

Amdocs Cloud Wi Fi

Simplify Wi Fi Life Cycle Management
&
Maximize Wi Fi Monetization



Gal Reiss - Amdocs



The Service Provider \$25B Gold Rush Wi Fi Opportunity

Industry analysts believe service providers will be key for the next-gen Wi-Fi market.

- Retain and upsell existing customers
- Establish a new revenue stream
- Add managed Wi-Fi services to implement and operate Wi-Fi networks on behalf of business customers
- Monetize on customer analytics by selling micro-location behavior intelligence data
- Create new revenue streams with micro location-based services and micro-targeted advertising.

Access Points by Industry in 2020 (Millions)



The Service Provider \$25B Gold Rush Wi Fi Opportunity

The Money is in B2B

Managed Business Customer Markets – High Growth Area



Hotels

Business Customers:

- Want high quality always-on service
- Want simplicity
- Prefer Opex over CapEx
- Prefer bundled services



Offices



Schools

MSPs:

- Deliver solid solution
- Cloud reduces cost
- Opportunity to bundle services
- Generate recurring revenue

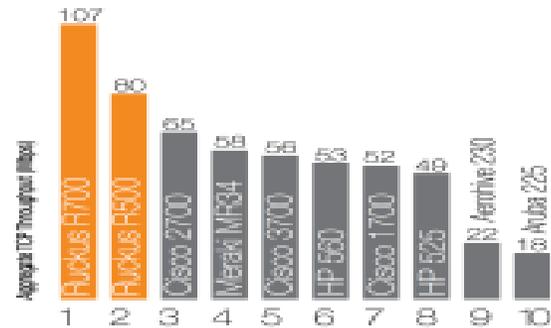


Shops

Amdocs Cloud Wi Fi

Simplify Wi Fi Life Cycle Management & Maximize Wi Fi Monetization

Better Wireless



Highest performing APs on the planet



Carrier Grade Cloud Wi Fi

Maximize Wi Fi Monetization



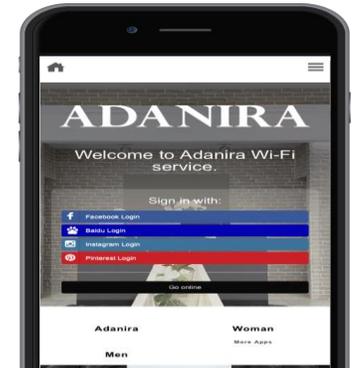
Carrier Grade Operation

Carrier Grade Operations

E2E Responsibility for Cloud Instantiation, Personalization's, Operations & 24X7X365 Support

Pay As You Grow Commercial Model

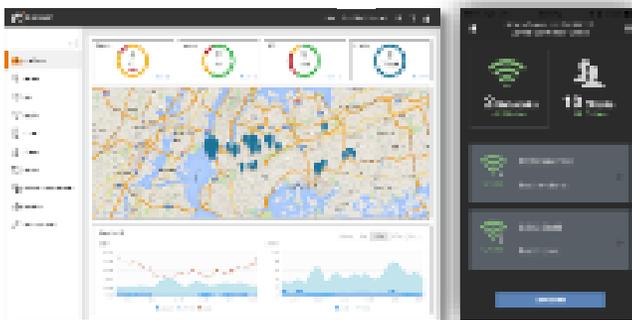
Marketing Guests Portals



Maximize Wi Fi Monetization



Easy To Use & Affordable



For Enterprises & SMBs



Presence & Location Analytics



Insights for Business Owners

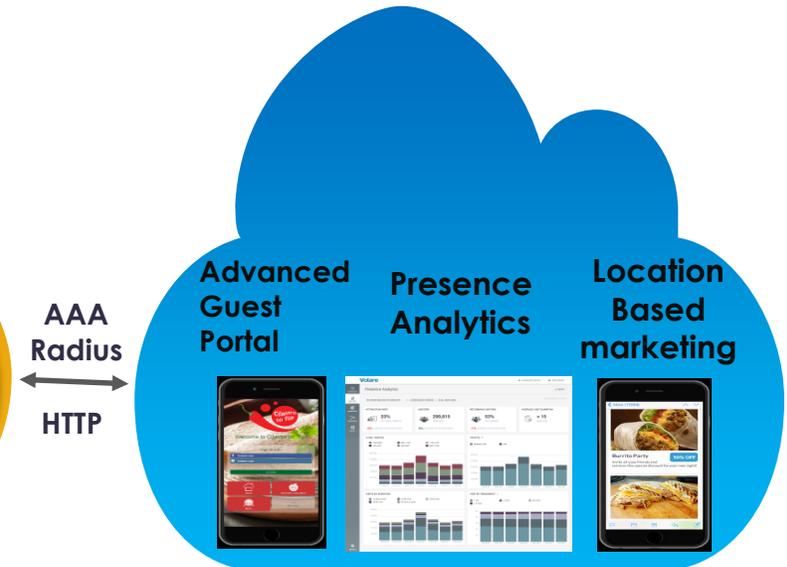


Amdocs Cloud Wi Fi Solution Architecture

Simplify Wi Fi Life Cycle Management



Maximize Wi Fi Monetization



Amdocs

Carrier Grade Cloud Management

E2E Responsibility for Cloud Instantiation, Personalization's, Operations & 24X7X365 Support

Pay As You Grow Model

Attractive pay as you grow model
Sharing risks and revenue growth

Amdocs Service Offering

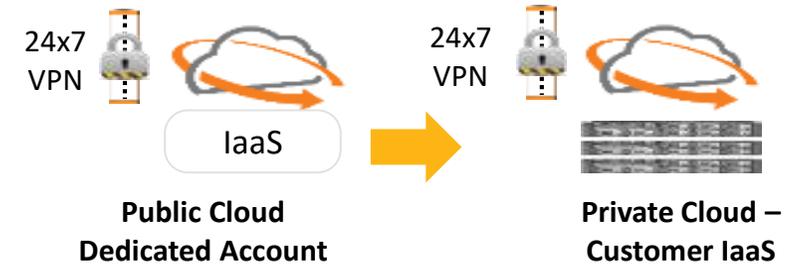
Cloud Wi Fi Setup (Personalization , Integration & Instantiation)

- White-label UIs - Portal, Mobile App, Notification, Guest Portal, ...)
- OSS & BSS integration
- Custom workflows



Cloud Wi Fi Support & Operations

- **Support** - 24x7 NOC support, SLA management , help desk.
- **Operations** - Manages SW infrastructure (change management , Remediation, SW upgrades, testing)



Advanced Guest Portal , Presence & Location Analytics , Marketing

- Cloud Set up
- Cloud Operations
- Professional Services



Amdocs Cloud Wi Fi - delivered as a Service to SP's

- Private Cloud Wi Fi
 - dedicated cloud instance
 - Full portfolio of Wi Fi APs
 - Gives control to SP

- Amdocs Managed Services
 - Delivered as a Service
 - Customization & Branding
 - Cloud deployment & operations
 - SP level support

- Fast Time-to-Market

Feature	Option A	Option B
Set-up	Project based: One-time fee based on IaaS of choice, SP branding, System Integration, etc...	
Subscription	OpEx - \$ / AP / year	OpEx - \$ / AP / month
Access Points	CapEx - \$ / AP	
Operations, Support	Included in Subscription	

WIN-WIN-WIN Offering

For Service Provider

- **Recurring Revenue Stream** – growing recurring income
- **Affordable Solution** – cloud makes Wi Fi offering affordable for sweet spot SMB market
- **OPEX Model** – grow with your business, and avoid capital investment and Risks
- **Focus on Sales** – outsource operations complexity , and focus on growing your business
- **Latest and Greatest** –cloud solution promise market newts features with frequent transparent upgrades

For Business Owners

- **Increase ARPU** - Average ARPU increase with High margins with a recurring services and billing model
- **Retain Customers** - Valuable service that SMBs can rely on to increase customer loyalty
- **Find New Customers** -An OTT solution means attracting SMBs from other service providers that don't offer marketing tools
- **Promote New products** - Bundle marketing services with new product promotions such as voice over Wi-Fi.

For Guests

- **Always on** Wi Fi service
- Get online in just a **few seconds**
- Enjoy automatic re-connection during future visits
- Receive relevant, **personalized content** about their favorite brands and products
- Receive information related to specific locations
- Have on-site **interactive experiences**

A hand holding a lit sparkler in a field of tall grass at sunset, with the text "Thank you" overlaid.

Thank you

Amdocs Cloud Wi Fi - Simplify Wi Fi Life Cycle Management



Better Wireless



Cloud

Investment Protection



One Architecture for Wi-Fi & LTE

Scalable & Cost Effective



Simplicity for SMBs & Enterprises



Manage your Wi-Fi network from anywhere

Carrier Grade Cloud Management

E2E Responsibility for Cloud Instantiation, Personalization, Operations & 24x7 Support



Amdocs Cloud Wi Fi

Wireless At Its Best



Production-proven products

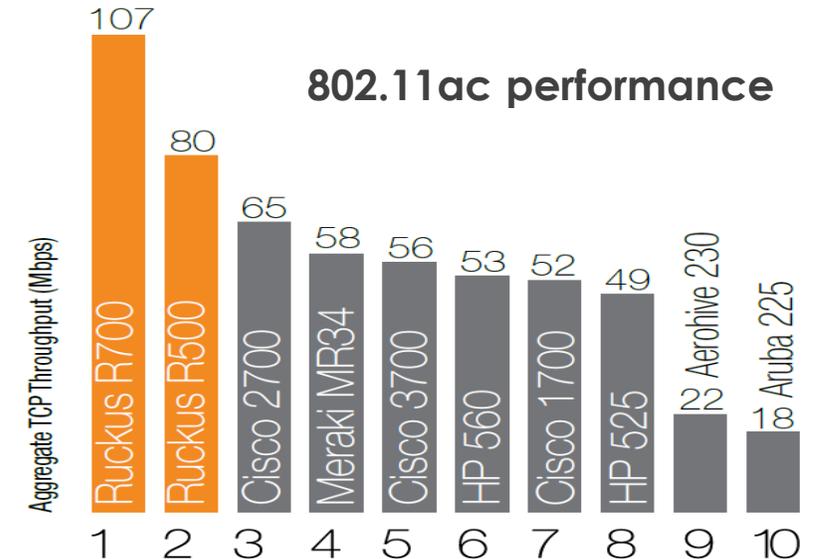
Latest 802.11ac Indoor & Outdoor Access Points



Better Wireless

Independent Natural testing shows the solution's wireless superiority

- Stronger Wi-Fi signals, longer ranges
- RF adapts automatically to environmental
- More concurrent users per AP
- More stable connections at higher data rates



Amdocs Cloud Wi Fi

Simplified & Smarter for SP & SP SMBs



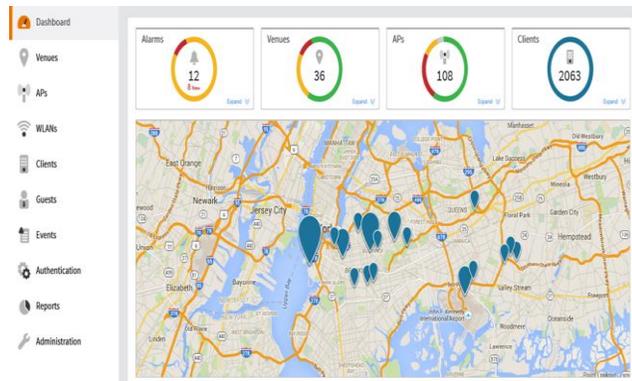
Web portal capabilities:

- ❑ Zero-Touch provisioning of APs and Networks
- ❑ Venue & floor management
- ❑ Multiple networks security options
- ❑ Smart analytics
- ❑ Administration

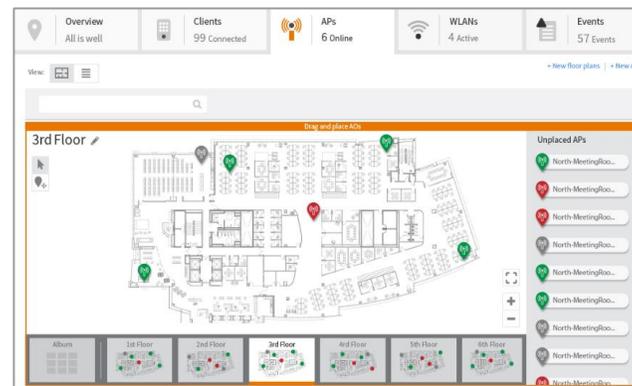


Simplified for
Enterprises & SMBs

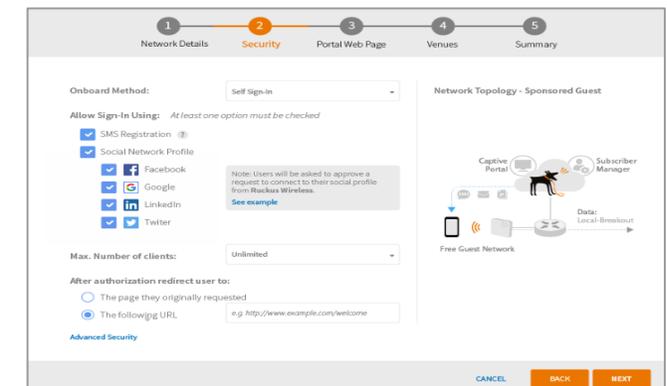
Management Dashboard



Venue & Floor Management



Network Social Sign On



Amdocs Cloud Wi Fi

Simplified & Smarter for SP & SP SMBs

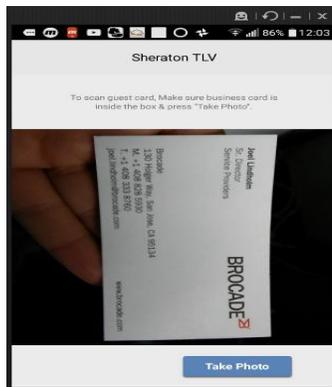
Mobile App capabilities:

- ❑ Zero Touch provision of APs by Barcode Scanning
- ❑ Managed Guest Pass Creation with Business Card
- ❑ Managed Notification
- ❑ Geo positioning APs provisioning
- ❑ Android & iOS support

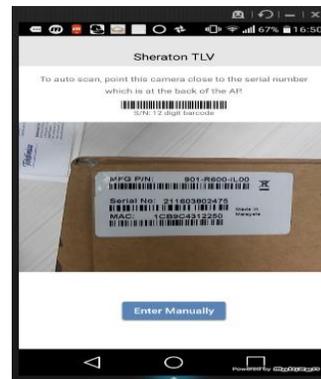


Simplified for
Enterprises & SMBs

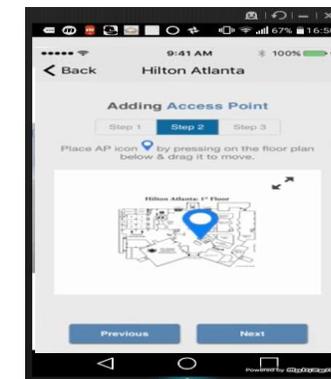
Scan Business Card to Create Guest Pass



Zero Touch Provisioning by Barcode Scanning

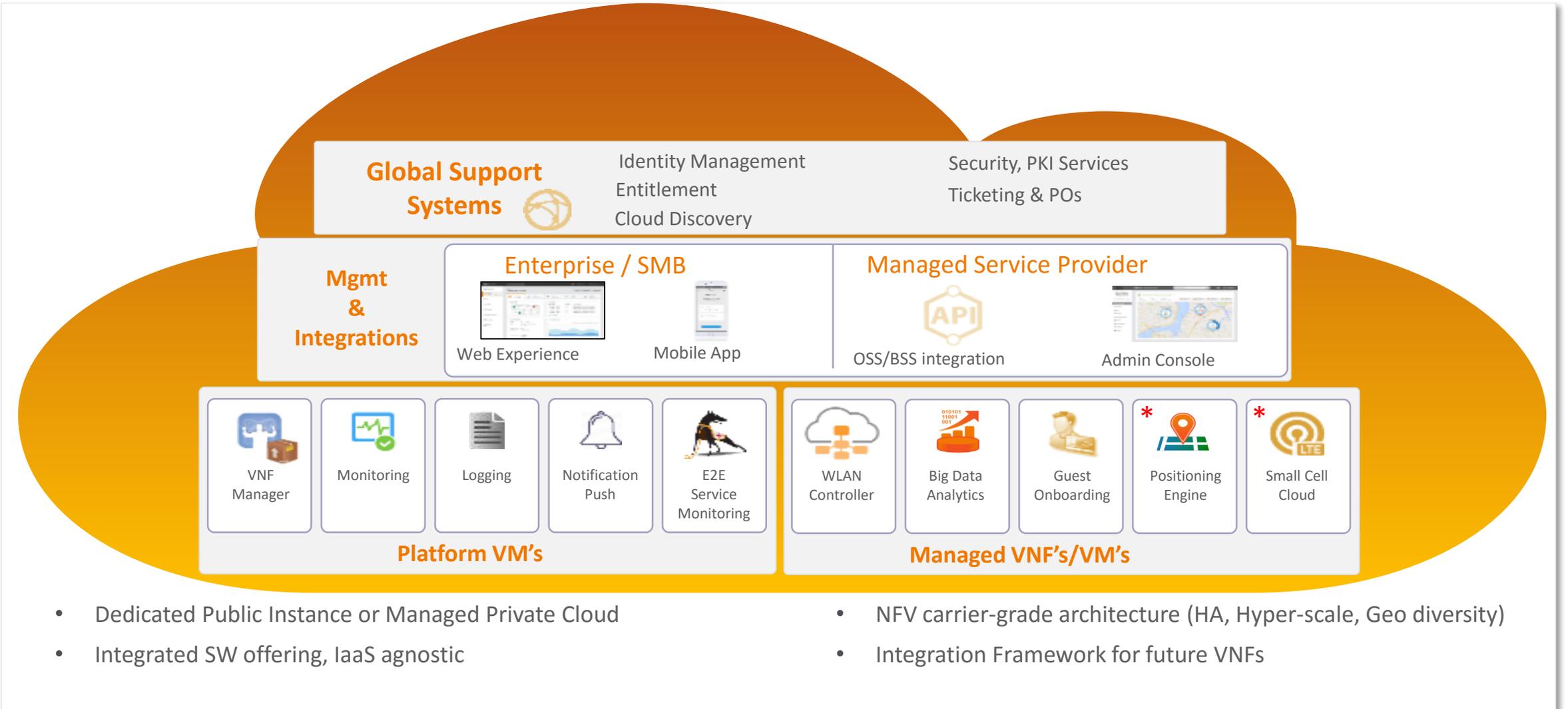


Adding & Calibrating



Amdocs Cloud Wi Fi solution

Scalable & Cost-Effective



Wi Fi VAS - Maximize Wi Fi Monetization

Unique point of **management** packed with **best practices** proven in the field

Quick go-to-market with Full **white-label** options (including mobile app)

Vendor independent

Portal, interfaces and **APIs** available to integrate and implement various workflows, and easily integrate with **BSS / OSS**

Guest Wi-Fi services provide a consistent, warm digital welcome

Presence and locations Analytics enable valuable customer insights

Marketing services help build strong customer relationships



Amdocs

Carrier Grade Cloud Management

E2E Responsibility for Cloud Instantiation, Personalization's, Operations & 24X7X365 Support

Pay As You Grow Model

Attractive pay as you grow model
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Guest Wi-Fi services provide a consistent, warm digital welcome



Customizable Welcome Portal

Customize the look and feel, content, languages, unique alias URLs and policies

Multiple Login Profiles

Choose from click-through with custom fields, to social login, and user email/phone validation

Digital Device Identity

Associate a digital identity to each device, including email address and phone number



Expanded Customer Databases

Collect valuable customer information to build unique opt-in marketing lists

Flexible Internet Plans

Set how guest Wi-Fi is used: free vs paid, recurring vs one-time use, and limit per-user time or traffic allowance

Digital Front Door

Create custom onboarding experiences that complement the brand and use applications to engage customers

Analytics Enable Valuable Customer Insights



User Analytics

Get in-depth insights into who shoppers are, their demographics, devices and more

Wi-Fi Service Analytics

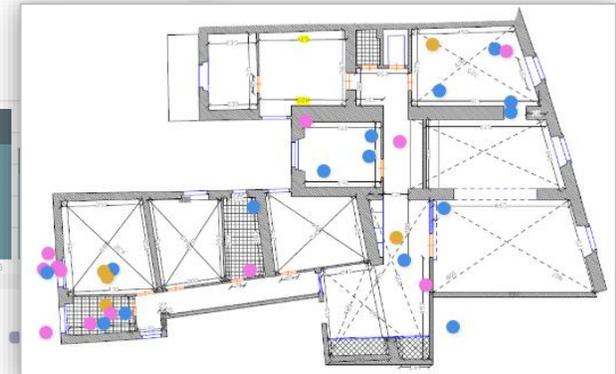
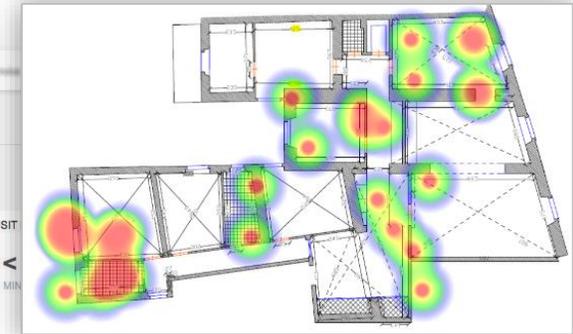
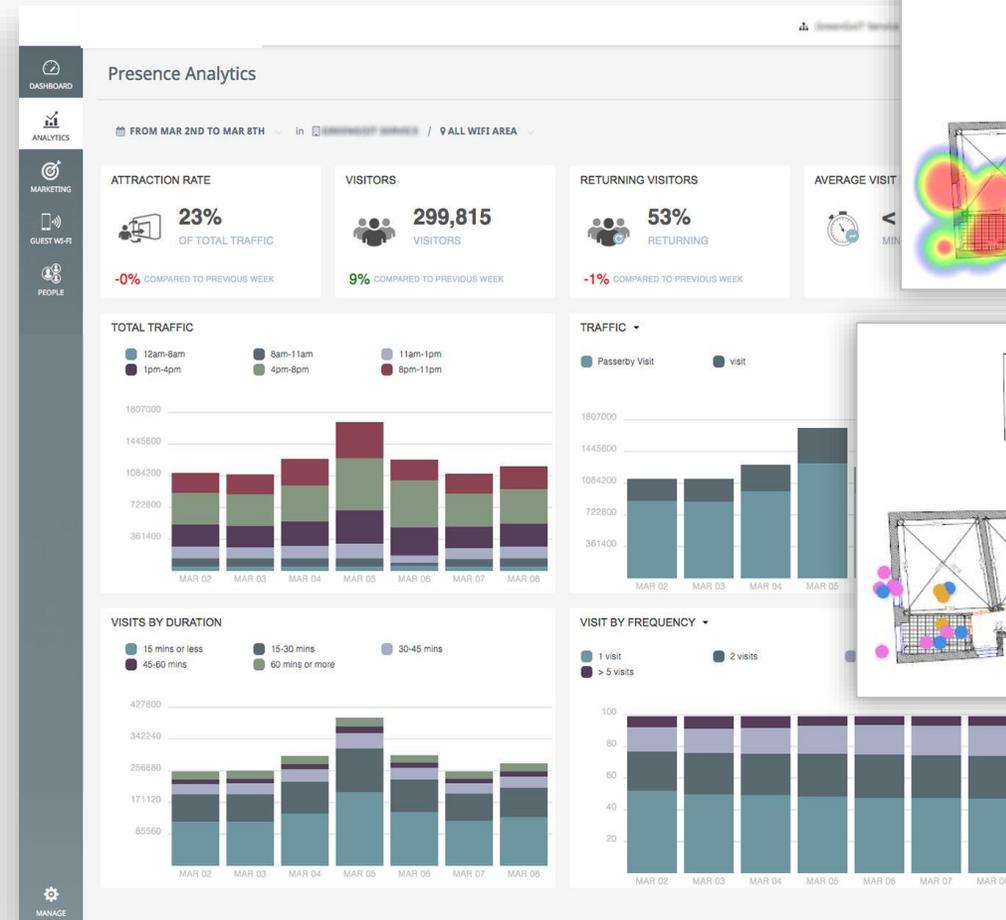
Understand how guest Wi-Fi services are used across various store locations

Presence Analytics

Collect foot traffic data and understand in-store behavior

Location Analytics

See how shoppers move around a store and the areas they spend most of their time



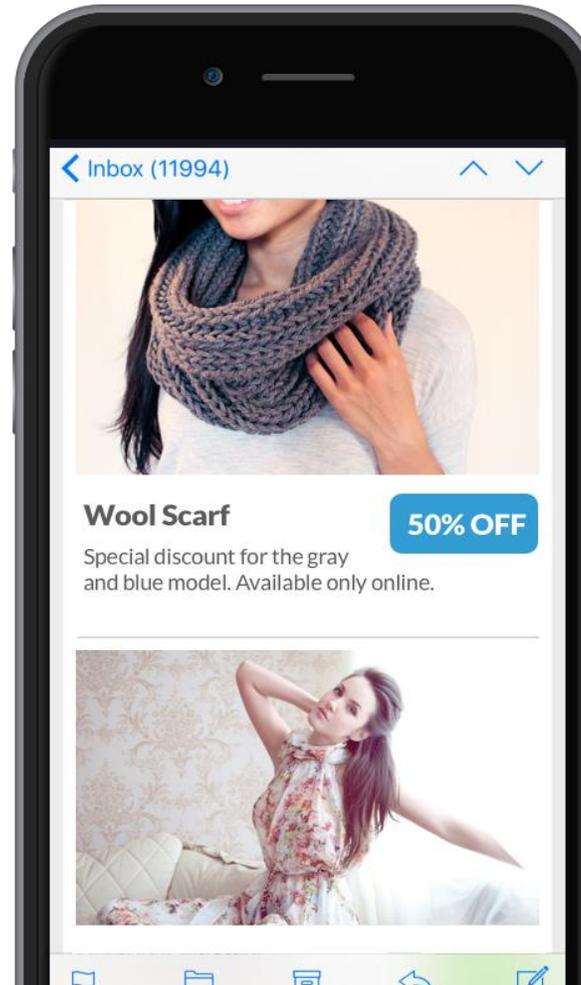
Marketing Services Help Build Strong Customer Relationships

Powerful Triggered Campaigns

Use triggered campaigns to send coupons and messages through emails, text messages and beacon-enabled in-app notifications

Impactful Advertising

Customize ads for each store to display on the welcome portal or during the welcome journey



Compelling Social Media Marketing

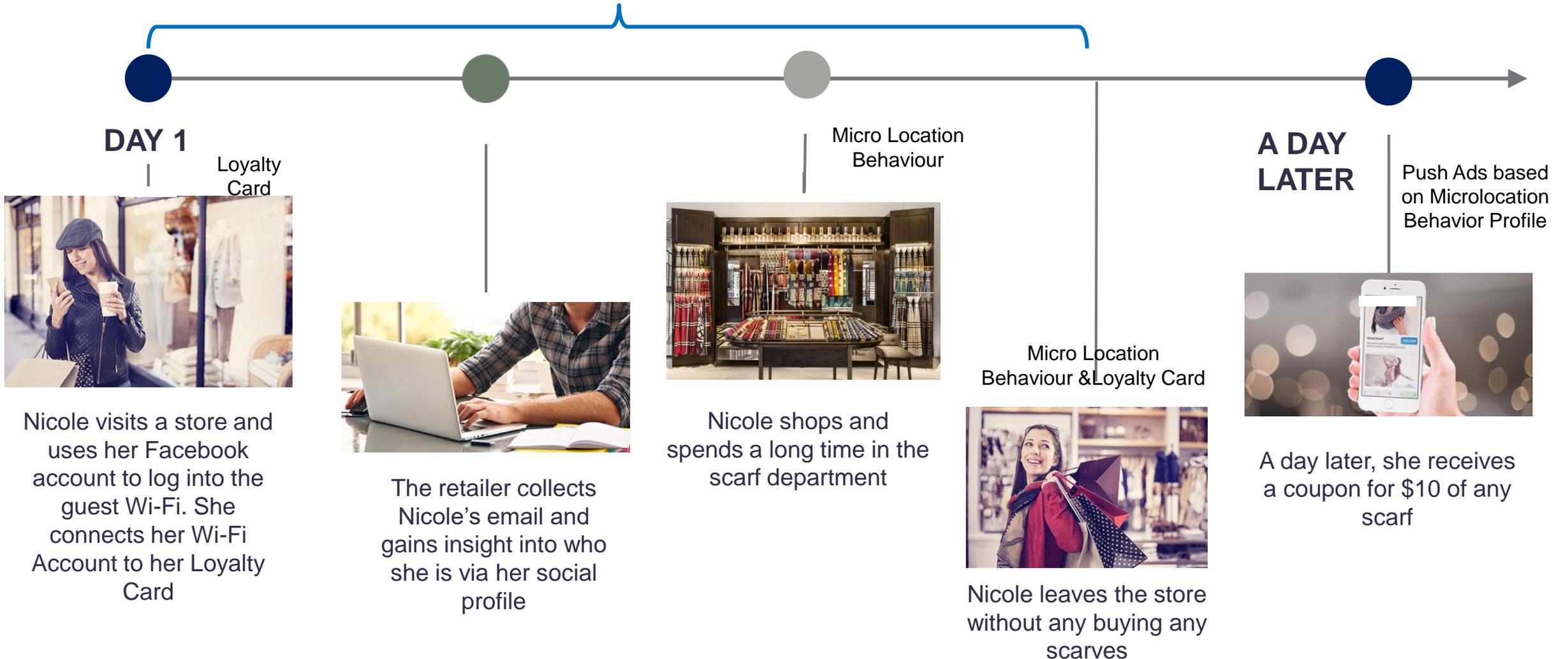
Encourage 'Likes' and 'Follows' to social media accounts, 'Check-ins' to stores, and ask customers to post on their own social media accounts

Robust Segment Builder

Segment customers into different lists based on attributes and actions they've performed

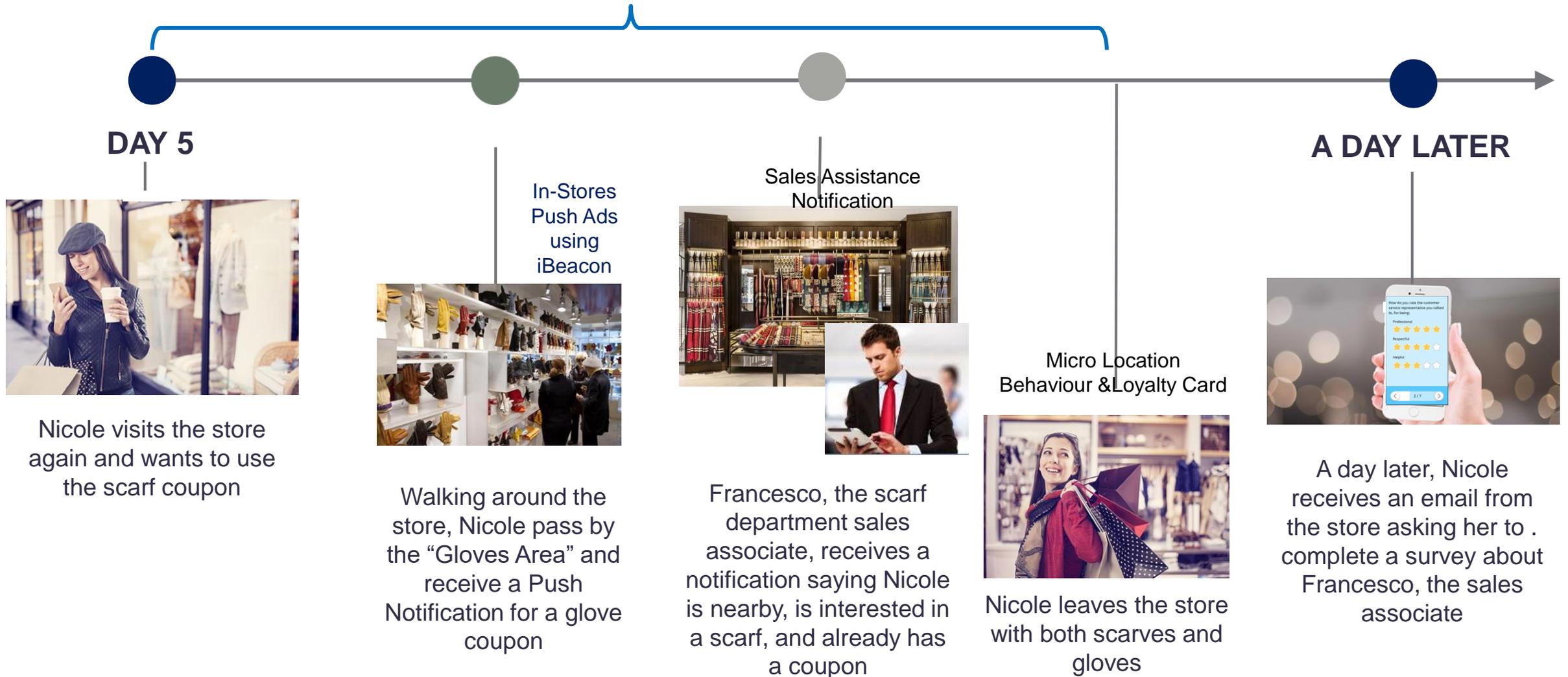
Retail vision

Micro Location User Journey Behavior Analytics and Profile



Retail vision (continued)

Micro Location User Journey Behavior Analytics and Profile



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For Business Owners

- **Increase ARPU** - Average ARPU increase is typically \$20-\$50 per month with 50% margins with a recurring services and billing model
- **Retain Customers** - Valuable service that SMBs can rely on to increase customer loyalty
- **Find New Customers** -An OTT solution means attracting SMBs from other service providers that don't offer marketing tools
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E2E Wi Fi Services Coverage

Design & Deployment



Network Design

RF and Capacity Planning
Design WLAN and Services



Installation

On-site cabling and HW installation



Service Onboarding

Configure man. tools (e.g. CISCO Prime) to enable monitoring of the WiFi network



Project Man.

Man. & coordination of service design installation and onboarding

Support for Operation



Guest Help Desk L1 support

Handles connectivity issues, guest login



Service Desk L2 support

Monitoring
Reports generating
Troubleshooting
SW update/upgrade
Technician dispatch



Experts L3 support

Deep problem investigation
System Audits
Analyzing & Predictions



Man. & Monitoring tools

CISCO Prime and HP Airwave



Service Management

Governance reporting
Bid support

VAS



Guest Wi Fi And Analytics

Wi Fi Guest Portals, User Journey, couponing and promotions, Presence & Location based analytics



Security

Threat detection and prevention
PCI compliance reporting

Legend

 Amdocs
Optional

 Amdocs
Base Scope