



28 SEP – 21 OCT 2021

WI-FI: POWERING INNOVATION SERIES

Creating new possibilities in a virtual society

Join us for a series of exclusive webinars featuring top executives from the Wi-Fi industry

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21 OCT 2021 – 15:30 CET

Wi-Fi Innovation for Service Providers, Cities and Venues with Public and Guest Wi-Fi

Creating new possibilities in a virtual society

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Introduction & Welcome

SARAH KOLMER

DIRECTOR, MARKETING & PR, EVENTS

Wireless Broadband Alliance





Thank you to our Sponsors



Wi-Fi Powering Innovation Series

Full Program Agenda

September 28th & 29th – WBA Members Only Working Sessions

September 30th – WBA Members Only Working Sessions: Briefing for Asia-based members

WI-FI POWERING INNOVATION SERIES: 06:30 PT; 09:30 ET; 15:30 CET; 23:30 Singapore

**Tuesday
October 5th**

**Wi-Fi Leadership
Conference
&
WBA Industry Awards
2021**

**Thursday
October 7th**

**Wi-Fi: Public and Private
Networks and
Convergence with 5G**

**Tuesday
October 19th**

**Wi-Fi: Enabling the Smart
Connected Enterprise**

**Thursday
October 21st**

**Innovation for Service
Providers, Cities and
Venues with Public and
Guest Wi-Fi**

Wi-Fi Innovation for Service Providers, Cities and Venues with Public and Guest Wi-Fi



Sarah Kolmer

Wireless Broadband
Alliance



Enver Kilic

Türk Telekom



Ravi Shankar

STL



Shai Silberman

San Jose State
University



Robert Lamb

Plume



**Bernard
Herscovici**

NetExperience



Tiago Rodrigues

Wireless Broadband
Alliance



Alphonso Jenkins

Formerly Deputy
Commissioner of
Telecom Planning
New York City



Reza Jafari

e-Development
International

Innovation for Service Providers, Cities and Venues with Public and Guest Wi-Fi

TODAY'S AGENDA	
15:30pm (CET)	Introduction & Welcome Sarah Kolmer, Director, Marketing & PR, Events, Wireless Broadband Alliance.
15:35pm (CET)	Enhancing the Wi-Fi Experience for Small Sized Restaurants & Coffee Shops Enver Kilic, Mobile & Fixed Data Group Manager, Türk Telekom
15:55pm (CET)	Harnessing Wi-Fi Offload to Maximize Return on Your Network Investments Ravi Shankar, Head of Product Management – OSS/BSS, STL
16:15pm (CET)	Modernizing the San Jose State University Campus Shai Silberman, Director of Networking Services, San Jose State University.
16:35pm (CET)	How Fiber Providers can rise to the customer experience challenge. Robert Lamb, Senior Director of Business Development, Plume.
16:55pm (CET)	OpenWiFi Platform for Europe Bernard Herscovici, Founder & CEO, NetExperience.
17:15pm (CET)	Connected Communities Panel: Addressing the automatic, secure and privacy-ready needs essential for Public Wi-Fi and bridging the Digital Divide Tiago Rodrigues, CEO – Wireless Broadband Alliance; Al Jenkins, Former Deputy Commissioner of Telecom Planning – NYC; Reza Jafari, Chair & CEO – e-Development International.
17:35pm (CET)	Event Close and updates on Next WBA Event 2022 Tiago Rodrigues, CEO, Wireless Broadband Alliance.



Enhancing the Wi-Fi Experience for Small Sized Restaurants & Coffee Shops

ENVER KILIC

MOBILE & FIXED DATA GROUP MANAGER

Türk Telekom



Türk Telekom
Değerli Hissettirir



**“Enhancing the Wi-Fi Experience for Small
Sized Restaurants & Coffee Shops**



About Türk Telekom



WiFi Products & Services



About Re-Ca WiFi



Leading
Operator in Turkey
Offering
Integrated telecom
services



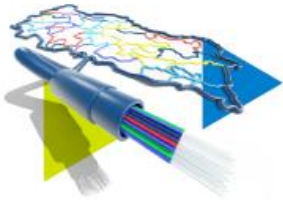
Serving
50.7mn
Subscribers



95%
LTE
Population coverage



2nd **player**
in Pay TV market



345k km
Fibre network in
81 cities



45%
Fibre connected
LTE base stations



27.9mn
Fibre homepass*
*Includes FTTC & FTTH/B

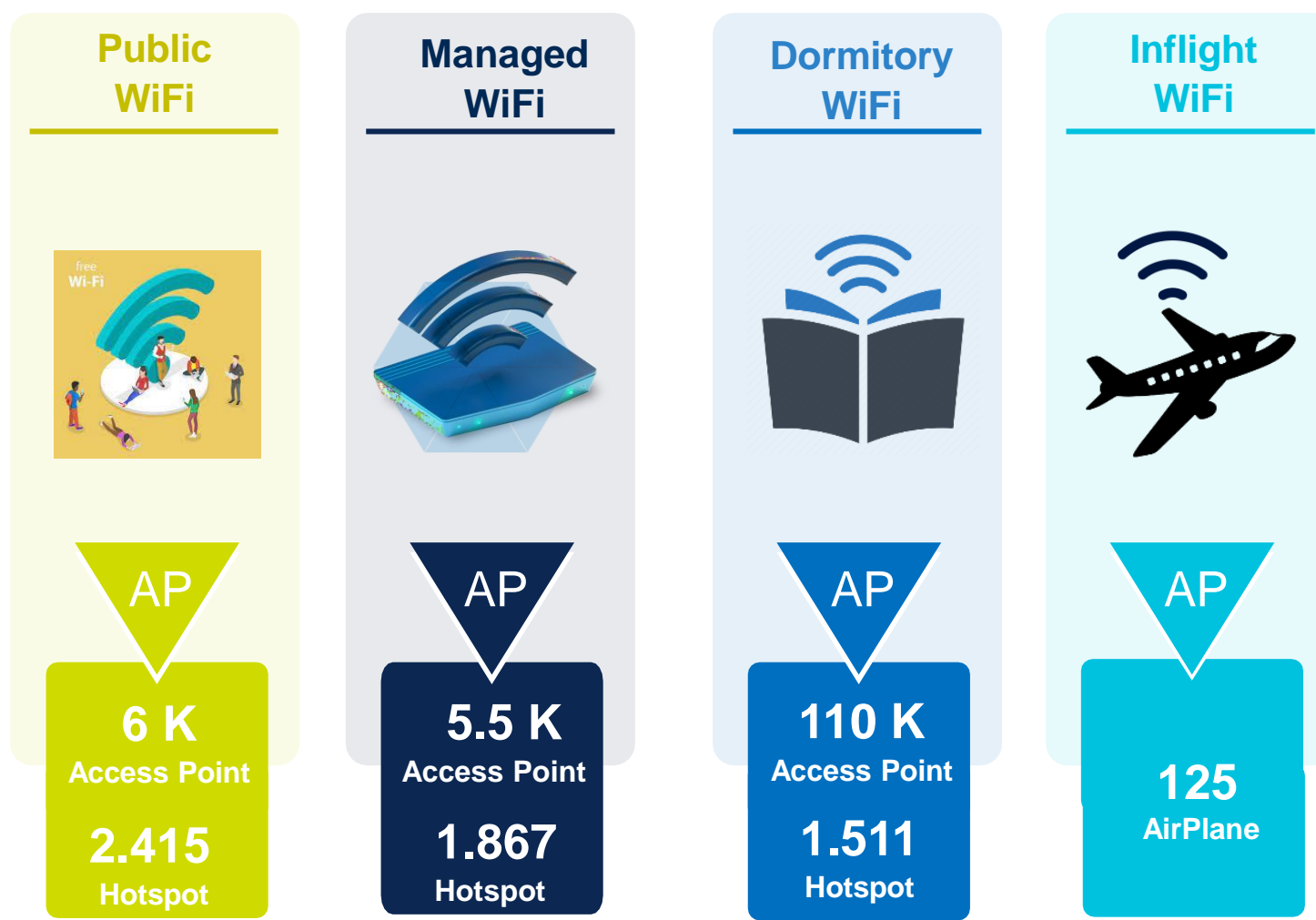


Market share ranks are from the Q2 '21 ICTA report.



62%*

Multi-product ownership



Türk Telekom WiFi

Turkey's widest WiFi broadband network since 2006



(WiFi)

**FOR SMALL-SIZED RESTAURANTS
AND
COFFEE SHOOPS**

The First Idea ..

Security concern was the idea behind the service. We need a secure and flexible services for both owners and end users.

- Some shop owners directly share their SSID and passwords. Hackers love coffee but also free wifi as well !
- Some shop owners share seperate SSID and passwords for all different end users, no user awareness !
- Hacking constraints and other illegal problems can be a burden for both coffee owners and end users.
- End user traffic can be monitored or altered in untrusted network.
- Owners has limited budget to giver more secure services



What Small Businesses NEED ?

Providing free and secure internet for their customers !

- ▶ **Plug and Play Services:** Over your current/new broadband infrastructure at restaurants and coffes
- ▶ **Custom Login Pages:** Express yourself ! A design of your own choice according to your style and concept.
- ▶ **Special Advertising and Campaign Plan:** Temporary or seasonal marketing efforts for your customers!
- ▶ **High Security:** Secure service both for you and for your customers.
- ▶ **Compliance to Local Regulations and Laws:** No worries about legal obligations; just connect and leave the rest to Turk Telekom that handles all the data transmission procedures.



What TURK TELEKOM offers ?



Legal&Security

- Full compliance with legal obligations (GPDR etc.)
- Isolated networks (Guest and home network) which ensure the security between parties



Installations

- Remote software installation on existing broadband modems.



Management

- Custom portal design
- URL Forwarding
- Custom SSID
- Detailed app-centric usage report



Protection

- Content filtering for the end user
- Bandwidth limitations for guest network or per user

Make all of this possible

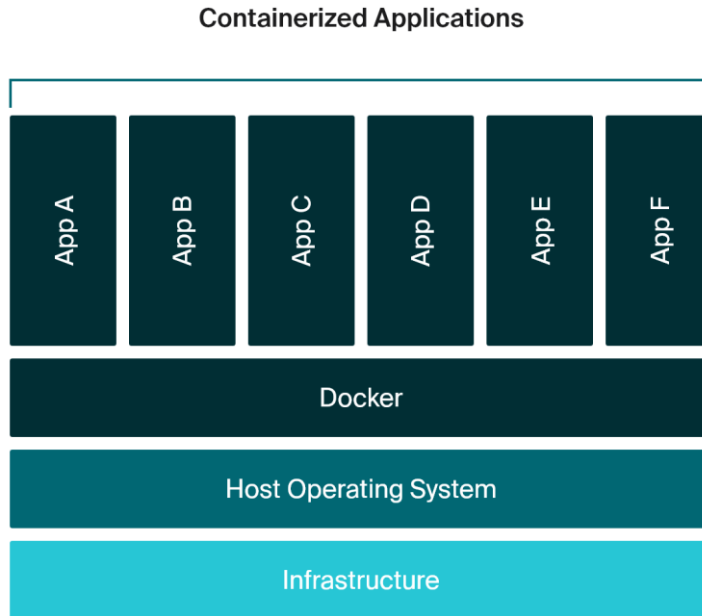


Power of the Cloud

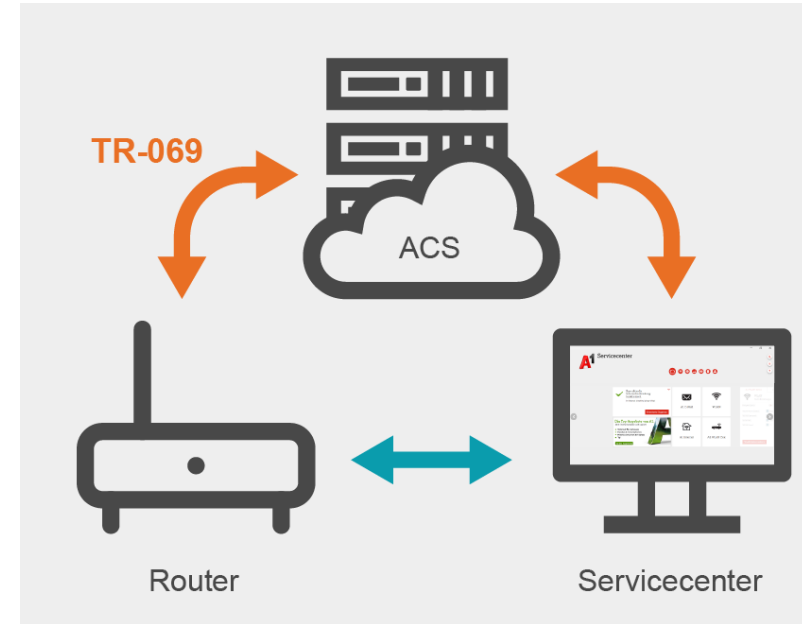


Containerized World

Containerized Modem Software & Modem Management Tools



Container Based Modem Software



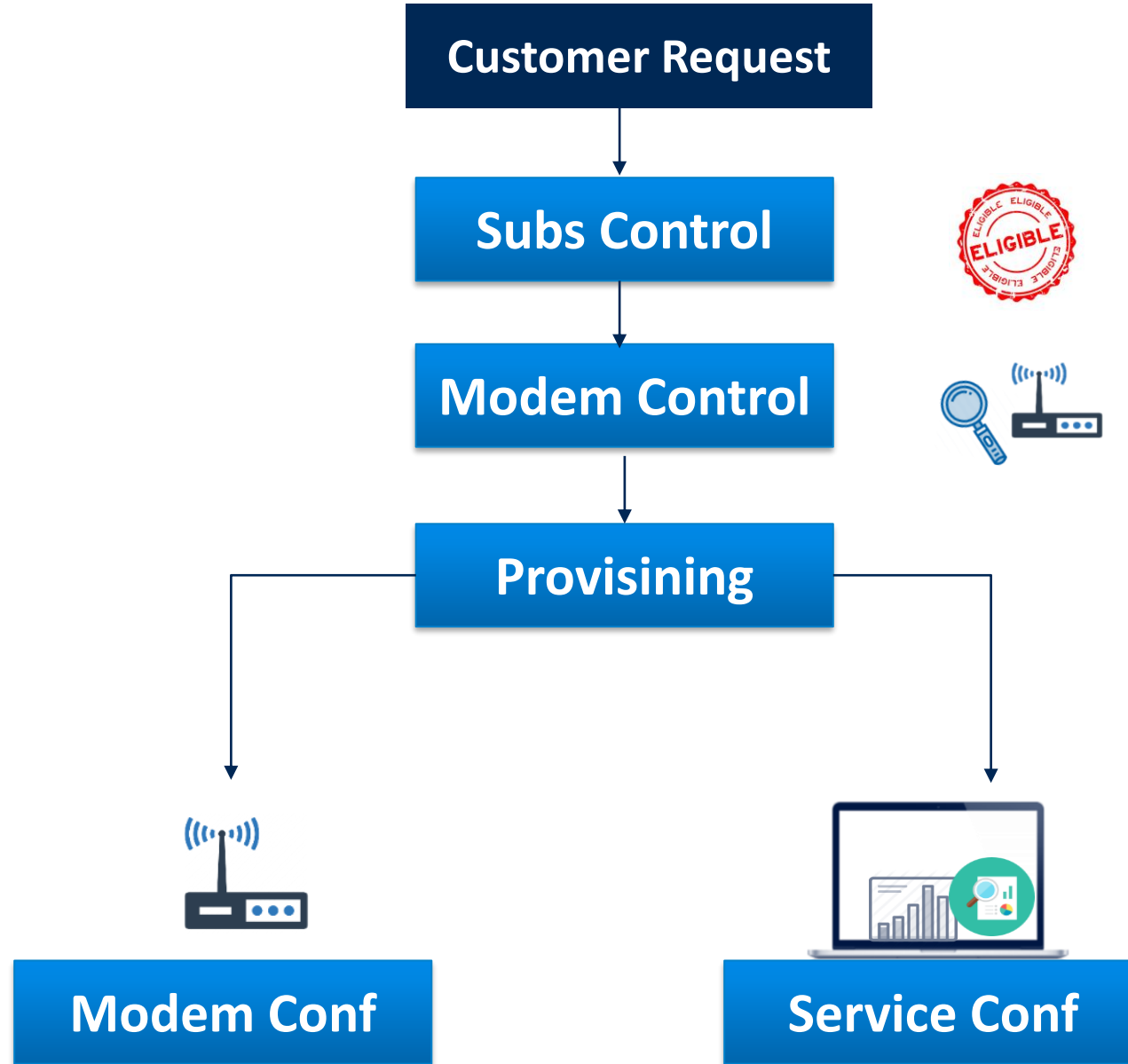
Enhanced Modem Management

Total Subscriber (M) and Modem in Turk Telekom

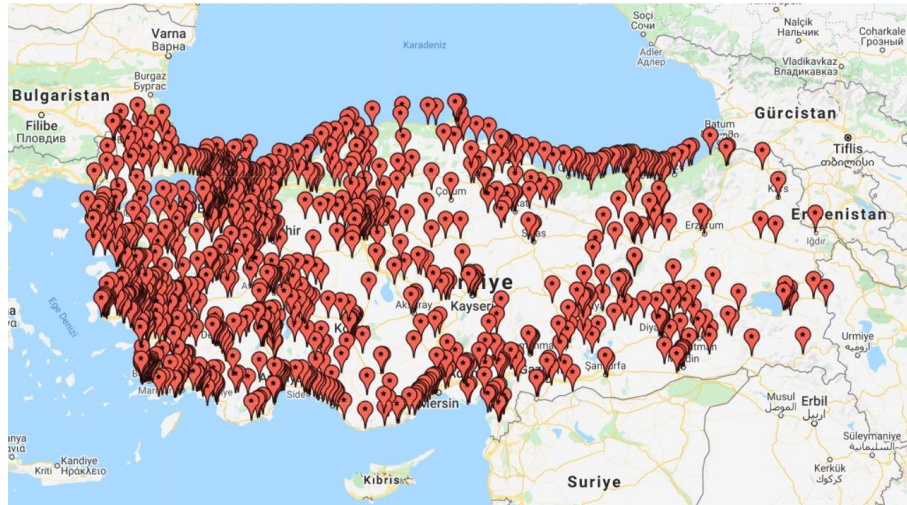


Turk Telekom are managing **9.2 M** broadband modem of **10.2 M**

Basic Workflow

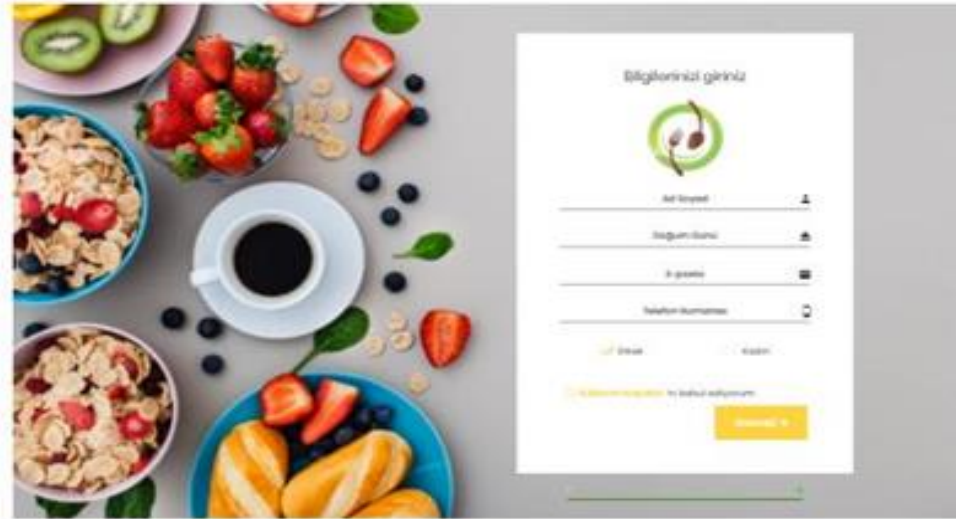


Expanding WiFi Footprint



Default Templates

Breakfast

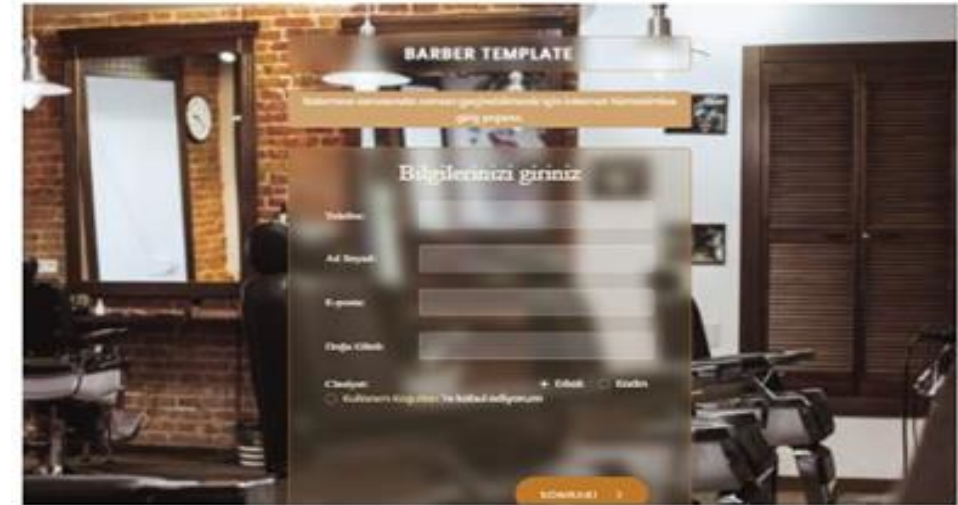


Bilgilerinizi giriniz

Erkek Kadın

Müşterim değilim. Teşekkür ederim.

Barber



BARBER TEMPLATE

Bilgilerinizi giriniz

Erkek Kadın

Müşterim değilim. Teşekkür ederim.

Coffee



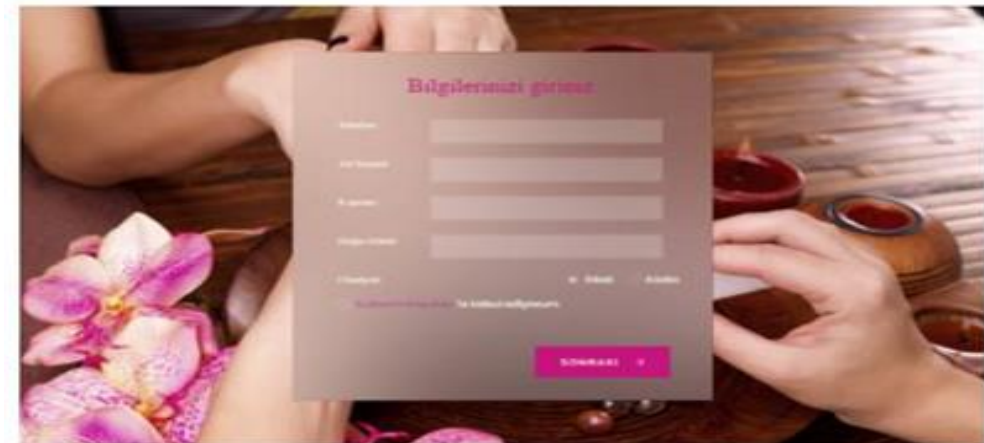
COFFEE & SHOP

Bilgilerinizi giriniz

Erkek Kadın

Müşterim değilim. Teşekkür ederim.

Beauty

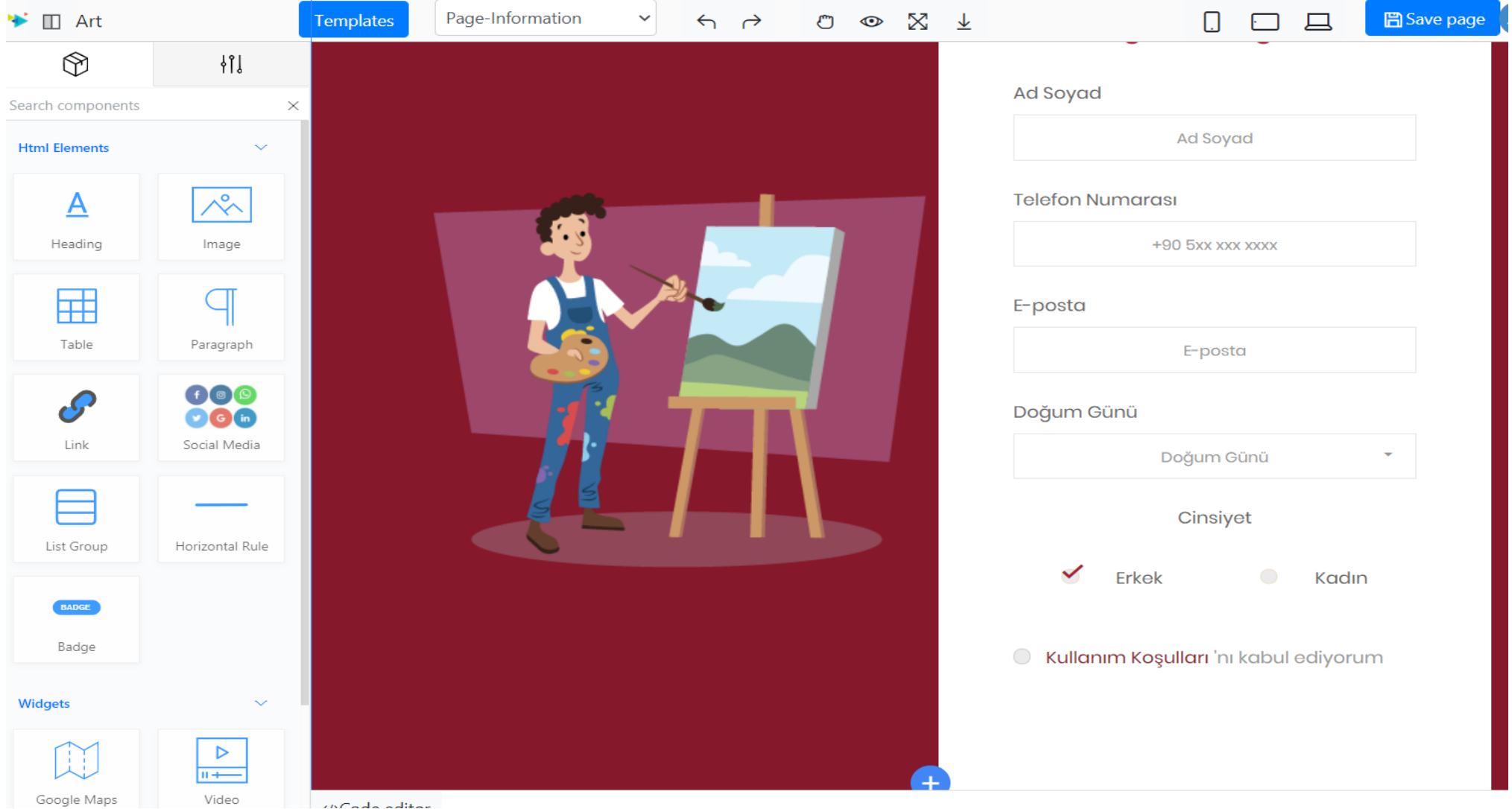


Bilgilerinizi giriniz

Erkek Kadın

Müşterim değilim. Teşekkür ederim.

Custom Design Page



The screenshot displays a web design tool interface with the following components:

- Top Bar:** Includes a 'Templates' button, a 'Page-Information' dropdown, navigation arrows, a trash icon, an eye icon, a crop icon, a download icon, and a 'Save page' button.
- Left Panel:** A 'Search components' sidebar with a search bar and a close button. It is divided into 'Html Elements' and 'Widgets' sections.
 - Html Elements:**
 - Heading (A)
 - Image (Image icon)
 - Table (Table icon)
 - Paragraph (Paragraph icon)
 - Link (Link icon)
 - Social Media (Social Media icons)
 - List Group (List Group icon)
 - Horizontal Rule (Horizontal Rule icon)
 - Badge (BADGE icon)
 - Widgets:**
 - Google Maps (Google Maps icon)
 - Video (Video icon)
- Central Canvas:** A large red background featuring a cartoon illustration of a painter in blue overalls painting a landscape on an easel.
- Right Panel:** A form with the following fields:
 - Ad Soyad:** A text input field with the placeholder 'Ad Soyad'.
 - Telefon Numarası:** A text input field with the placeholder '+90 5xx xxx xxxx'.
 - E-posta:** A text input field with the placeholder 'E-posta'.
 - Doğum Günü:** A dropdown menu with the placeholder 'Doğum Günü'.
 - Cinsiyet:** Radio buttons for 'Erkek' (checked) and 'Kadın'.
 - Kullanım Koşulları:** A radio button for 'Kullanım Koşulları 'nı kabul ediyorum'.

Advanced Traffic&Content Configuration

Traffic Control

These are the global download/upload speed settings. They correspond to the maximum internet speed limits available for this network.

Download Limit:

Maximum (defined)

Upload Limit:

Maximum (defined)

These are user-based speed settings. They correspond to the maximum internet speed limits to be applied to each user.

Download Limit:

6Mbit

Upload Limit:

4Mbit

Web filter

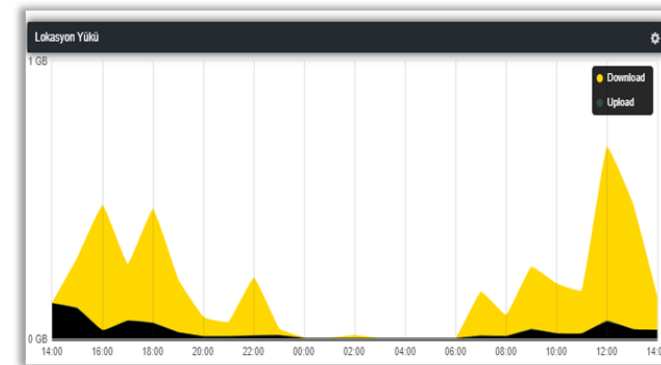
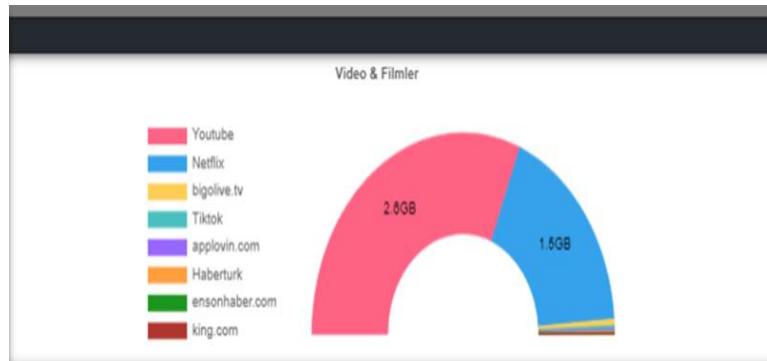
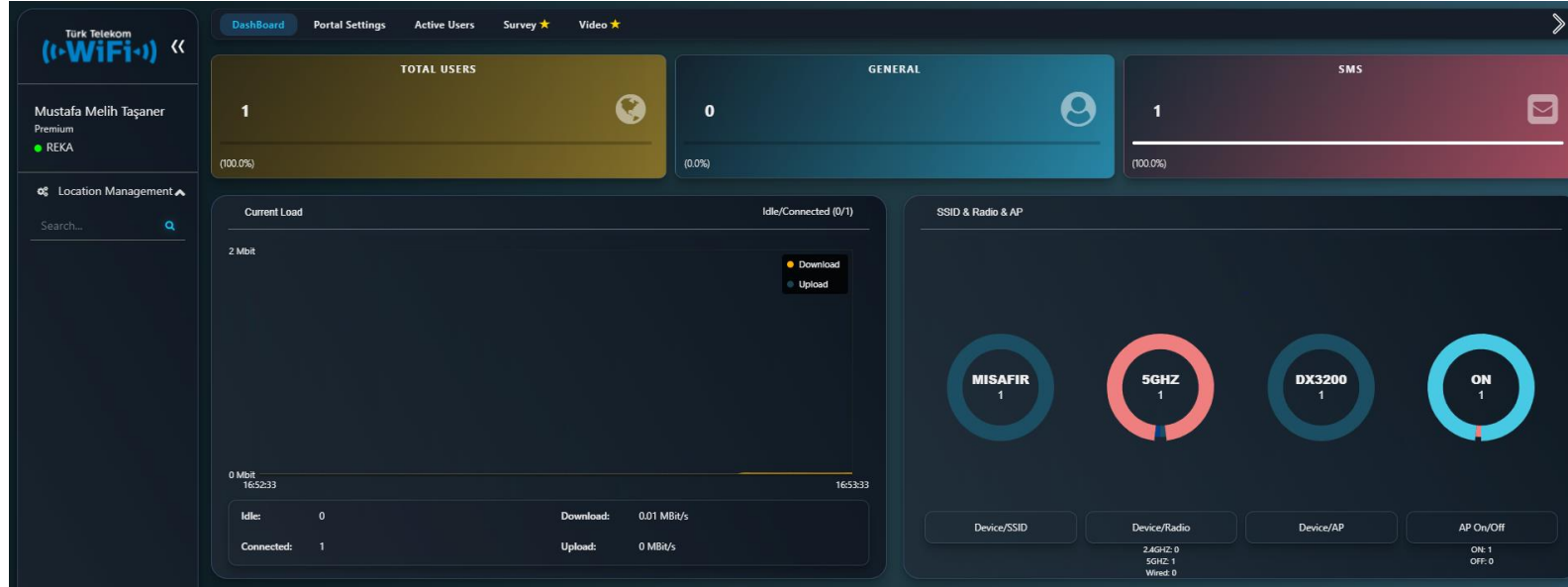
**Categories highlighted below will be blocked*

<input checked="" type="checkbox"/> Adult	Aggressive
<input type="checkbox"/> CriminalActivities	Phishing/Fraud
<input type="checkbox"/> Photo Sharing	<input checked="" type="checkbox"/> Spam URLs
<input type="checkbox"/> Video_Movies	Social Networking

Black List

8C:85:90:56:95:12

Status&Monitoring



Project Scope

Launch October

- Legal liability
- Custom portal design, SSID
- Management Portal and advanced reporting
- SMS OTP Login



Next Steps

- GSMA Mobile Connect Login
- Social Login Business Mobile Application for ordering and payment
- Integration with other TT SOHO Digital services
- SMS/E-mail/Advertising Campaign
- WiFi Roaming



QUESTIONS ?



THANK YOU !

enver.kilic@turktelekom.com.tr



Harnessing Wi-Fi Offload to Maximize Return on Your Network Investments

RAVI SHANKAR

HEAD OF PRODUCT MANAGEMENT – OSS/BSS

STL

The logo for STL, consisting of the letters "STL" in a bold, blue, sans-serif font, with a small green leaf-like shape above the letter "L".



stl.tech

WBA WiFi Webinar

Harnessing Wi-Fi Offload to Maximize
Return on Your Network Investments

Ravi Shankar | October-21



dSmartMobility - Our Journey so far and the road ahead



POC - Vanilla Wi-Fi offload

Basic offload use case
3GPP parameter check
Location based offload



POC Policy based offload

ANDSF Compliance
QoE check, Periodic evaluation, Real Time offload, Analytics



ANDSF Live

Any WiFi
Device coverage
Multi Tenancy
Engineering View

Cloud Native multi offload approach

OMA DM
CNF
HS 2.0
OpenRoaming

Network Convergence

5G
IoT
Link Aggregation

We are here

- 3GPP Location based offload
- Basic RSSI check
- Android device only supported

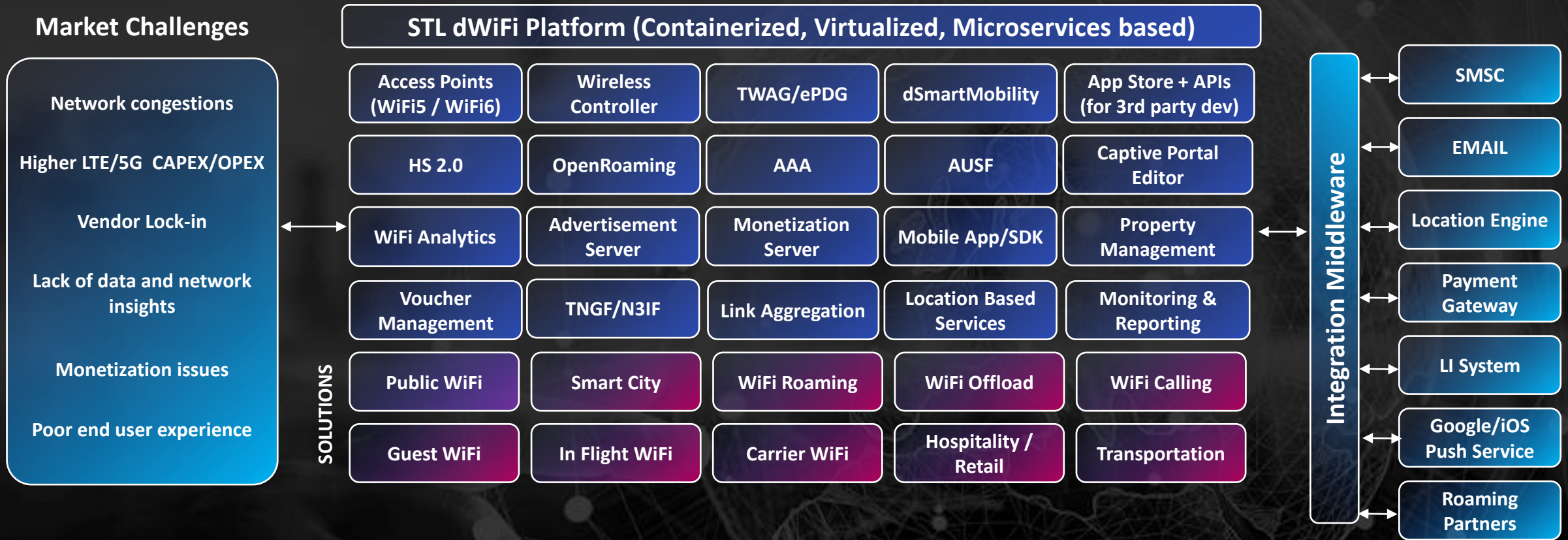
- 3GPP Release 11 TS 24
- ISMP Policy
- Base Analytics
- Wi-Fi scanning
- Support up to Android 9

- iOS SDK
- Android device coverage
- Multi Tenancy
- Basic and Advanced Profiling
- Dashboard (Business/ Engineering)

- OMA DM
- CNF Based Deployment
- Hotspot 2.0 (3 use cases)
- OpenRoaming
- Advanced Analytics

- ANDSP
- MPTCP / Link Aggregation
- ATSSS
- IoT and eSIM use cases
- MicroServices

STL's Role in overall WiFi Value Chain



Value Propositions



Smart & Intelligent Network Services



Elevate digital experience



Innovate new revenue channels



Reduced time to market



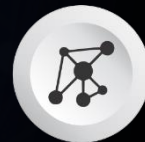
Better Customer Experience



Seamless access & authentication



Low Cost to serve



Network Agnostic & Vendor Neutral

1

dSmartMobility

- Client App (Android/iOS SDK) Based Approach
- Auto offload to WiFi network when in range and have better connectivity than LTE
- Offload based on the QoS parameters/threshold
- Notifications for the nearby available hotspots

2

NGH (Hotspot 2.0 + OpenRoaming)

- Client Less Approach (in built functionality in devices)
- Auto authentication and Seamless connectivity to WiFi without any manual login or intervention
- Offload based on the QoS parameters/threshold
- OpenRoaming to offer extended WiFi coverage by seamless roaming

3

WI-FI and 5G Offload + Convergence

- App less approach where intelligence built in 5G devices
- Uses ANDSP and UE Route Selection Policy (URSP) for traffic selection and steering
- ATSSS rules which defines rules to dictate how the device should utilize the 3GPP and Non-3GPP access networks

dSmartMobility Success Story – Tier 1 Operator



2.5M

Registered Users
offloading to Wi-Fi

15%

Acceleration in Wi-Fi
offload Adoption

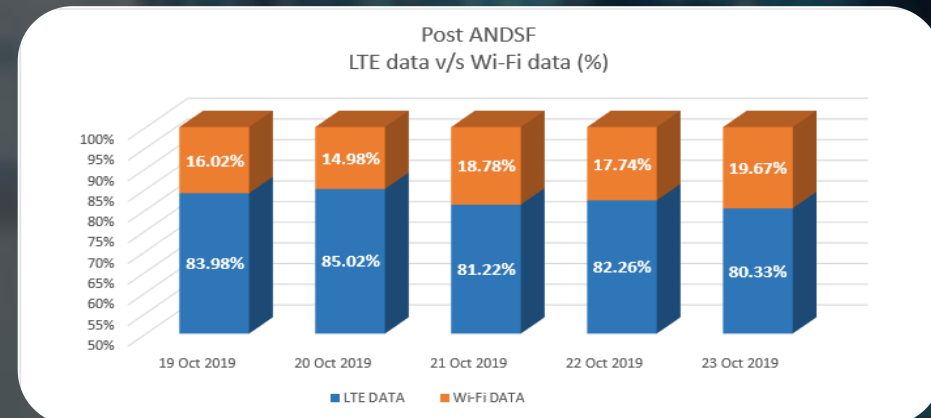
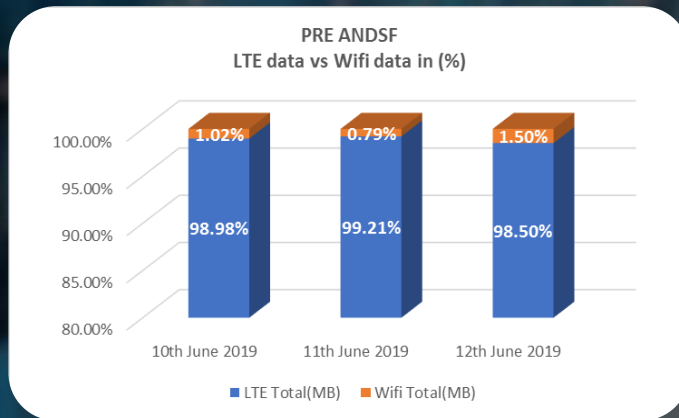


Higher Data usage
volumes on Wi-Fi as
compared to LTE



Wi-Fi usage duration is
longer than LTE

Impact created by dSmartMobility



Benefits after Implementing HS2.0



KPIs Improvement

- ✓ Increased WiFi Adoption
- ✓ Improved User Onboarding and experience
- ✓ Reduced customer churn
- ✓ Increased WiFi Offload
- ✓ Reduced number of steps for WiFi login
- ✓ Increased opportunity for WiFi Roaming

Benefits

- ✓ Transparent, automatic WiFi connection and authentication
- ✓ Policy configuration support for differentiated QoS
- ✓ Enabling WiFi Roaming for inexpensive but better network coverage
- ✓ No manual selection of SSID or input of access credentials
- ✓ Enhanced security (WPA2 and EAP)
- ✓ No dependency on Application, OS version and device as functionality in-built in devices

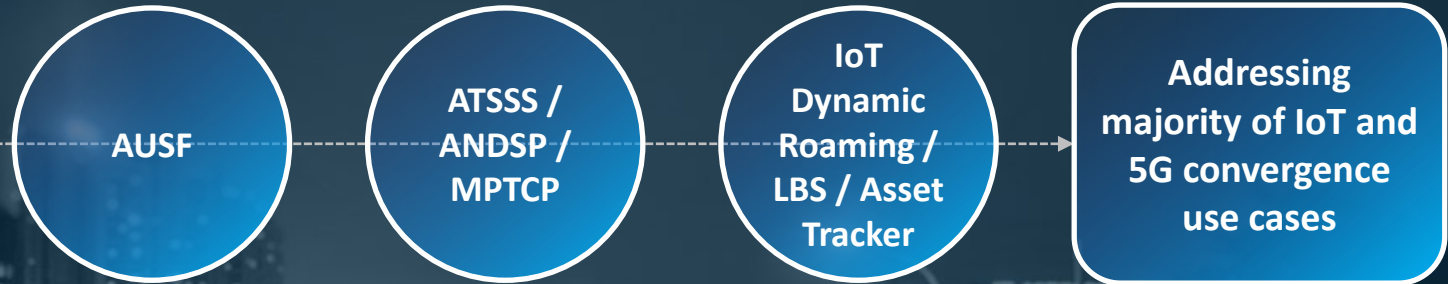
Alignment of CSP's Business Objective with STL Solutions



Objective

- 5G and WiFi interworking
- IoT and eSIM Use Cases (Home Automation, Industrial IoT, Asset Tracking, Enterprise IoT)

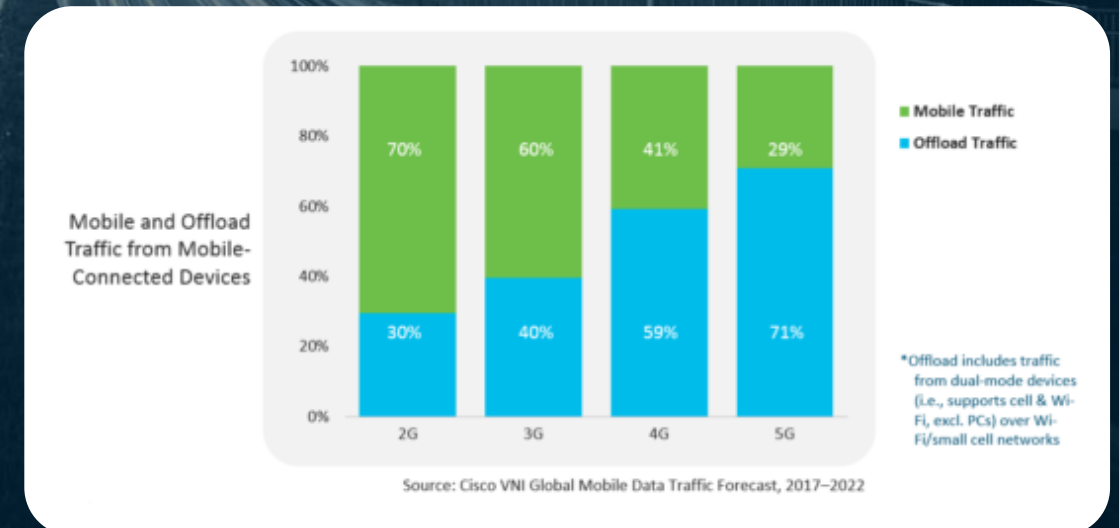
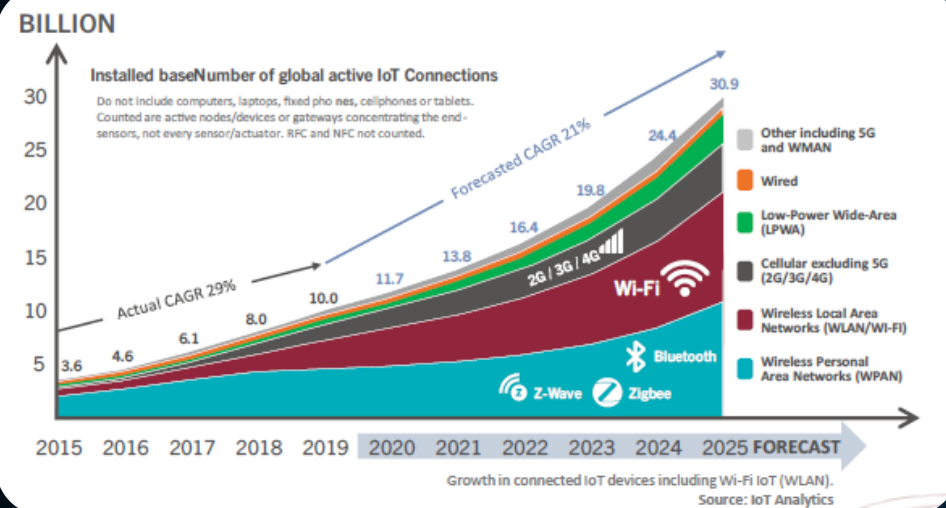
STL Solutions



Analytics Digs Insights

7.5 billion IoT units as of 2020 are short-range and non-cellular and uses only WiFi

The share of offloaded traffic will only increase with 5G (from 59% in 4G to 71% in 5G)



STL dWiFi Excellence: Expertise & Experience



40+

Operators have chosen STL for WiFi deployments

2500

ISP & Hotspot deployments globally



Operational excellence with Tier-1 Telco

Successful experience for delivery, implementation and services support with large scale Live projects

Proven Interoperability

Highest number of integrations with Tier 1 multi vendors' equipment and WiFi partner ecosystems worldwide

Fastest Go-Live

Flexible platform, seamless integration with existing IT & packet core infrastructure. Plus on-site team in every region

Rich experience in BSS & OSS

Easy understanding of operator business requirements and helps providing customized solution

Comprehensive and Converged WiFi portfolio

Pre-integrated, modular platform to enable quick launch to innovative services to the market

STL

beyond tomorrow



Modernizing the San Jose State University Campus

SHAI SILBERMAN

DIRECTOR OF NETWORKING SERVICES

San Jose State University



Modernizing the San Jose State University Campus



SJSU SAN JOSÉ STATE UNIVERSITY



WINNER OF THE AWARD

Best Enterprise Wi-Fi Network

San José State University- Best Enterprise Network



SJSU SAN JOSÉ STATE UNIVERSITY

For more information please visit: www.wballiance.com/wba-industry-awards

San Jose State University Profile

Empowering the Silicon Valley

University Profile

- 35,000 students + 5,000 faculty staff
- San Jose Public Library
- Hospitality (4200 Dorm residents)
- ~400 classrooms
- Theater / Sports Arena / Stadium
- 52 Buildings and 250 data closets

Wireless Network

- 3000 Access Points (3702, 2800,1815,C9130, C9124, ANT9104)
- Wireless Controllers C9800
- Authentication: ISE, OpenRoaming
- Management: Cisco DNA-C /Prime Infrastructure
- 30K Concurrent Wireless Devices
- 75K different devices per week
- 300+ years of sessions airtime in a month
- Device Diversity, High Density



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UNIVERSITY



Journey & Returning to campus

- It's been nearly two years since SJSU moved to a remote learning model.
- When Students returned for Fall 2021 Semester they came back to a transformed campus.
 - Wi-Fi6 across campus
 - Comprehensive outdoor wireless deployment
 - OpenRoaming based guest network
 - Building Density Monitoring with DNA-Spaces
 - User Defined Networks

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Modernization Challenges

- Lack of funding
- Lack of infrastructure to outdoor spaces
- Landscape Obstructions
- Building Penetrations
- Aesthetics
- Logistics
- PoE Availability

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How to prepare for modernization

- Understand the business requirements
- Understand the outcomes
- Define What Success looks like
- Does it fit into the digital transformation strategy
- What are all the overlays
- Focus on Layers 8 to 10
 - How do you expect users to behave differently



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New Design Thinking for Wireless

Overhead model vs Under seat model

Onboarding - Portal vs No Portal

Directional Vs Omni

Sustainability/Operational considerations

Wired Vs Mesh

5Ghz/6Ghz vs 2.4Ghz/5Ghz

How to enable digital transformation

BLE/PoE Daisy Chain

Location Analytics

Smart Spaces



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Location Services



What is the value?

Analytics

First time customers

Returning Customer

Customer Behavior

Head count into restrooms

Average wait time at concession

Integration with Digital Signage

Customer/User Engagement

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Seamless OnBoarding

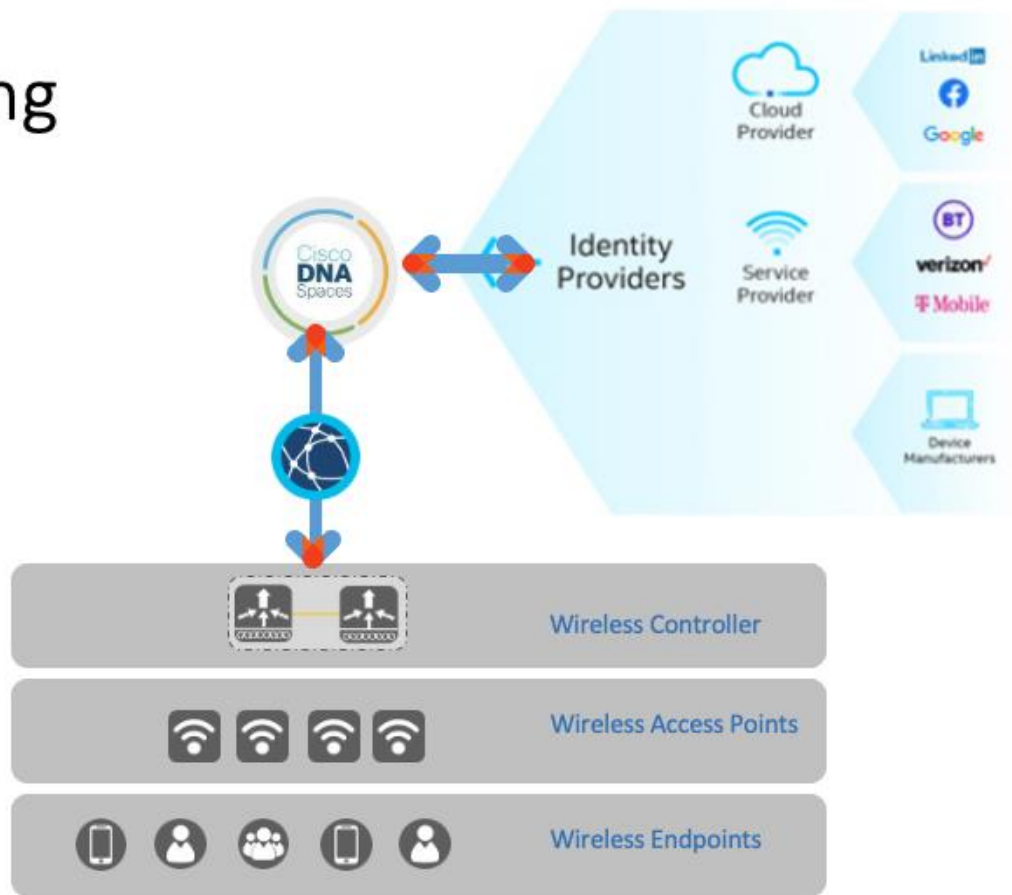
- What is the value of authentication?
- Captive Portals
- OpenRoaming
- Mobile Application
- Secure Vs Nonsecure Guest Connection

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OpenRoaming Workflow

OpenRoaming



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Onboarding with OpenRoaming Learnings

To test the theory of high function vs ease of connectivity, we enabled OpenRoaming in addition to the Captive Portal SSID at a football game and saw interesting findings and user behavior:

- Out of 855 attached clients to the captive portal SSID - only 20% were authenticated, meaning they did not enter the information required to gain network access.
- More than 2600 clients attached to the OpenRoaming network were all automatically authenticated and using the network
- 3400 clients were on the campus SSID or eduroam SSID.

One of the takeaways here is that even with great wireless connectivity with the latest WiFi6 technology, if you want users on your network, onboarding must be seamless!

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Questions?



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WINNER OF THE AWARD

Best Enterprise Wi-Fi Network

San José State University- Best Enterprise Network



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For more information please visit: www.wballiance.com/wba-industry-awards





How Fiber Providers Can Rise to the Customer Experience Challenge

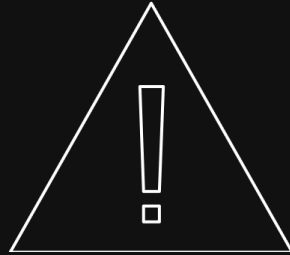
ROBERT LAMB

SENIOR DIRECTOR OF BUSINESS DEVELOPMENT
Plume





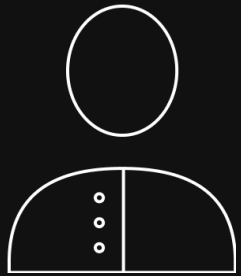
How fiber providers can rise to the
customer experience challenge



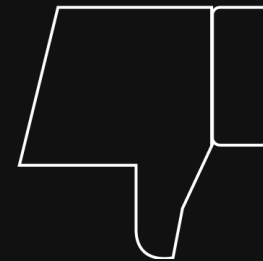
The world today for fiber providers
is fraught with challenges



Customer expectations are at an all-time high



On average, service providers lose \$500 per year per subscriber due to churn

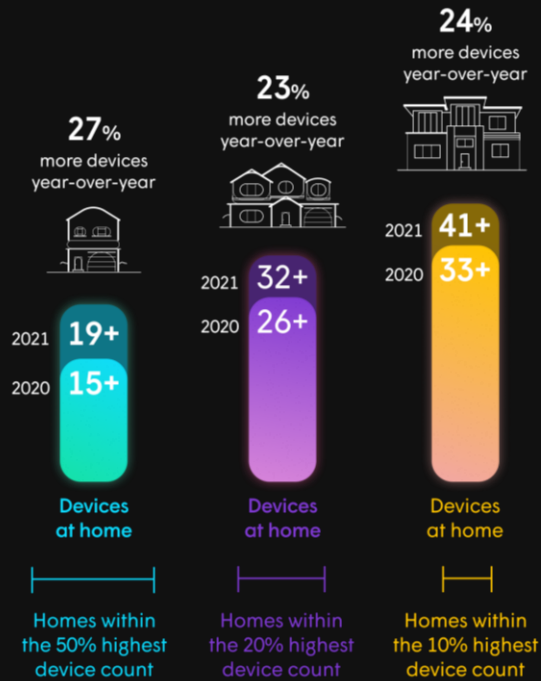


Among subscribers who experience poor Internet connection, 55% are planning to change their provider in the next 12 months



Complexity is increasing

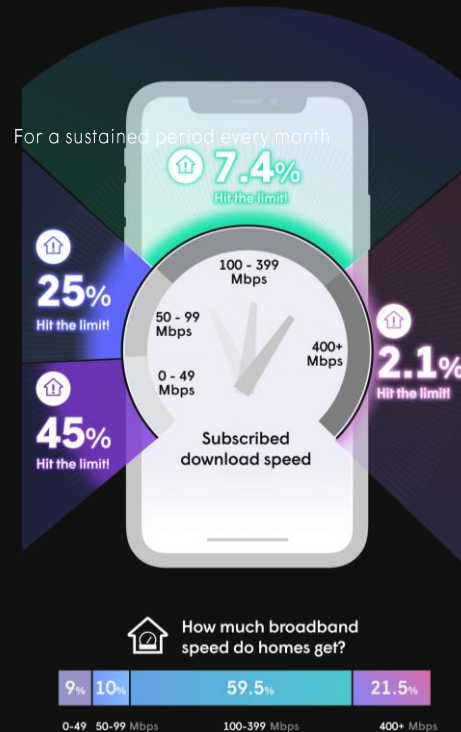
More devices in home networks



Rapid growth of connected devices in home networks

Source: Plume IQ May 2021

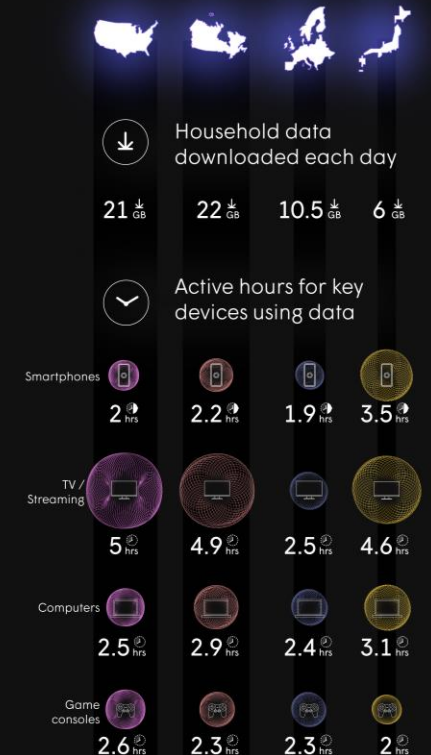
More subscriber demands can lead to poor experience



Proportion of homes exceeding 90% of their broadband speed

Source: Plume IQ April 2021

More data demands across the globe



Charting smart home usage across key geographies

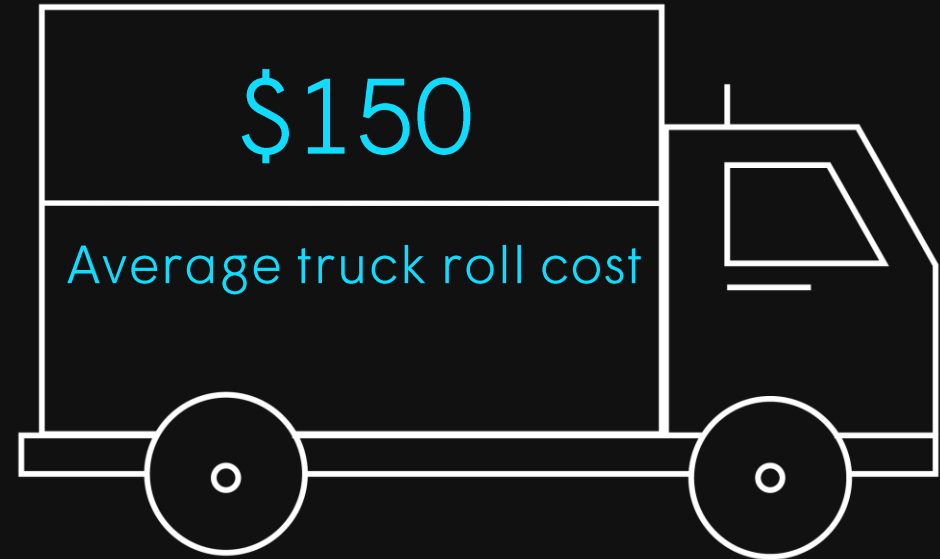
Source: Plume IQ December 2020



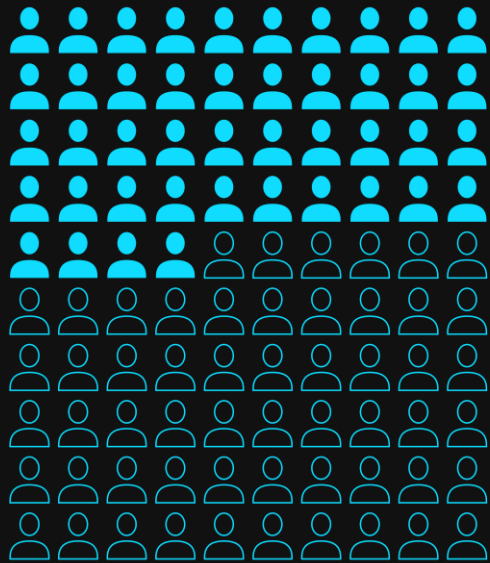
Operational costs are high



Average trouble
ticket call
cost



Competitors are disrupting the marketplace



44%

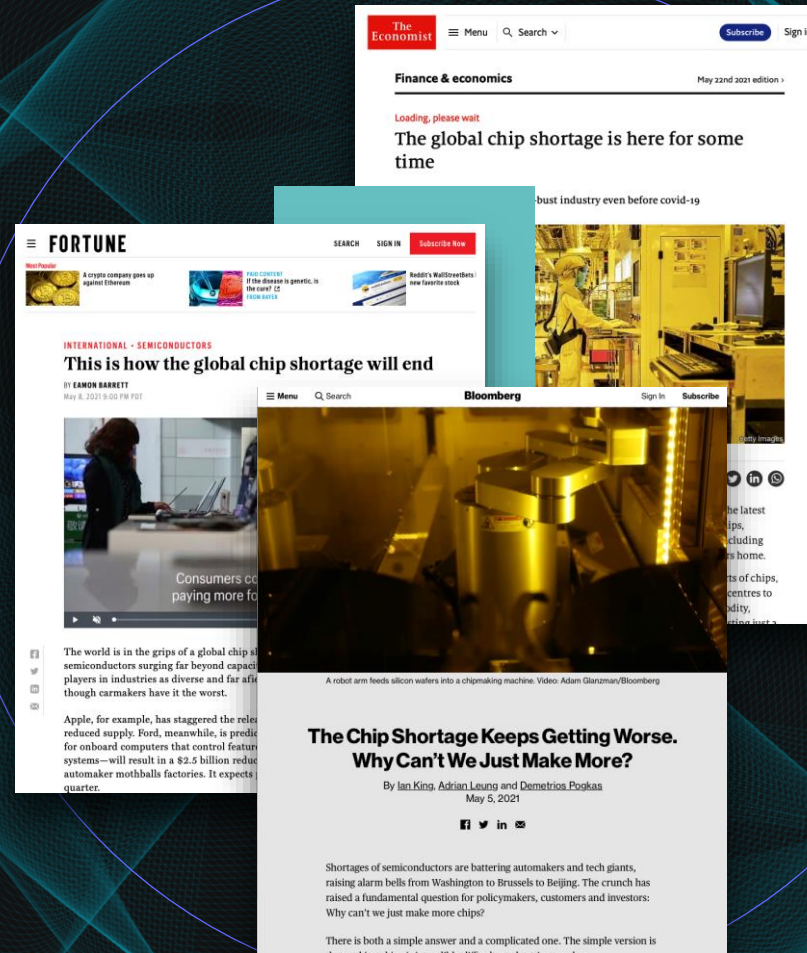
of customers would
abandon existing
providers for new
market entrants

Of those who
would stay, only
29%
say it's because
they
are currently
satisfied



Global chipset shortage threatens supply

Global semiconductor sales increased 13.2% year/year in January



Product supply chains will likely be stressed for another two years

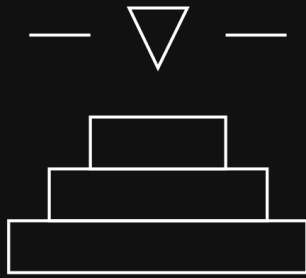




It's time to move the conversation
beyond speed and price and
win on experience



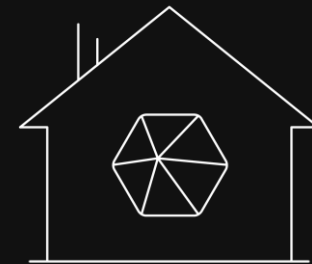
Adopt a new approach to service delivery to up-level subscriber experience



Embrace an open-platform approach



Deliver optimized performance



Offer distinctive experiences



Find new ways to lower OPEX, drive growth

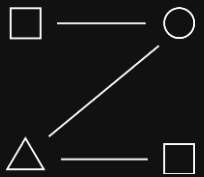
Make the most of
in-home visibility

Turn network data
into actionable
business insight

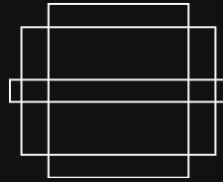
Tap into net-new
revenue streams



Lead with customer experience



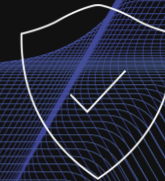
Customer self—
service to reduce
call-ins



Threat remediation
& isolation



Scalable, home, all-
device protection



Intrusion
detection &
blocking



Additional cloud-
based services

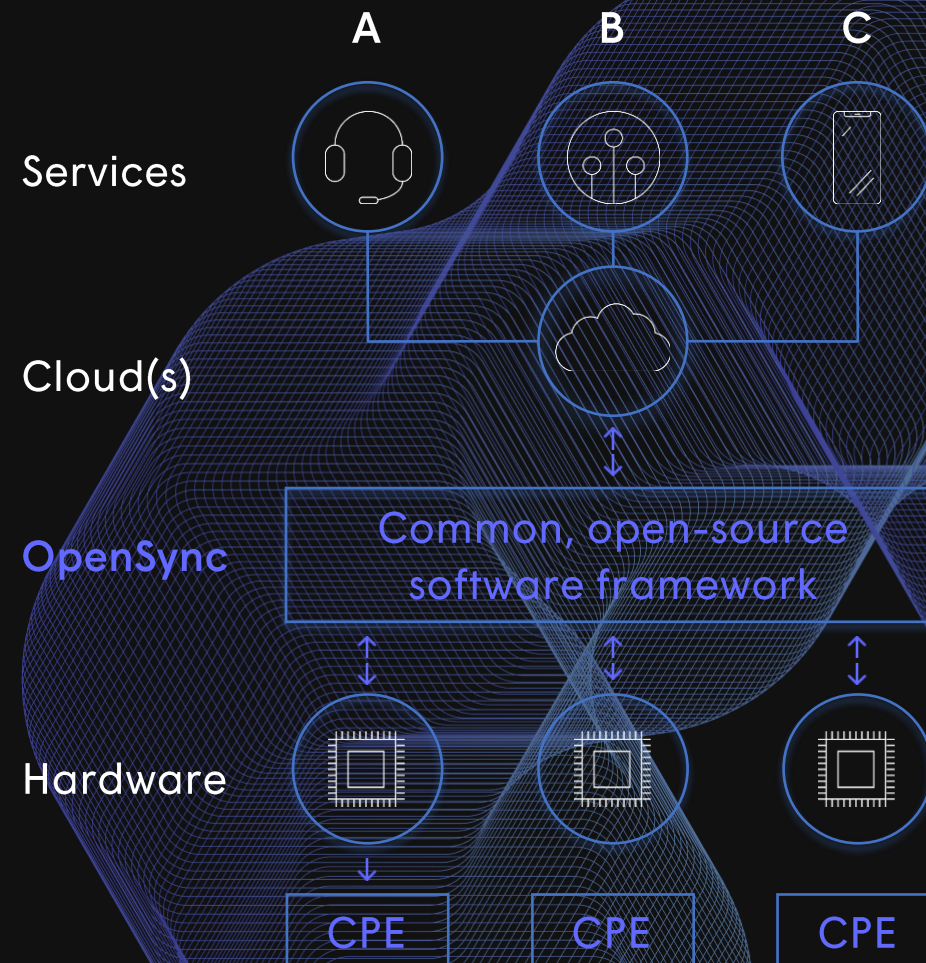


Remove hardware dependencies, launch new cloud-based services in a matter of weeks

1. **Decouple hardware from services** and push services to the cloud

2. Turn disjointed systems into a **unified platform**:

- Compatibility with all major chipset vendors
- Standardized communication protocols
- Consistent user experience, regardless of hardware platform
- Common data set for scale



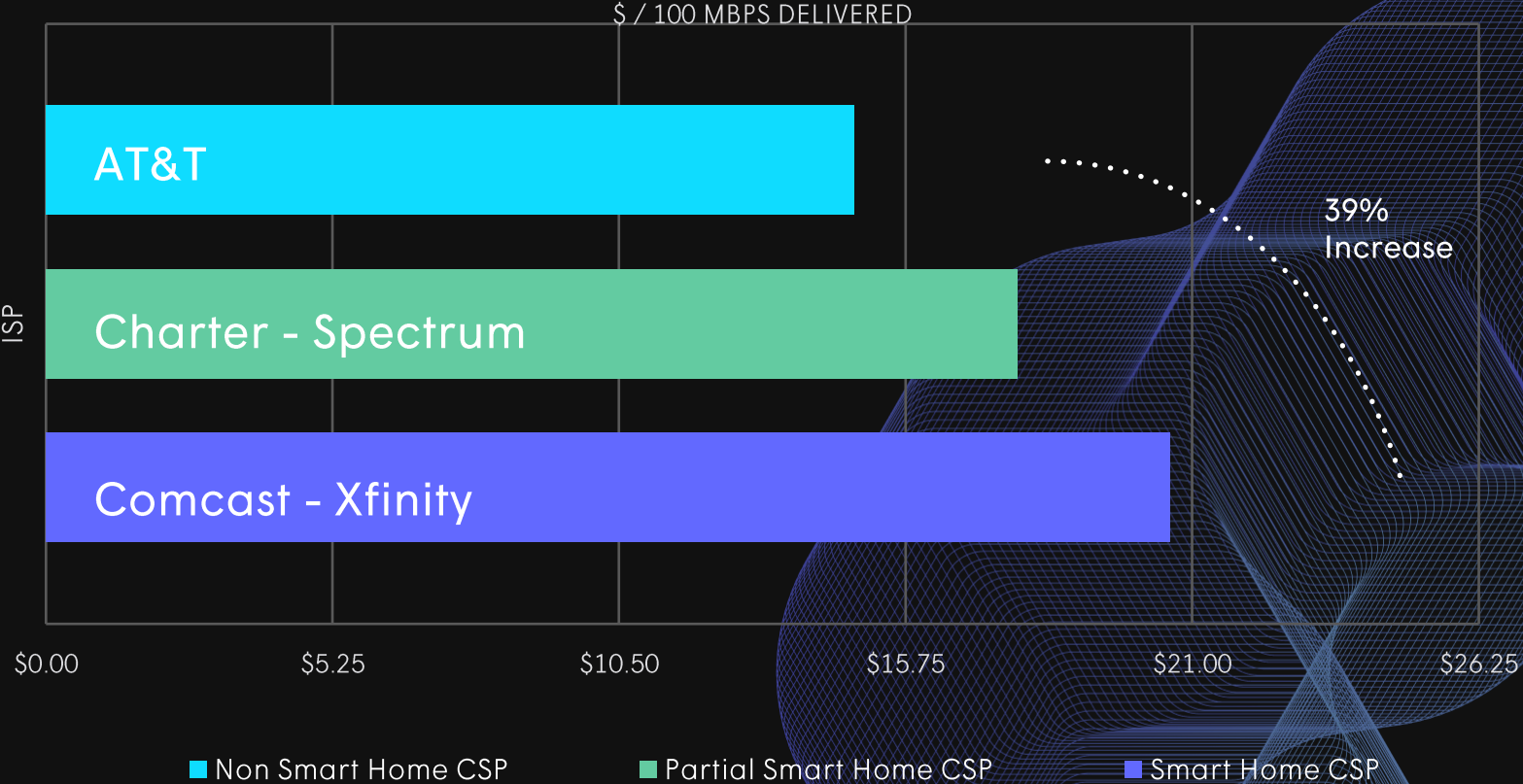
Smart Home CSPs increase base ARPU



ARPU increased by

\$10-\$15

Tier 1 CSP monthly ARPU per Mbps for internet and Wi-Fi service*

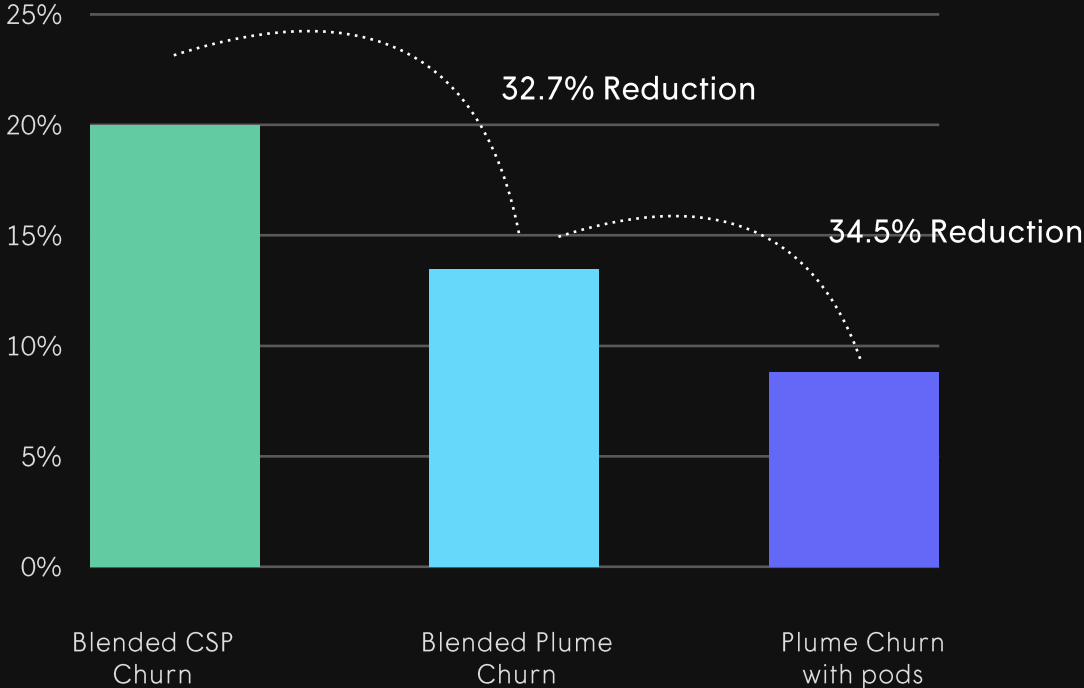


*Calculated from 2 year Internet only price with WiFi Router and service for speeds between 200Mbps and 1Gbps at Xfinity, Charter and AT&T



Churn reduction with Smart Home services

Annual churn reduction with Plume*



Churn

▼ 30+%

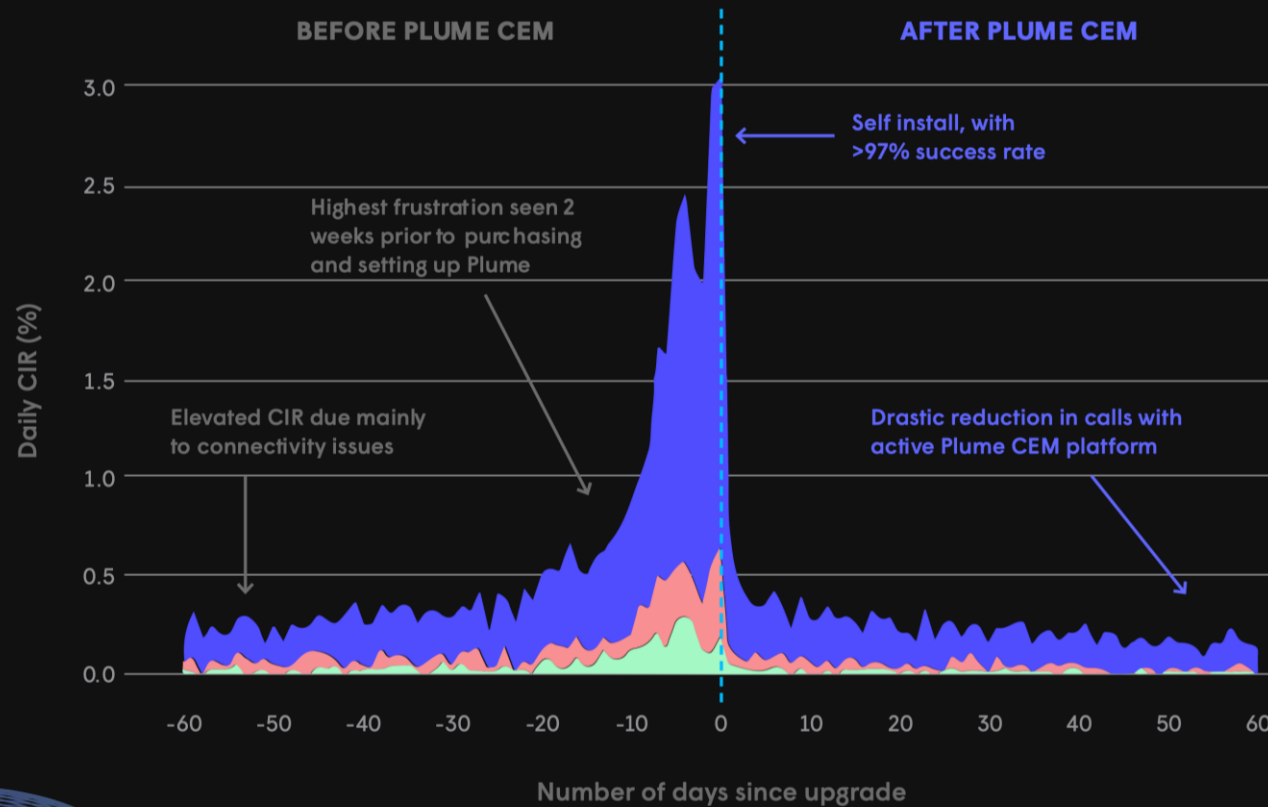
Calculated across sample of 10.1M active homes

*As measured in homes managed by the Plume cloud, in 3Q'20
Monthly churn calculated after 60 days of service and subsequently 30 days continuously offline across 10.1M HHs



OPEX CIR and TRR reduction

Internet CIR over time by trouble time



Support calls

▽ 50%



Truck rolls

▽ 67%



Plume overview



2014

Founded



7

Global locations



475+

Total full-time employees



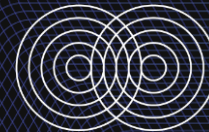
50

Granted US & foreign patents
(54 pending)



\$2.65B

Valuation



240+

CSP customers



35M+

Active subscribers







Open Wi-Fi Platform for Europe

BERNARD HERSCOVICI

FOUNDER & CEO

NetExperience



Open Wi-Fi Platform for Europe

October 21, 2021

Bernard Herscovici – CEO

www.netexperience.com





Software for Open Wi-Fi

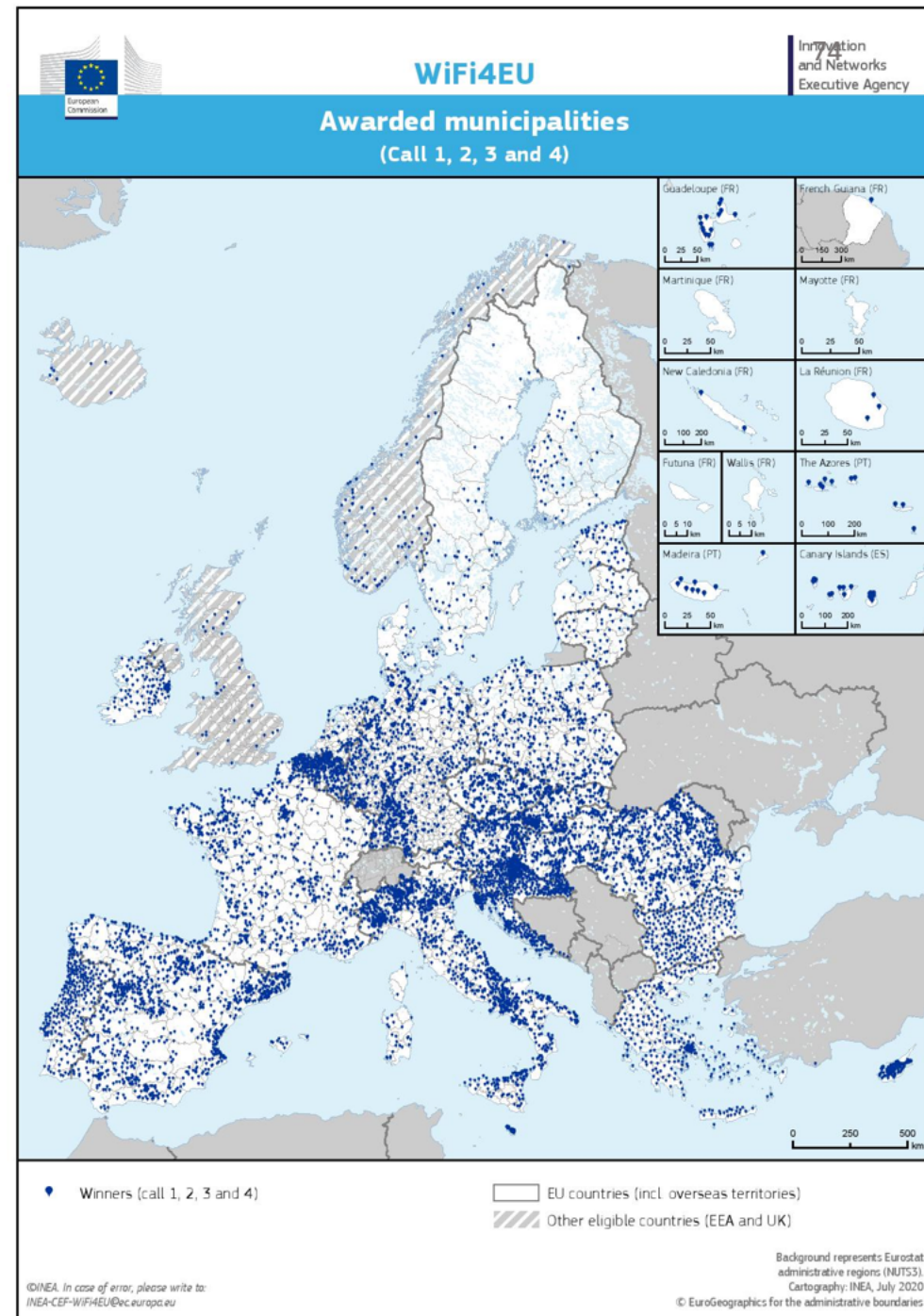
- Open source Contributor/Maintainer
- OpenWi-Fi platform for service providers
 - Full commercial product
 - Tested with multiple hardware vendors
 - Software, support, integration services
- Engagements with flagship Service Providers
 - US
 - Europe
 - Africa
 - Asia
 - South America

OpenWi-Fi

- Part of TIP
 - www.telecominfraproject.com
 - About 1,000 members
 - Service providers: Comcast, Voda, Telefonica...
 - Technology providers: HW, SW, etc.
 - Open source
 - Disaggregate networks
 - Open Architecture / Multiple suppliers
- OpenWi-Fi = Disaggregated WLAN
 - Open source core
 - Architecture
 - Ecosystem
 - Testing / Validation / Certification
 - Commercial applications like NetExperience

OpenWiFi for Europe Smart Cities

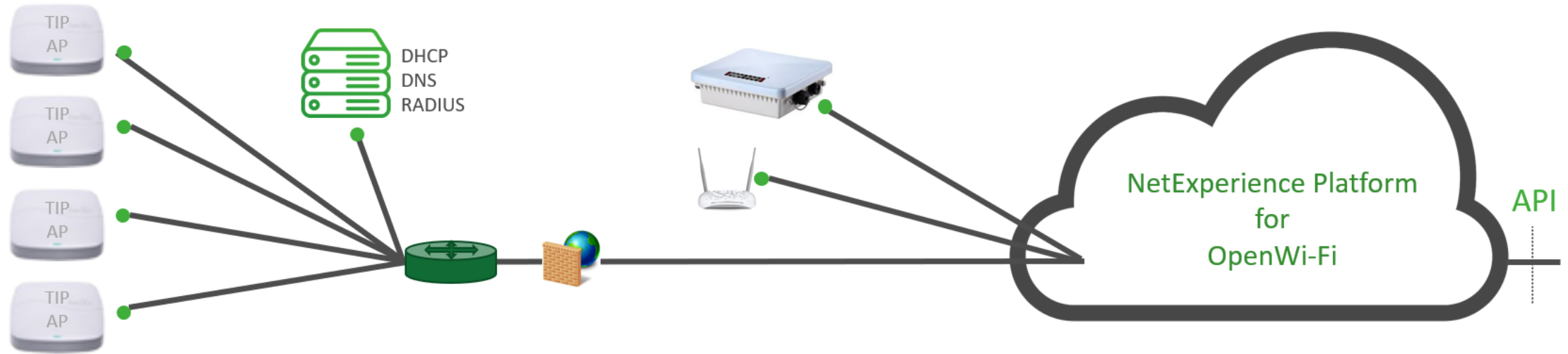
- OpenWiFi – synergies with EU requirements:
 - Compatible with WiFi4EU Technical Requirements
 - Open Source, Compatible with EU Open Source strategies
 - Data privacy – Hosted in Europe, Data stays in Europe
 - Multi vendor - Lower TCO and increased HW availability
 - Architecture support for multiple WiFi use cases



EU Open Source Study

- “Case studies reveal that by procuring Open Source Software instead of proprietary software, the public sector could reduce the total cost of ownership, avoid vendor lock-in and thus increase its digital autonomy.”
- “companies located in the EU invested around €1 billion in Open Source Software in 2018, which brought about a positive impact on the European economy of between €65 and €95 billion.”
- “an increase of 10% in contributions to Open Source Software code would annually generate an additional 0.4% to 0.6% GDP, as well as more than 600 additional ICT start-ups in the EU”

<https://digital-strategy.ec.europa.eu/en/news/commission-publishes-study-impact-open-source-european-economy>



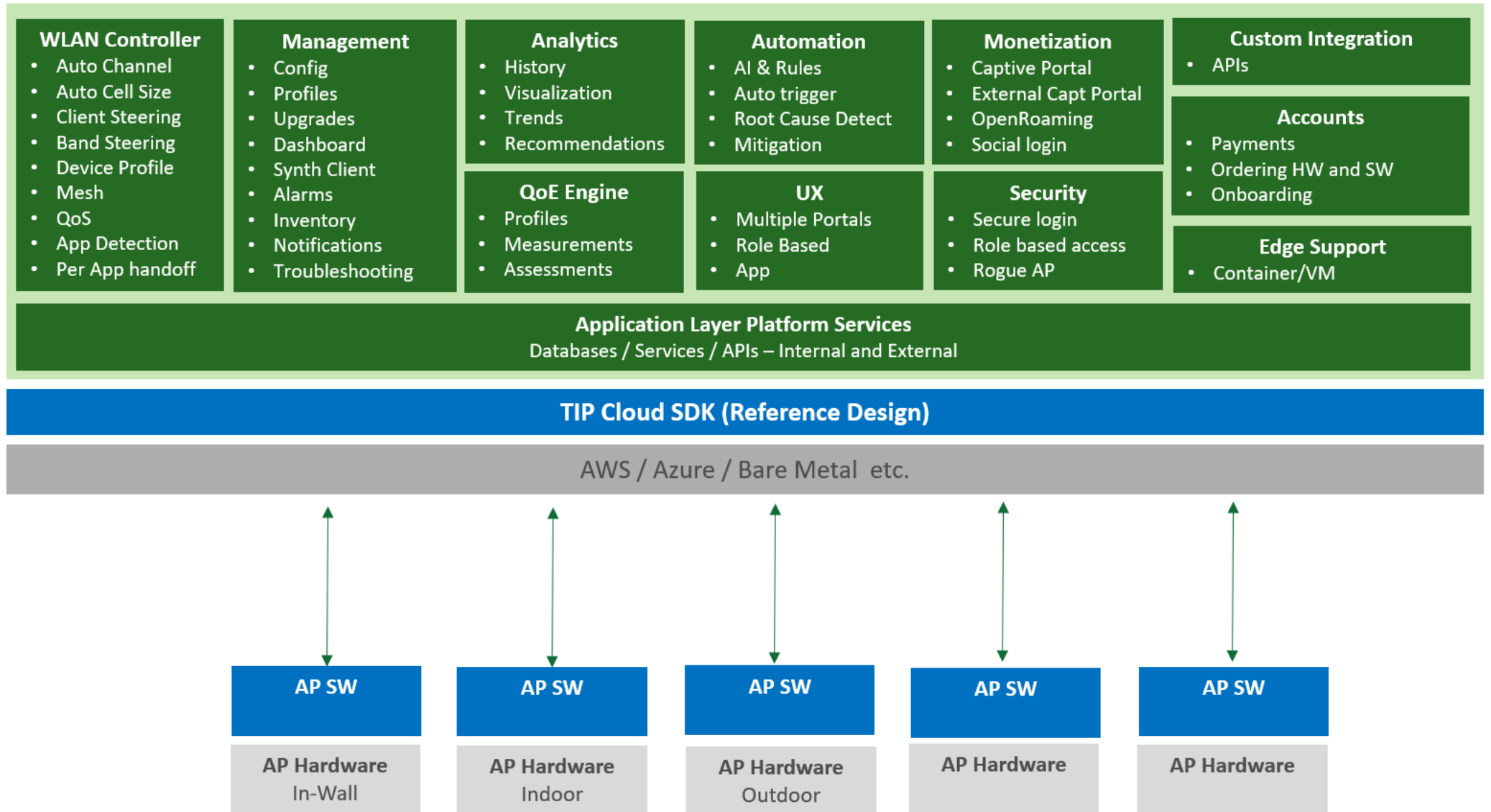
- ✓ One Platform for multiple HW Vendors
- ✓ One Platform multiple use cases
- ✓ Low TCO – expect 60% reduction
- ✓ SaaS or Licensed
- ✓ Open Platform with APIs



MDUs	SMBs	Hotels	Schools	Enterprise	Industrial
				Smart City	Sports
					Offload

NetExperience: Full Stack for OpenWi-Fi

NetExperience
Application
Layer



Full Commercial Product

- Cloud platform for OpenWiFi
 - Compatible with TIP Access Points
 - Includes both the SDK and the Application layers
- Offered as
 - SaaS or
 - Licensed Software
- Tech Support – SW/HW
- Trial Support
- Integration / Customization

NetExperience for Wi-Fi Providers:

Feature	Benefit
From 3-4 Wi-Fi platforms to one	<ul style="list-style-type: none">• Simplify WiFi management and reduce OpEx
Multiple hardware vendors	<ul style="list-style-type: none">• Security of supply and competitive costs
Network automation	<ul style="list-style-type: none">• Reduce OpEx and training for support personnel
AI detect & correct issues automatically	<ul style="list-style-type: none">• Avoid the need for truck rolls
SaaS or licensed platform	<ul style="list-style-type: none">• Easy to start deployment, scales to larger service providers data centers
Supports OpenRoaming	<ul style="list-style-type: none">• Monetize roaming from 4G/5G and provides better end user experience
Low hardware cost	<ul style="list-style-type: none">• Dramatically reduces CapEx (TCO reduced by 60% vs. existing solutions)
Low license fees	<ul style="list-style-type: none">• Lowers OpEx (TCO reduction 60%)

The logo features a stylized white icon on the left, composed of several overlapping, curved segments that resemble a fan or a signal tower. To the right of this icon, the word "NetExperience" is written in a bold, white, sans-serif font. The background is a solid green color with large, overlapping, semi-transparent green shapes that create a layered, abstract effect.

NetExperience



Connected Communities Panel

Addressing the Automatic, Secure and Privacy-ready Needs Essential for Public Wi-Fi and Bridging the Digital Divide

**TIAGO
RODRIGUES**

CEO
WIRELESS BROADBAND ALLIANCE

**ALPHONSO
JENKINS**

FORMER DEPUTY COMMISSIONER OF
TELECOM PLANNING
NEW YORK CITY

CO-CHAIR
CONNECTED CITY ADVISORY BOARD
WIRELESS BROADBAND ALLIANCE

**REZA
JAFARI**

CHAIRMAN & CEO
E-DEVELOPMENT
INTERNATIONAL

BOARD ADVISOR
WIRELESS BROADBAND ALLIANCE

WBA Annual Industry Report 2022



Connected Communities Forum



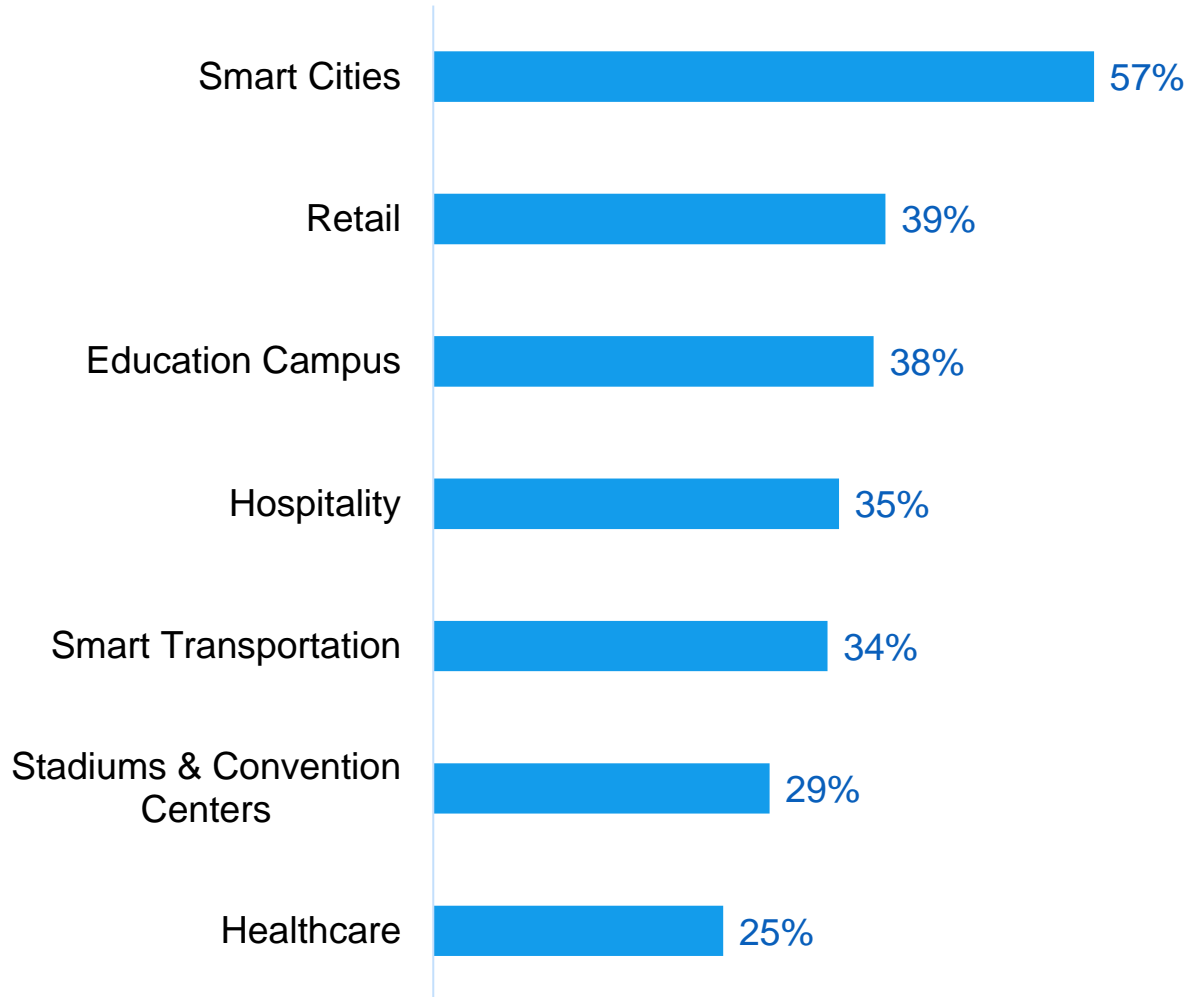
MISSION:

Build awareness, advocacy and global availability of Wi-Fi as one of the critical pillars for connectivity guided by the leadership of cities and communities.

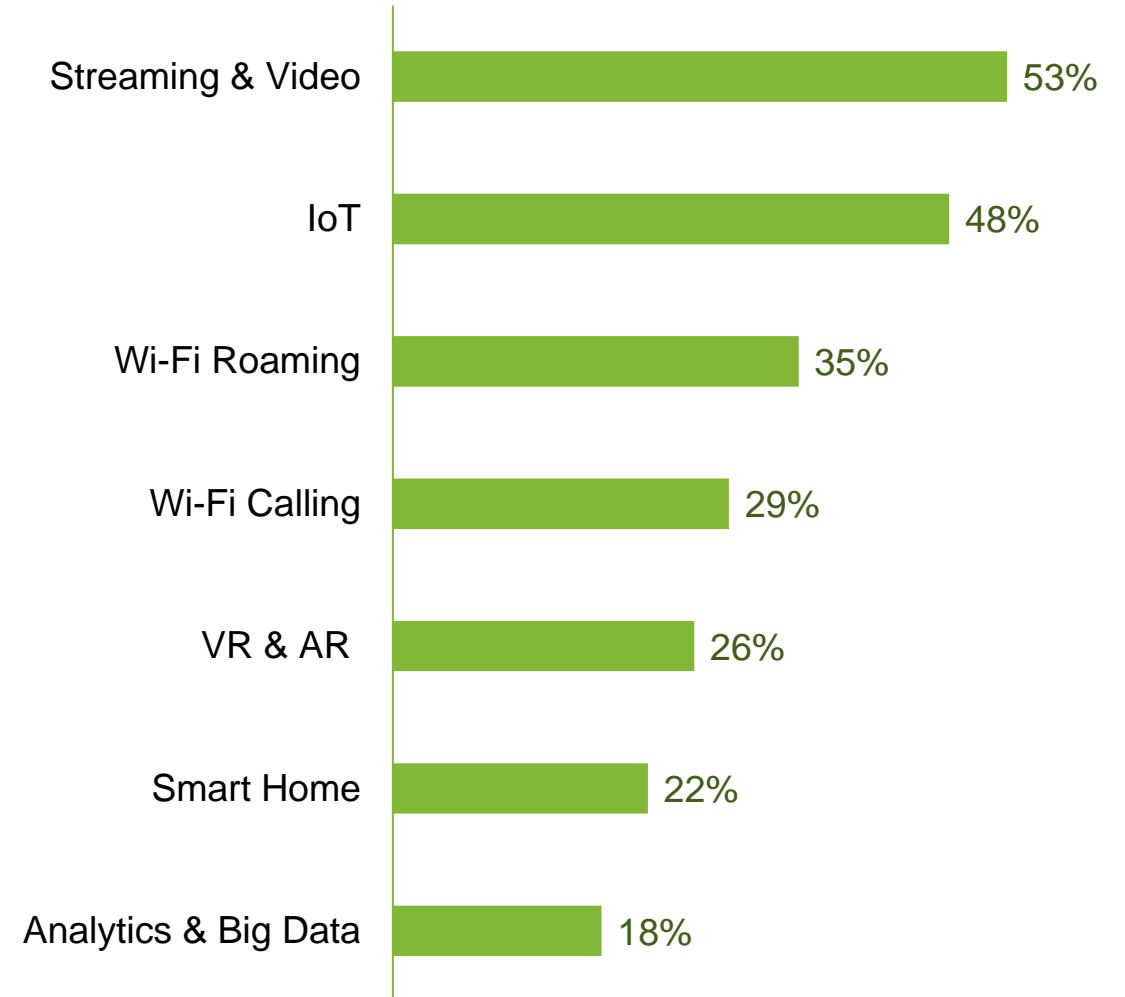
Mobilize the industry through the adoption of Wi-Fi standards and best practices to enhance connectivity to all and share knowledge among the members.

<https://bit.ly/3G9dfla>

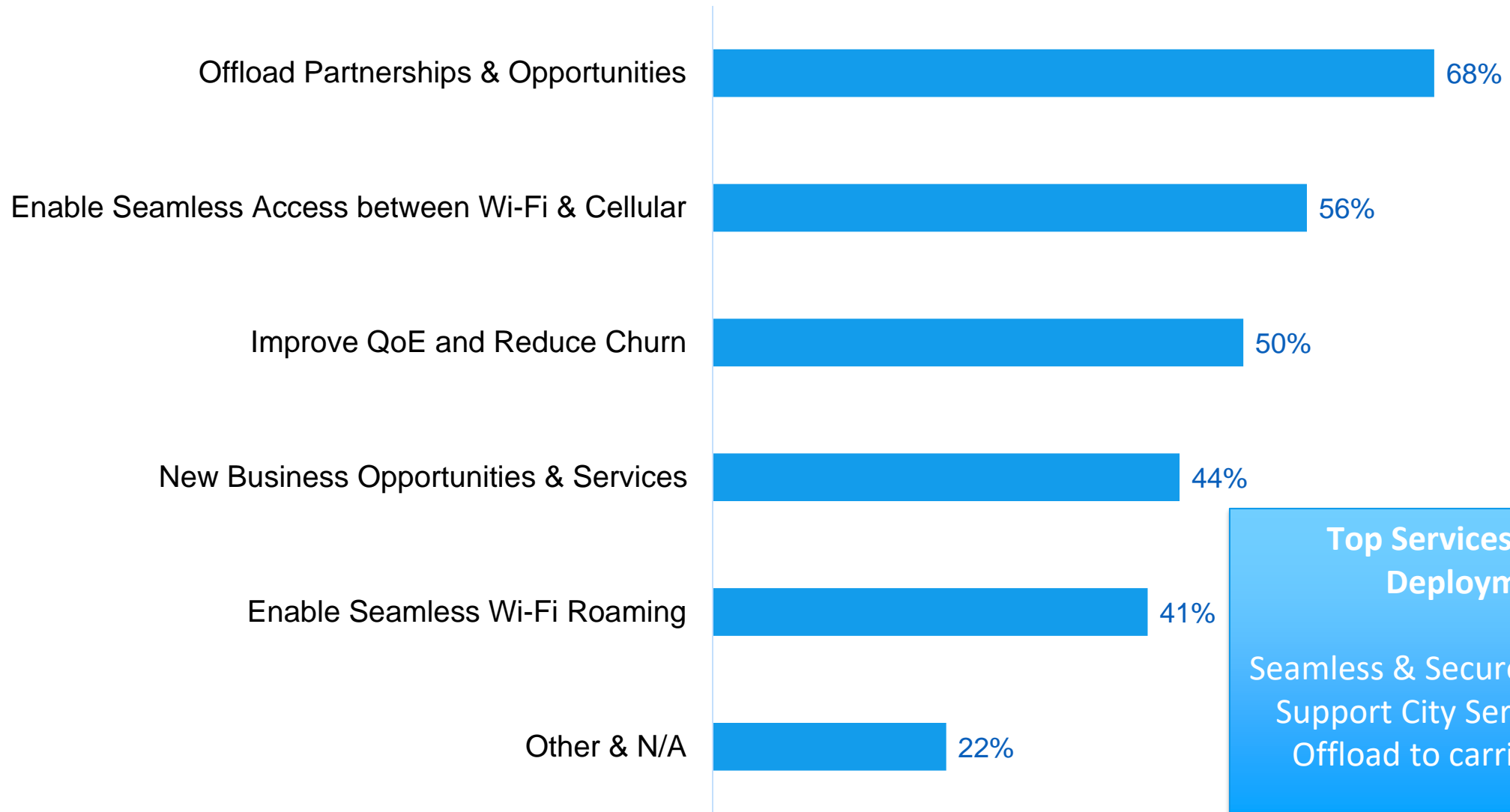
Top Vertical Markets to Grow Investments in Guest-Wi-Fi



Top Wi-Fi Applications for Traffic Growth



Source: WBA Annual Industry Report 2022



Top Services for City Deployment

- Seamless & Secure Wi-Fi - 79%
- Support City Services – 72%
- Offload to carriers – 48%

Source: WBA Annual Industry Report 2022



Connected Communities Panel

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Event Close and Updates on Next WBA Events in 2022

TIAGO RODRIGUES

CEO

Wireless Broadband Alliance



Wi-Fi Powering Innovation Series

Tuesday October 5th

WBA Leadership Conference & WBA Industry Awards

This autumn's premier Wi-Fi event kicks off with a celebration of all things Wi-Fi and the exciting developments we can look forward to in 2022. The WBA Industry Awards will honor the innovation and excellence from the best of the best in the Wi-Fi Industry. We'll also be looking at strategic impacts of Wi-Fi on the global economy in 2022 and beyond; new innovations in technology and business models for Wi-Fi through 2025; and featuring the highlights of the 2022 WBA Annual Industry Report, including the current leading market trends and drivers on Wi-Fi.

Thursday October 7th

Wi-Fi: Public and Private Networks and Convergence with 5G

What does the future hold for public and private networks, and what role will 5G convergence play? In this session, hear the latest on Wi-Fi 6, including ongoing use case case studies and a deep dive on operational benefits. We'll also be looking at the new opportunities and developing use cases for Wi-Fi 6E and taking a snapshot of the rollout of the 6 GHz spectrum, emerging technologies such as Wi-Fi 802.11bf and beyond; and much more!

Tuesday October 19th

Wi-Fi: Enabling the Smart Connected Enterprise

When it comes to enterprises looking to get 'smart' and offer outstanding connectivity for employees and consumers, the role of Wi-Fi can't be understated. Hear how companies can secure their IoT infrastructure with Wi-Fi; how smart Wi-Fi can support customer and operations for verticals such as retail, transportation, healthcare, and targeted enterprise; the impact of the 'bring your own device' (BYOD) era on security, privacy, and data integrity; and how Wi-Fi is creating emerging opportunities for Industry 4.0 in the 5G era.

Thursday October 21st

Innovation for Service Providers, Cities and Venues with Public and Guest Wi-Fi

How can Wi-Fi address the emerging needs of enterprise to innovate and adapt in a post-COVID-19 world? This session will explore the latest on emerging opportunities for Industry 4.0 and IoT deployments in the discuss the game changers for connected retailer and automotive industry and examine how train operators are setting up to offer outstanding Wi-Fi connectivity for passengers leading up to 2030.



Thank you to our Sponsors



WBA 2022 EVENTS PLAN

Q1 2022

Q2 2022

Q4 2022

Hybrid



Wireless Global Congress – APAC Dubai, UAE

25 January - Open Congress
(F2F will be members only)

26-27 January - Working Sessions
(Strictly Members Only)

*Virtual and Physical attendance
Situation may vary due to COVID19 pandemic*

Hybrid



Wireless Global Congress - Americas Chicago, USA

6-7 June - Working Sessions
(Strictly Members Only)

8-9 June - Open Congress

**Co-Located with
Wi-Fi Alliance**

*Virtual and Physical attendance
Situation may vary due to COVID19 pandemic*

Hybrid



Wireless Global Congress – EMEA Amsterdam, Netherlands

17–18 October - Open Congress*

18-19 October - Working Sessions*
(Strictly Members Only)

**Co-Located with
Broadband World Forum**

*Virtual and Physical attendance
Situation may vary due to COVID19 pandemic
* Final dates subject to confirmation*



THANKS FOR ATTENDING

WGC Autumn Webinar Series Replays will be available
from October 22nd

Check out our next events
www.wirelessglobalcongress.com

#wifirevolution | #lovewifi