SOLUTION OVERVIEW

MOBILE ENGAGEMENT

Venues come to life with location-aware mobile apps that provide indoor turn-by-turn navigation, contextual marketing, and a personalized guest experience.

MOBILE ENGAGEMENT ACROSS ENTERPRISE WI-FI NETWORKS

There are over a billion smartphones in the world today, which enable users to access the web wherever they happen to be – retail stores, hospitals, resort hotels, airports, stadiums and convention centers.

The impact of anywhere, anytime access to the Internet can have a considerable and lucrative impact on indoor enterprise venues. In fact, the U.S. Environmental Protection Agency estimates that we spend 90% of our time indoors.

Inspired by these technology-enabled consumers, public venues are offering mobile apps to engage with customers. However, these efforts do not often produce a return on investment because they’re simply mobile-friendly versions of an enterprise web site.

The first wave of enterprise mobile apps generally failed to take advantage of technologies that personalized the experience of consumers based on who and where they are. And when they did take advantage of location, they ceded control of their data to third-party vendors.

Your next-generation mobility efforts require apps that personalize the consumer experience based on identity and location. It's essential to offer an omni-channel experience that engages them in a contextually relevant manner – from home to the public enterprise venue.

THE COMPLETE MOBILE ENGAGEMENT SOLUTION

Unlike a hardware-only approach, the Aruba, a Hewlett Packard Enterprise company Mobile Engagement Solution integrates best-in-class enterprise Wi-Fi and Aruba Location Services with self-service device onboarding and mobile app platforms into one integrated solution that's quick and easy to deploy.

Today's mobile engagement efforts require apps that personalize the consumer experience based on identity and location.

- Aruba gigabit Wi-Fi – controller-managed and controllerless wireless LANs and high-performance access points – connect many thousands of devices and apps to create a memorable user experience.
- ClearPass Guest securely connects visitors to Wi-Fi with a custom-branded device onboarding portal that offers targeted in-browser branding and advertising and encourages mobile app downloads.
- Aruba's Meridian mobile app platform enables venues to quickly and easily create mobile apps or improve existing apps with features such as turn-by-turn directions within venues.
- Aruba Location Services powered by Aruba Beacons integrate with the Meridian mobile app platform to enhance the visitor experience with location-aware features like a glowing blue dot on an indoor map and relevant push notifications based on a user's real-time location.
- Centralized Management Tools allow venues to easily scale Aruba Beacon deployments across multiple venues. Mobile app content as well as Aruba Beacon hardware settings (power-levels, battery life, campaigns, etc.) can all be remotely managed within Meridian. Data is sent to the Meridian cloud over BLE-enabled Aruba Wi-Fi access points or over a multivendor management tool called Aruba Sensor.
The Aruba Mobile Engagement Solution leverages user, location, device and other contextual data to engage guests in a more meaningful way. This enables enterprise venues to deliver compelling, personalized information to their mobile devices while protecting their privacy.

Visitors who connect to a venue’s Wi-Fi can specify their preferences so enterprise businesses know how they want to be engaged. And when they download a venue’s custom-branded Meridian mobile app, they can opt-in to get personalized, location-relevant push notifications.

**Reliable guest Wi-Fi that’s always on**

Aruba’s answer to the mobile engagement challenge starts with an ultra-fast, highly scalable Wi-Fi infrastructure and ClearPass Guest capabilities, which securely connect visitors to the network via a browser-based portal.

The Wi-Fi network remembers opted-in guests during future visits, and the one-time registration process provides context around each user’s unique identity, what devices they use, and their specific interests.

Using this information, the ClearPass Guest portal can display pertinent in-browser ads and encourage visitors to stay connected by downloading the venue’s custom-branded Meridian-powered mobile app from Google Play or the Apple App Store.

![Diagram](figure_1.0_102714_mobileengagement-soa)

**ClearPass Guest lets visitors easily connect to the Wi-Fi and displays targeted browser-based communications.**
Meridian content management
In addition to delivering the back-end technology for guest mobile engagement, the Meridian platform includes the Meridian Editor content management system, which gives venues a quick and simple way to create and improve their own customized mobile apps.

A highly visual, cloud-based content management system, the Meridian Editor makes it easy to enter location-specific information like places of interest on a map, directions, onsite events, and services. This content encourages mobile-app users to explore and discover the venue.

With the Meridian Editor, enterprise venues can dramatically reduce the time and effort it takes to develop and maintain engaging, world-class apps for their guest’s mobile devices.

Aruba Location Services powered by Aruba Beacons
Aruba Beacons identify a visitor’s location at a venue and work with Meridian-powered mobile apps to deliver many location-aware services to guest mobile devices, including:

- A glowing blue dot that shows their location on a map of your venue.
- Turn-by-turn directions to nearby amenities on your property.
- Push notifications with relevant content based on personal preferences.

One of the Bay Area’s newest and largest sports stadiums leverages Aruba Beacons to dispatch location services to their customized mobile app so fans can get turn-by-turn directions to the nearest concessions, their seats and other places of interest.

The Meridian Editor’s intuitive content management system (CMS) lets venues create customized site maps where they can add their own points of interest.

Aruba Beacons are available in battery and USB powered versions for indoor location-based services.

The visitor downloads the venue’s app, which is powered by the Meridian platform.

The venue’s app communicates with Aruba Beacons.

This allows the app to display a user’s real-time location on a map, location based push notifications, and more.

Aruba Location Services (powered by Aruba Beacons) enhance Meridian-powered mobile apps.
MOBILE ENGAGEMENT THAT'S TAILORED TO YOUR BUSINESS

Retail
While retailers have adapted to e-commerce, they’ve equally improved their brick-and-mortar experiences. But until recently, technology hasn’t kept pace with these crucial arms of the retail business. That’s changing with advances in location-based technology.

For retail engagement, Aruba Meridian-powered mobile apps and location capabilities give customers a unique and memorable shopping experience wherever they happen to be – at home, in the store and anywhere in between.

One of the largest furniture and electronics retailers in the United States, Nebraska Furniture Mart, relies on Aruba Beacons and the Meridian Platform to give customers in-store “blue dot” directions to in-store services and merchandise. They can also push unique offers to customer mobile devices based on their in-store location or personal opt-in preferences.

Hospitals
Hospitals often consist of a complex mix of buildings and campuses that welcome thousands of patients and visitors. It can be stressful and confusing for patients as they make their way to clinical appointments, waiting areas, cafeterias, and other onsite health services.

Aruba connects hospitals with patients in ways that complement information desks, directional signage and other wayfinding tools. With Meridian mobile apps, hospitals like Boston Children’s can guide visitors to clinical departments, food-and-drink options, and nearby amenities.

The Meridian platform also enables hospitals to add a variety of functionality to their custom mobile apps. For example, the Meridian platform makes it easy to integrate patient services systems, staff directories and social media with their mobile app.

To improve the quality of healthcare delivery, hospitals can offer a menu of local services, turn-by-turn directions, and push out notifications to pick up prescriptions.

With Meridian-powered apps and Aruba Beacons, retailers can guide shoppers to departments and send push notifications about sales to reward loyalty.
Hospitality
Hotels, casinos, resorts and cruise lines employ a tactical approach to engage customers more than any other location-based venue. Loyalty programs, digital signage and strategic building layouts are all part of the hospitality industry’s arsenal.

That’s why hospitality venues are adopting the Aruba Mobile Engagement solution with such fervor. A growing number of businesses like the Venetian and the Palazzo Las Vegas Resort-Hotel-Casino use Meridian-powered apps to engage customers onsite and off.

Guests can get location-based offers that alert them to onsite services as well as turn-by-turn directions to restaurants, entertainment and shopping. The Meridian platform also makes it easy to add mobile web-sites, loyalty programs and social media to a venue’s mobile apps.

Airports
Few venues see more people hastily navigating their way indoors than airports. In the past, weary travelers hovered around electronic displays to find their gates, while those with a layover wandered the terminals in search of something to eat or something to read.

Today, Aruba helps travelers find their way through airports, whether they’re in a hurry or have time to burn. Meridian powered apps give travelers at Orlando International Airport and other airports turn-by-turn directions to gates, food, shops, ATMs, restrooms and ground transportation.

Airports can create revenue by pushing out promos and offering turn-by-turn directions to gates, restaurants, retailers, transportation, restrooms and ATMs.

Hotels, casinos and resorts can update guests in real-time about current events and help them find their way to restaurants, entertainment and shopping destinations.
Stadiums
Unlike season-ticket holders, most stadium visitors wander about the premises looking for their friends, their seats, concession stands, restrooms and variety of other services. And after the event, they search for the quickest way out to the parking lot.

Thankfully, mobile engagement technology puts wayfinding into the customer’s hands. Stadiums that adopt the Aruba Mobile Engagement solution can give attendees turn-by-turn directions to just about anywhere they want to go.

Fans at Levi’s Stadium in Santa Clara, CA enjoy “blue dot” directions to their seats as well as in-app food and beverage ordering – made possible by the stadium’s Meridian-powered app and Aruba Beacon hardware.

Museums
Years ago, museums connected with visitors through rented Pocket PCs and iPAQ PDAs. With the arrival of iPhones and Android devices, museums scrapped the old stuff and now enable visitors to connect using their own Wi-Fi-enabled smartphones.

Meridian-powered mobile apps provide museum visitors with an in-pocket tour guide. For example, The American Museum of Natural History uses a Meridian-powered app with Aruba Beacon hardware to guide visitors with “blue dot” navigation to works of art that are on display.

Many cultural centers also find it helpful to use the Meridian platform to provide turn-by-turn directions to exhibits as well as integrate event calendars and social media efforts into their custom-branded mobile apps.
Convention Centers
Winding your way through convention centers can be a challenge for attendees and exhibitors at trade shows and other elaborate indoor events. Those looking for exhibits, places to eat, restrooms and information desks have had to rely on fixed signage to point the way.

Today, the Aruba Mobile Engagement solution makes it possible to use the Wi-Fi infrastructure to communicate with many thousands of attendees and exhibitors through their smartphones, tablets and other personal mobile devices.

With Meridian-powered apps, convention center venues can provide attendees with turn-by-turn directions from a trade show exhibit to a conference break-out session, and then to concession areas when they need a break.

And the legions of conference sponsors and organizers who occupy a convention floor can quickly and easily customize the mobile app experience with their unique brand, floor layouts and event activities.

Conclusion
The Aruba Mobile Engagement solution enables new location-aware services and personalizes the visitor experience by leveraging contextual data from Aruba – ClearPass Guest, Wi-Fi and Aruba Location Services – with Meridian-powered mobile apps to engage customers in real-time.

ClearPass Guest makes it easy for visitors to securely connect to a venue’s enterprise Wi-Fi network, while simultaneously delivering targeted communications and links to download a customized mobile app.

Best-in-class Aruba Wi-Fi and Aruba Location Services (powered by Aruba Beacons) allow businesses to deliver a wide range of location-aware mobile engagement features – including indoor wayfinding and proximity-based push notifications – to visitors who opt-in and download the Meridian mobile app.

With Aruba, businesses can leverage user, device, location, and other contextual data to engage visitors in relevant and meaningful ways, encourage brand loyalty, increase revenue, and create a memorable guest experience by offering more personalized services.

Providing visitors with the locations of trade show booths, exhibit halls, rest areas and food vendors reduce the need for physical signage.