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 key for the next-gen Wi-Fi market.

- Retain and upsell existing customers
- Establish a new revenue streams
- 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

**Business Customers:**
- Want high quality always-on service
- Want simplicity
- Prefer Opex over CapEx
- Prefer bundled services

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

- Hotels
- Offices
- Schools
- Shops
Amdocs Cloud Wi Fi
Simplify Wi Fi Life Cycle Management & Maximize Wi Fi Monetization

- Carrier Grade Cloud Wi Fi
- Maximize Wi Fi Monetization

Better Wireless
Highest performing APs on the planet

Carrier Grade Operation

Easy To Use & Affordable
For Enterprises & SMBs

Marketing Guests Portals
Maximize Wi Fi Monetization

Presence & Location Analytics
Insights for Business Owners

Carrier Grade Operations
E2E Responsibility for Cloud Instantiation, Personalization’s, Operations & 24X7X365 Support
Pay As You Grow Commercial Model
Amdocs Cloud Wi-Fi
Solution Architecture

Simplify Wi-Fi Life Cycle Management

- Better Wireless
- Highest performing APs on the planet

- Investment Protection
- One Architecture for Wi-Fi & LTE

- Scalable & Cost Effective

- More Intuitive for the Enterprises & SMBs
- Manage your Wi-Fi network from anywhere

Maximize Wi-Fi Monetization

- Pay As You Grow Model
- Attractive pay as you grow model
- Sharing risks and revenue growth

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Option A</th>
<th>Option B</th>
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<tbody>
<tr>
<td>Set-up</td>
<td>Project based: One-time fee based on IaaS of choice, SP branding, System Integration, etc…</td>
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<tr>
<td>Subscription</td>
<td>OpEx - $ / AP / year</td>
<td>OpEx - $ / AP / month</td>
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<tr>
<td>Access Points</td>
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<tr>
<td>Operations, Support</td>
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<td>Included in Subscription</td>
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## 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**
Thank you
Amdocs Cloud Wi Fi - Simplify Wi Fi Life Cycle Management

Cloud

Better Wireless

Highest performing APs

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

独立自然测试显示解决方案的无线优越性

- 强大的Wi-Fi信号，更长的范围
- RF自动适应环境
- 更多并发用户每AP
- 更稳定的连接在更高的数据速率

802.11ac性能

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<thead>
<tr>
<th>品牌</th>
<th>性能值</th>
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<tbody>
<tr>
<td>Ruckus R700</td>
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<tr>
<td>Ruckus R500</td>
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Effective bandwidth at 40MHz

Ruckus 2700 | 65
Meraki MR34 | 58
Cisco 3700 | 56
HP 5600 | 53
HP 1100 | 52
hp 525 | 49
Ruckus 1100 | 49
Aruba 3200 | 37
Aruba 225 | 30
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

Management Dashboard
Venue & Floor Management
Network Social Sign On

Simplified for Enterprises & SMBs
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

Scan Business Card to Create Guest Pass
Zero Touch Provisioning by Barcode Scanning
Adding & Calibrating
Amdocs Cloud Wi-Fi solution
Scalable & Cost-Effective

- Dedicated Public Instance or Managed Private Cloud
- Integrated SW offering, IaaS agnostic

- NFV carrier-grade architecture (HA, Hyper-scale, Geo diversity)
- Integration Framework for future VNFs
**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

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**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
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
Nicole visits a store and uses her Facebook account to log into the guest Wi-Fi. She connects her Wi-Fi Account to her Loyalty Card.

The retailer collects Nicole’s email and gains insight into who she is via her social profile.

Nicole shops and spends a long time in the scarf department.

Nicole leaves the store without buying any scarves.

A day later, she receives a coupon for $10 of any scarf.

Push Ads based on Microlocation Behavior Profile
Nicole visits the store again and wants to use the scarf coupon.

Walking around the store, Nicole passes by the “Gloves Area” and receives a Push Notification for a glove coupon.

Francesco, the scarf department sales associate, receives a notification saying Nicole is nearby, is interested in a scarf, and already has a coupon.

Nicole leaves the store with both scarves and gloves.

A day later, Nicole receives an email from the store asking her to complete a survey about Francesco, the sales associate.
WIN-WIN-WIN Offering

For Service Provider

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- Focus on Sales – outsource operations complexity, and focus on growing your business
- Latest and Greatest – cloud solution promise market new features with frequent transparent upgrades

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
- 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