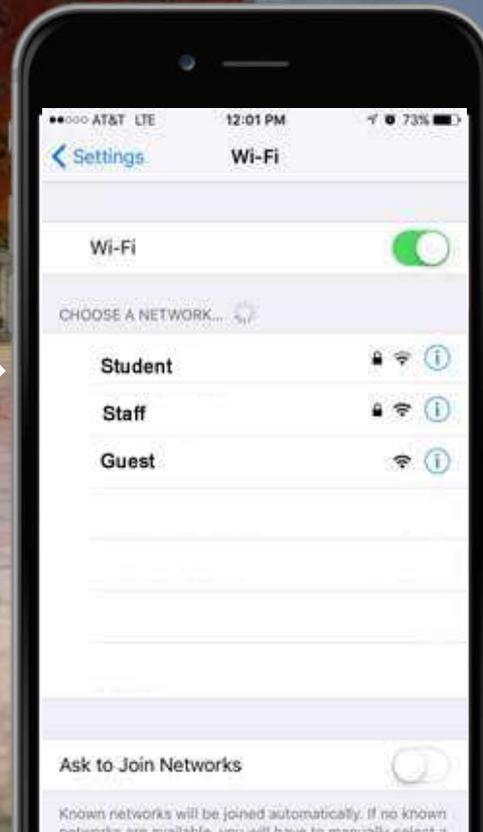
OLD WAY:

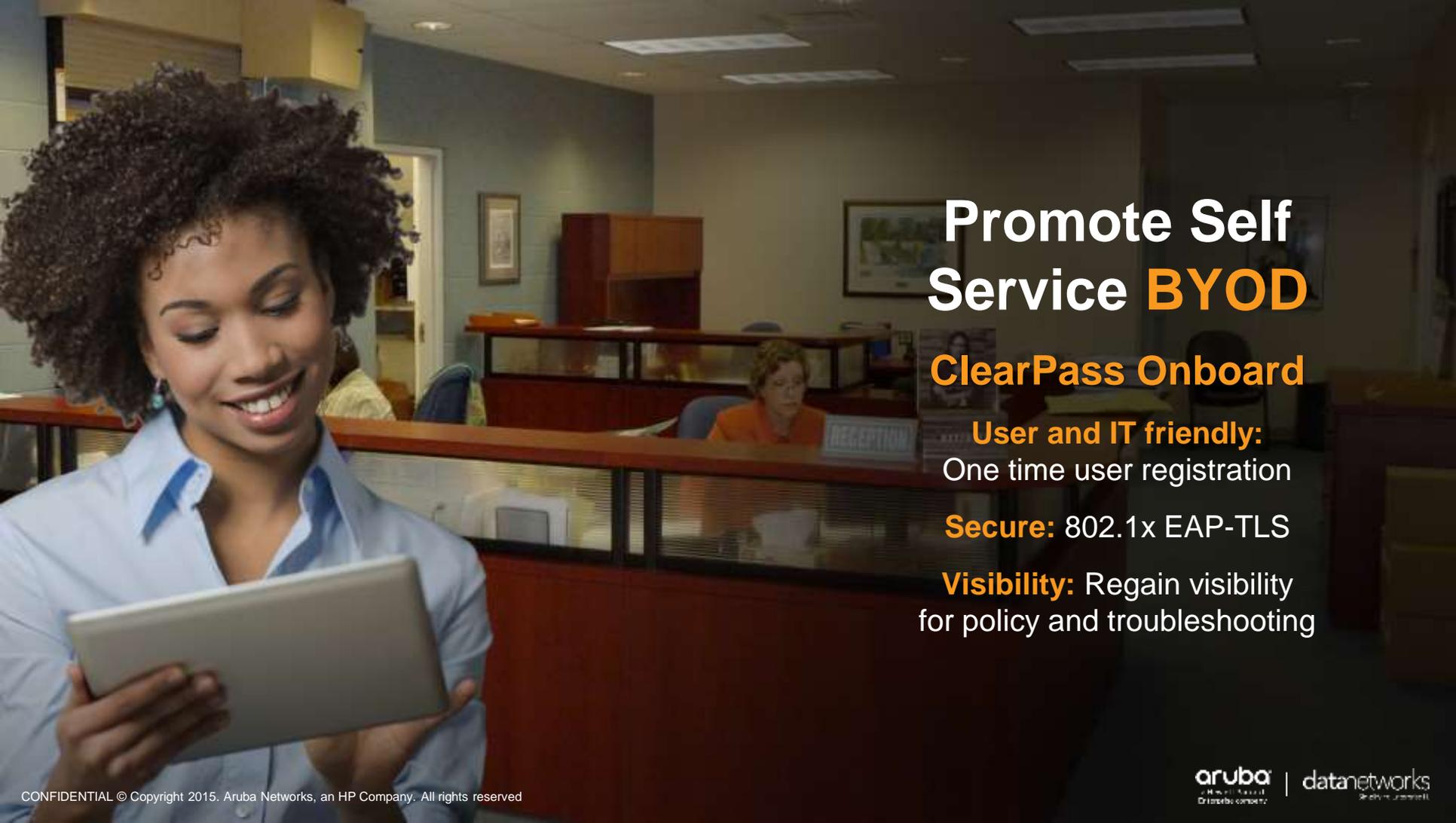
Without advanced policy, separate traffic by SSIDs



NEW WAY:

Simplify with ClearPass, separate traffic dynamically





Promote Self Service **BYOD**

ClearPass Onboard

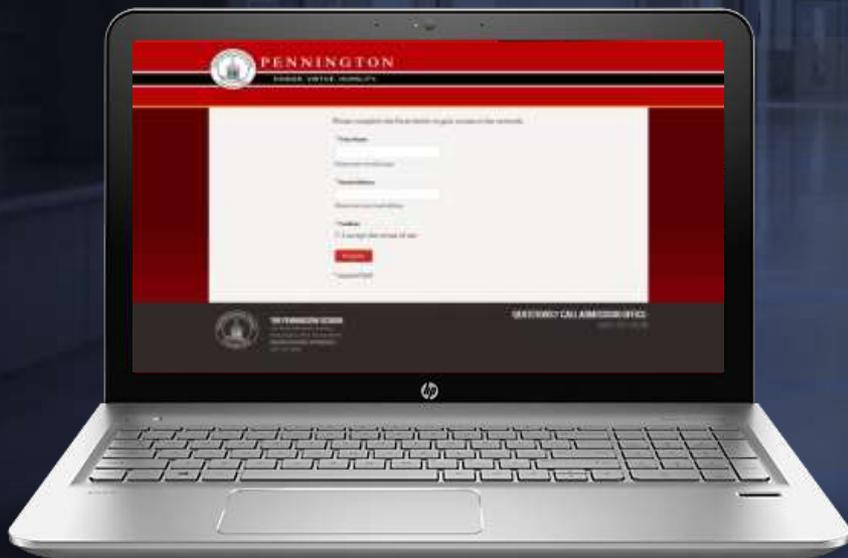
User and IT friendly:
One time user registration

Secure: 802.1x EAP-TLS

Visibility: Regain visibility
for policy and troubleshooting

Registered Guest Access for Parents and Visitors

ClearPass Guest



Custom portals
to promote your school

Can be used to advertise mobile
app and deliver download link

Social logon support

One Wi-Fi login for repeat visitors

ClearPass Policy Manager

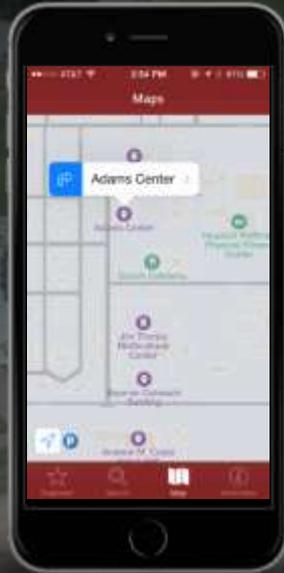
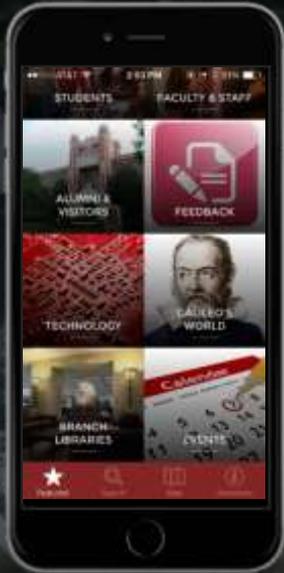
Create policies that adapt to
BYOD growth and IoT adoption

Customized device profiling for any
uncategorized connected device

Multi-factor authentication on
mobile devices for network usage



Intelligent Mobility Enhances Engagement



Way-Finding

Indoor turn-by-turn directions (for guided tours)

Push Notifications

Time and location relevant messaging

Aruba Beacons Power Indoor Location



Aruba Beacons

Blue dot directions and notifications based on real-time position

Aruba AP w/ integrated Beacon

Communicates with Aruba Beacons and Meridian Platform

Meridian Platform

Location-based and personalized content for apps
Monitor and manage beacon battery level, operating mode / firmware

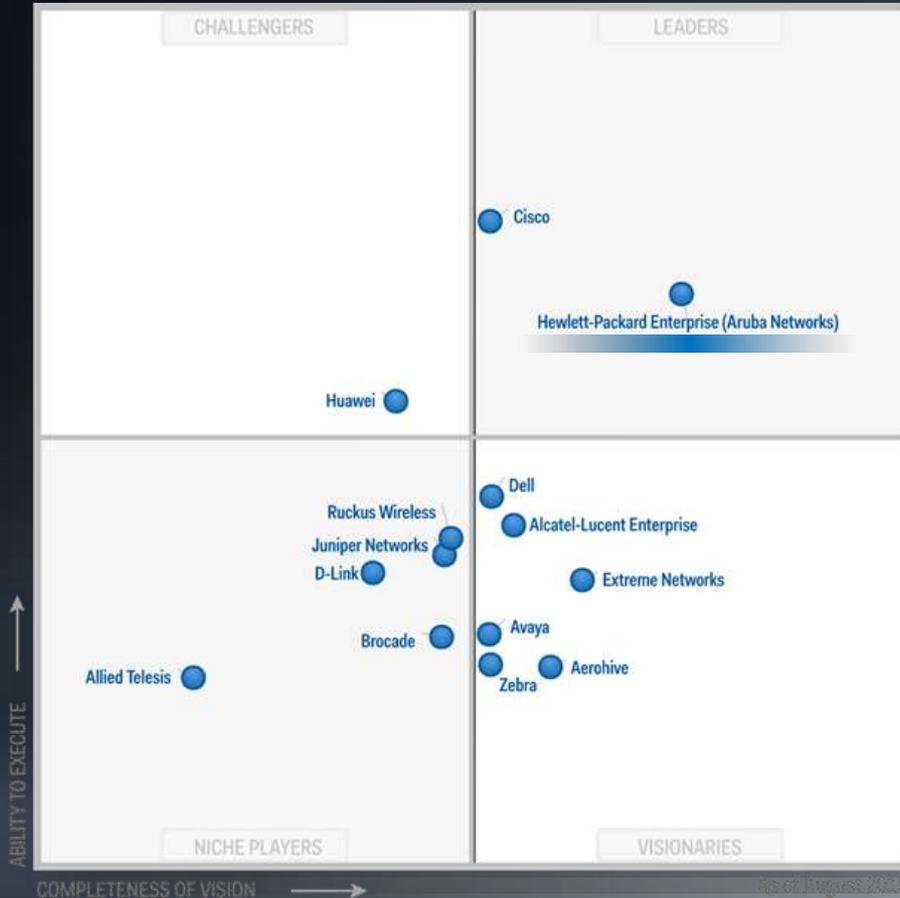
Meridian-Powered Mobile App

White-label or custom app w/ SDK

INNOVATION LEADER IN CAMPUS NETWORKS

“Clients globally should consider HP Aruba for all wired / WLAN access layer opportunities.”

Gartner MQ for Wired and Wireless LAN Access Infrastructure, August 2015



As of August 2015

Thank You

Data Networks



844-GET-DNET
or
datanetworks.com
to learn more.