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Express Wi-Fi: Building a Business

Platform for Sustainable Wi-Fi

WiFi India Summit 2019

02/06/2019

The Opportunity: Wi-Fi can complement mobile broadband for consumers and generate additional streams of revenues for service providers

4G COVERAGE GAPS

- *Assumption: WiFi economics can work in some of these gaps on targeted basis*
- Requires a minimum population density to be viable for WiFi
- Express WiFi integrated for seamless experience, or as a Stand-alone service

AREAS WITH LOW 4G ADOPTION

- *Assumption: low adoption due to 4G device penetration*
- WiFi as a retention and monetization strategy until high 4G device penetration is achieved
- Express WiFi integrated for seamless experience

AREAS WITH 4G CONGESTION

- *Assumption: the capacity constraint is Spectrum*
- Maintain quality customer experience with a WiFi layer and retain high value customers
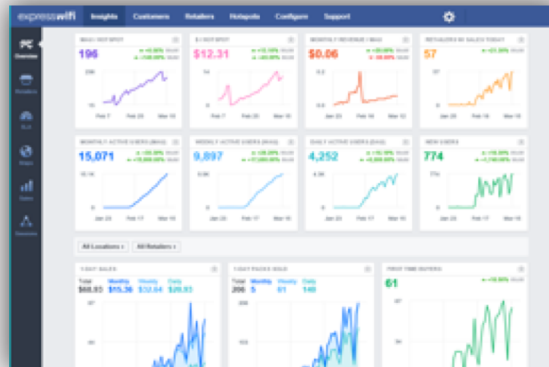- Express WiFi integrated for seamless experience

Wi-Fi Cloud Platform: Express Wi-Fi

The Express Wi-Fi solution provides operators an end to end Wi-Fi business platform and enables access to our vendor ecosystem partners
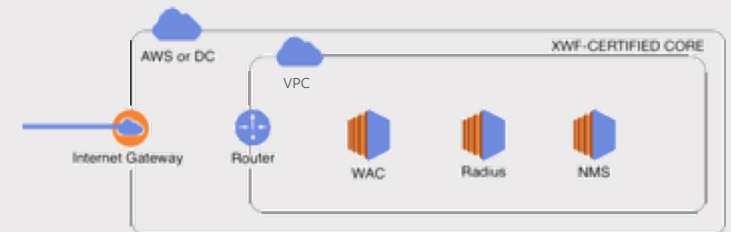
CONSUMER EXPERIENCE

- Consumer interface for registration, finding nearby hotspots, retailers, digital payments, and enhanced features

BUSINESS PLATFORM (BSS)

- Business performance, analytics and pricing optimization tools
- Distribution and retailer interface
- Billing, payments and retailer wallets

NETWORK PLATFORM

- Cloud-based network core (AAA and metering)
- Cloud based access point provisioning, network management and monitoring
- Vendor Ecosystem for AAA, Captive Portal, and WAC integration

Wi-Fi Cloud Platform

Vision: allow Wi-Fi service providers to focus on building the access network and on-the-ground operations, while providing an end-to-end SaaS platform for building, operating, growing, and monetizing a Wi-Fi network

| BUILD	OPERATE	GROW	MONETIZE
[Cloud-based Wi-FI Core (AAA), Usage Metering and Tools]	**[Operational Support System and Analytics Tools]**	**[Business Analytics, CRM, and Consumer Interface]**	**[Monetization Channel Management]**
Onboard new or existing Wi-Fi networks and efficiently expand the network	Understand network performance & improve Quality of Experience	Provide great customer experience, identify key customer segments and effectively acquire and retain them	Leverage the network footprint for monetization through fixed Wi-Fi services, pre-paid data sales, sponsored branding, advertising, and data offload

4 Lessons Learned in the Field

1. Build for Scale

Build for Scale: Designing a platform that can support millions of hotspots

Key considerations:

- Retaining the ability to improve user experience

- Enable Wi-Fi providers to understand their business

- Build on a standardized stack by partnering with OEMs

3rd Generation:
SaaS-based

Local
Breakout

Cloud

Business Platform

Network Platform
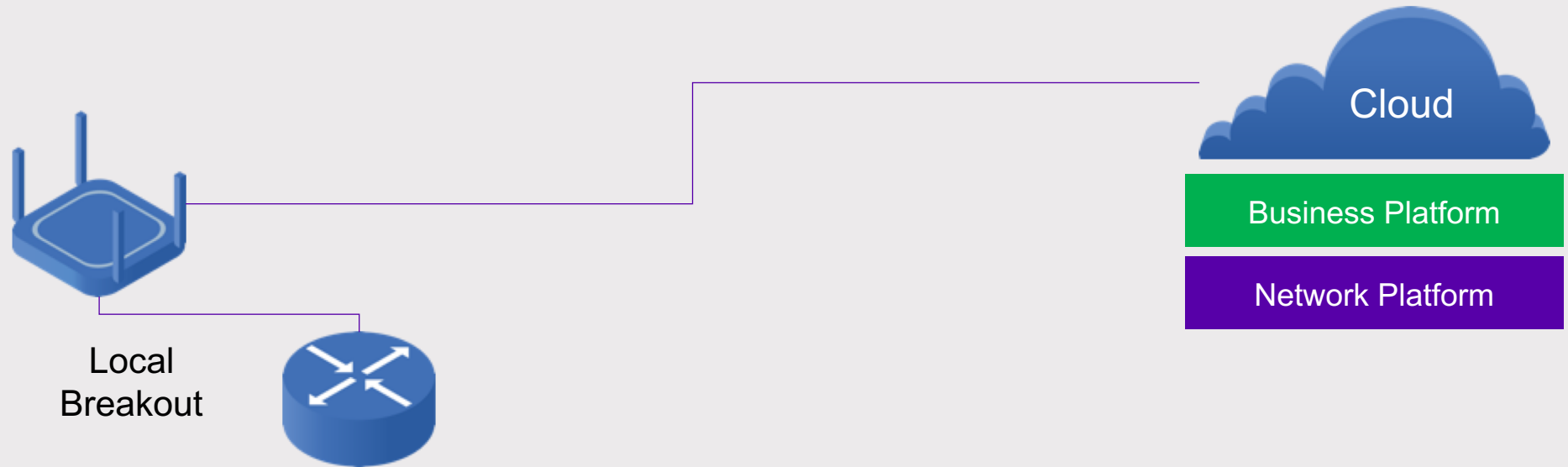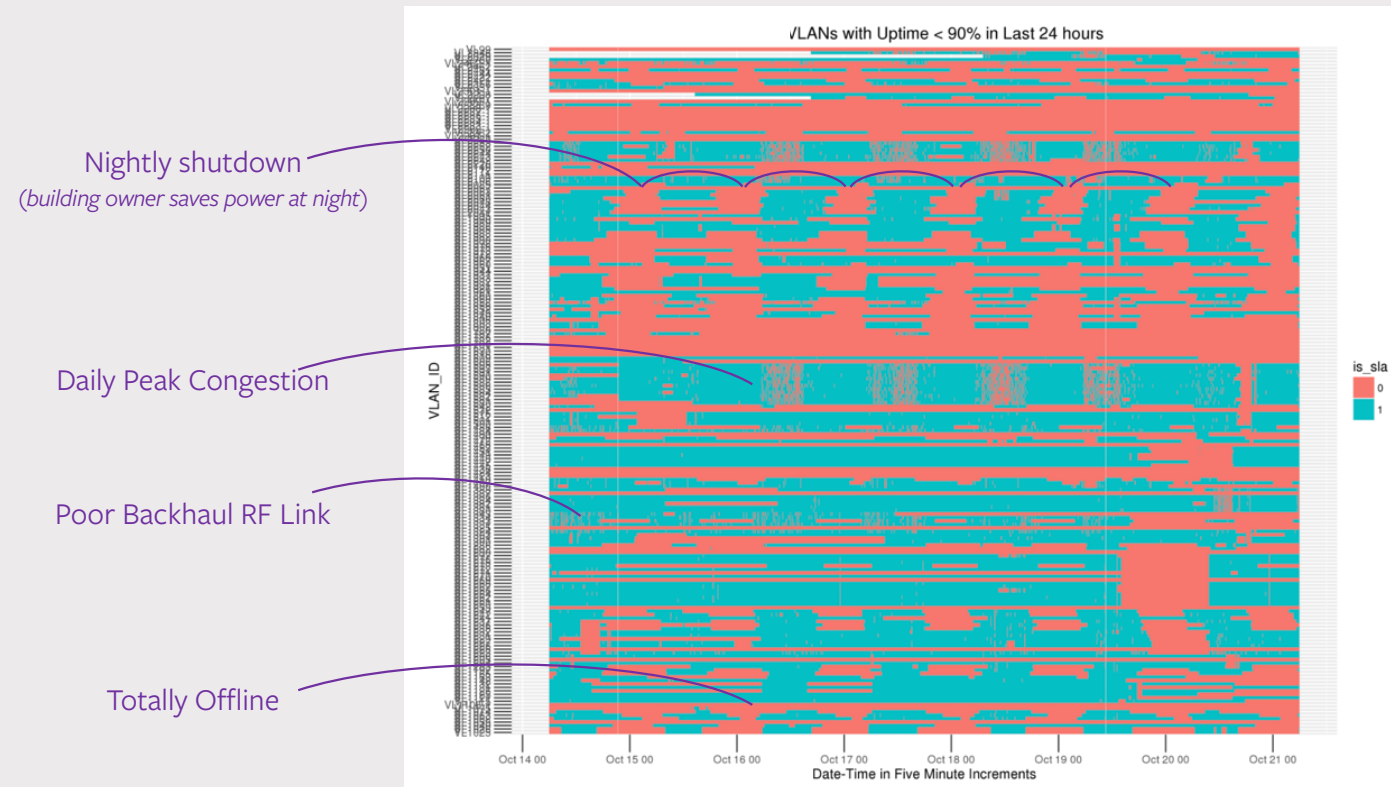
2. Operate: understand the network

Understand the Network: Enabling Wi-Fi providers to gain meaningful operational and business insights about their network

Key considerations:

- "Single pane of glass" view of network and business performance across zones and vendors

- Make the data actionable and help identify opportunities to improve the business

Example #1: Quality of Experience

- Establish AP-level measurement

- Integrate into the network controller and build a monitoring service

- Establish a QoE dashboard and understand the data

VLANs with Uptime < 90% in Last 24 hours

Nightly shutdown
(building owner saves power at night)

Daily Peak Congestion

Poor Backhaul RF Link

Totally Offline

Date-Time in Five Minute Increments

Business Support System optimized for Wi-Fi operations

Analytics

- Key business metrics
- Business opportunities and recommendations
- Core Analytics to support business decisions
- Understand user experience
- Identify how to increase revenue

Management

- Core business functions
- Customer Management
- Retailer Management
- Network planning
- Location ranking

3. Grow: provide great user experience

Provide a great user experience: enable Wi-Fi providers to grow their funnel
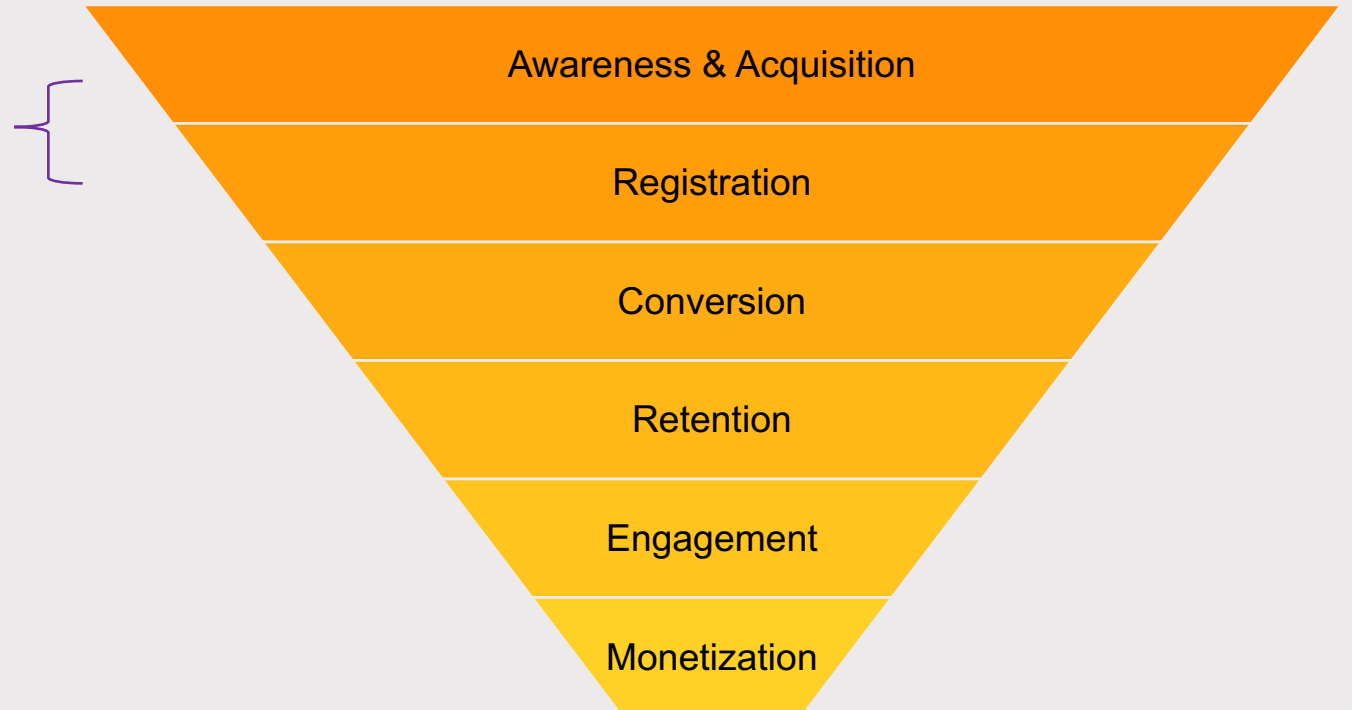
- Approaching this problems both from the consumer and the providers side:
  - Consumers: understand and improve people's experience around awareness, discovery of hotspots, connection, registration, and ongoing usage
  - Providers: identify opportunities through acquisition and retention tools
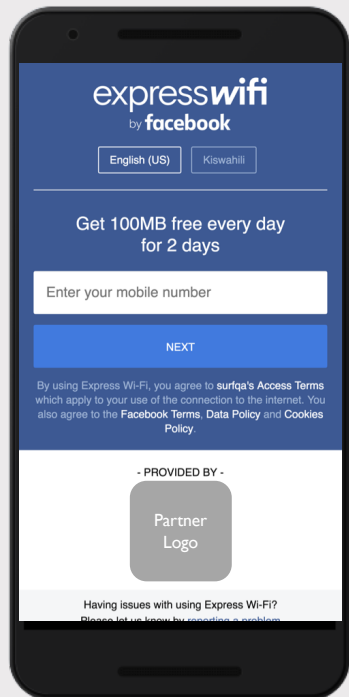
Example #1: Identifying ~60% drop in Captive Portal related issues
Solutions: native mobile experience, network stack improvements

~10% increase by removing "customer name" from the registration flow

express**wifi**
by **facebook**

English (US)   Kiswahili

Get 100MB free every day for 2 days

Enter your mobile number

NEXT

By using Express Wi-Fi, you agree to **surfqa's Access Terms** which apply to your use of the connection to the internet. You also agree to the **Facebook Terms**, **Data Policy** and **Cookies Policy**.

- PROVIDED BY -

Partner Logo

Having issues with using Express Wi-Fi? Please let us know by reporting a problem

Awareness & Acquisition

Registration

Conversion

Retention

Engagement

Monetization

NOTE: Revenue stream sizes are illustrative

Provide a great user experience: enable Wi-Fi providers to grow their funnel

- Approaching this problems both from the consumer and the providers side:

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Retention since First Active Usage
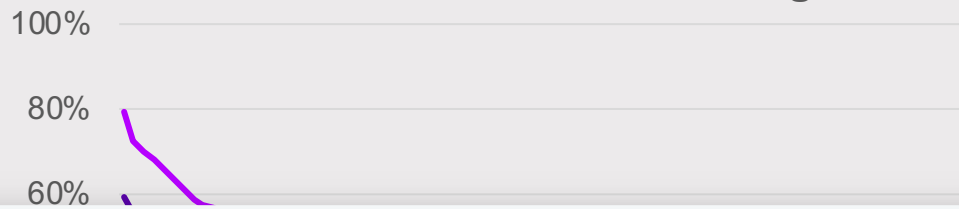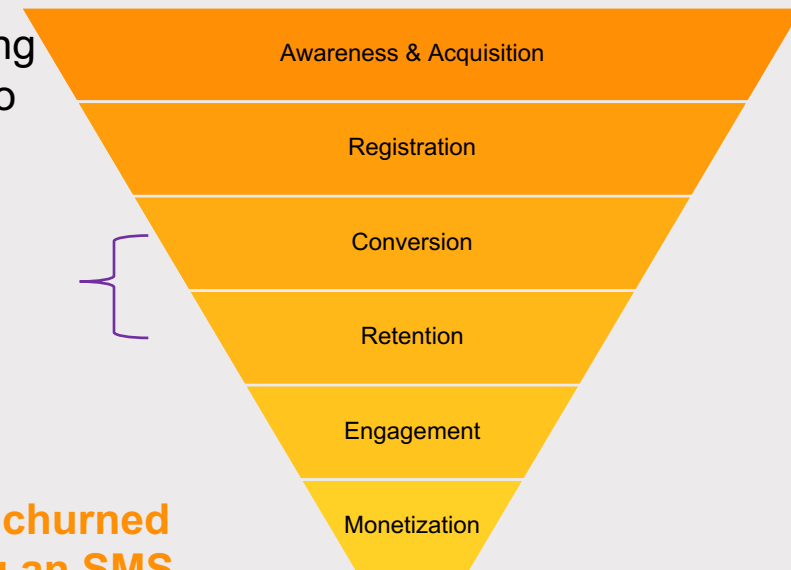

Example #2: Identifying users that are likely to churn
Solutions: launch targeted campaigns, customer outreach programs, customer loyalty programs
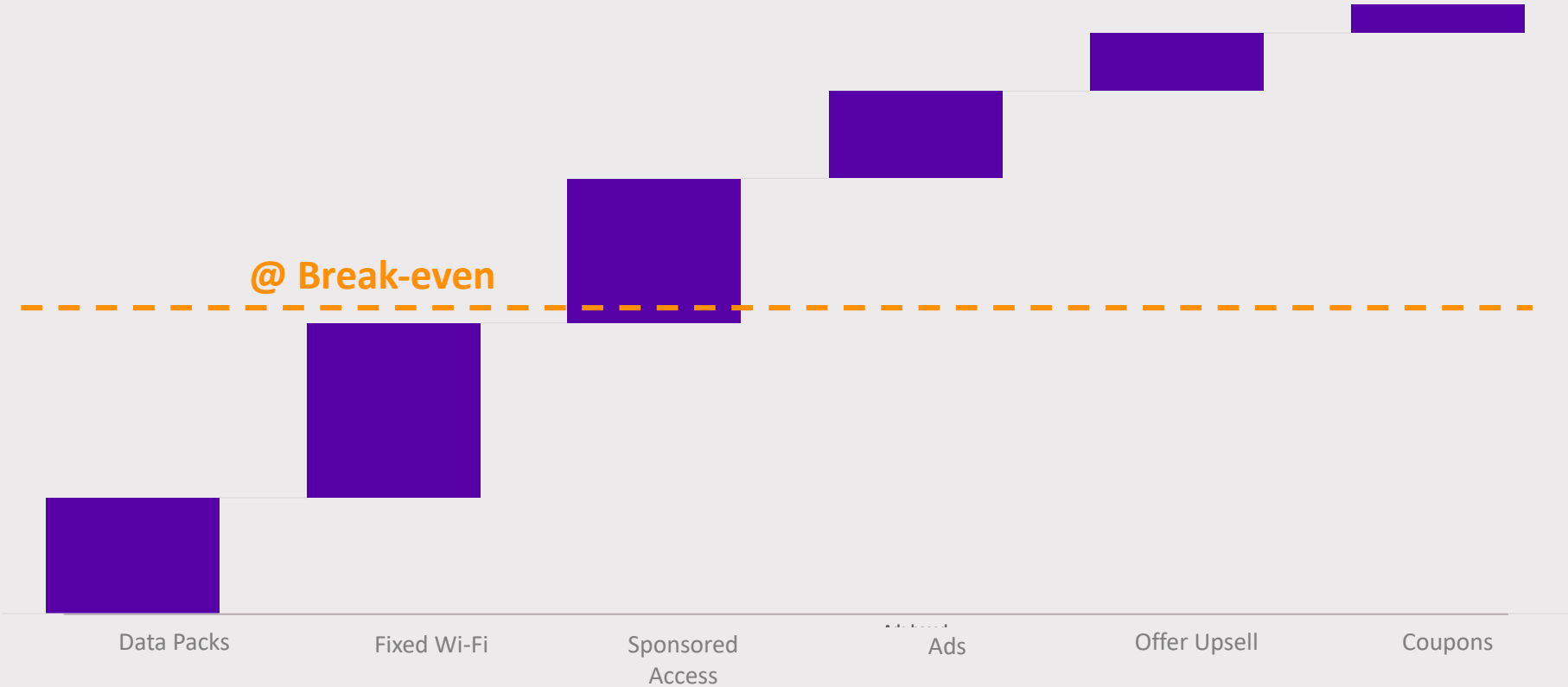
~20% reduction in churned users by launching an SMS campaign, ~30% increase in revenue per user

Awareness & Acquisition

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4. Monetize: How to make Wi-Fi profitable?

How to Make Wi-Fi Profitable?

- Profitability is key for Wi-Fi providers to scale and maintain high quality of experience

- We learned early on that one monetization scheme is often not enough – different schemes work differently across markets. For that, a **portfolio** approach was more applicable, by leveraging multiple channels:

@ Break-even

Data Packs · Fixed Wi-Fi · Sponsored Access · Ads · Offer Upsell · Coupons

NOTE: Revenue stream sizes are illustrative

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