STL DWIFI - INNOVATIVE WIFI SERVICE MANAGEMENT PLATFORM TAILOR-MADE FOR DIGITIZING TELCOS

INTRODUCTION

STL dW-Fi - Innovative W-Fi Service Management Platform Tailor-made for Digitizing Telcos. With the explosion in the IoT devices and rise in adoption of 5G, edge computing and cloud native network functions the need for speed, quality and monetization is non-negotiable. Telcos all across the globe are facing a complex situation of having to meet higher data consumption but with lesser resources. The situation calls for alternate solutions, which is precisely what STL offers with its dW-Fi converged W-Fi platform that seamlessly integrates with cellular core and offers a wide range of capabilities on top of it. dW-Fi helps Telcos address critical need of customers today – always-best connectivity experience - along with multiple opportunities to monetize.

DESCRIPTION OF THE CASE

S dW-Fi – STL's converged W-Fi platform for addressing data management challenges

Introduction – Data management challenges faced by Telcos

One of the key challenges for Telcos today is mobile data traffic growth. Growth in smart devices (smart phone and other network connected devices) is the leading driver for this and is estimated to lead to <u>12.3 billion</u> mobile connections by 2022. We are also witnessing IoT devices growing dramatically, it is estimated that there will be 41.6 billion connected IoT devices, or "things" generating 79.4 zettabytes (ZB) of data by 2025. As we get more and more connected, customers are starting to demand always-best connectivity. Some of the most common demand includes - best connected user experience anytime, anywhere, ability to switch seamlessly between devices and connections, and improved performance for high-definition streaming apps. Cellular services have suffered from spotty connections, high spectrum costs and rising network infrastructure costs. Telcos, in order to meeting changing customer needs, are forced to look beyond cellular today. Augmenting cellular networks with W-Fi networks has emerged as a potential solution to overcome the data tsunami and enhance user experience. But challenges like supporting different user scenarios like airports, in-flight, transit, public hotspot etc. with seamlessness, scale and monetization opportunities, still need to be overcome.

dW-Fi – A converged W-Fi platform from STL

dW-Fi from STL is a comprehensive and converged W-Fi platform that helps telcos unlock new business models, implement innovative use cases and differentiate themselves in the market. Thus precisely addressing the challenges Telcos are facing today.

dW-Fi is a carrier grade W-Fi platform that seamlessly integrates with the cellular core to deliver a comprehensive feature set.

›   **Offloading** – with Device Event Monitoring, Real Time QoE Measurement, Rules and Actions on Policy, Policy on Device, Policy Pull cache, Evaluation and enforcement. Based on latest 3GPP release 12

›   **W-Fi calling and roaming** - Converged 3GPP AAA offers a smooth handover between trusted and un-trusted networks, Architecture supports dual authentication mode for both 3G/4G subscribers, towards HLR/HSS, Seamless integration with HSS, ePDG, PGW from leading NEP OEMs

›   **AAA** - Single-platform for multiple networks with common policy and subscriber profile

›   **Monetization opportunities** – Advertisements, Paid W-Fi Plans and Vouchers, Loyalty Platform

› **Experience** – Analytics to measure W-Fi offload success ratio, Effectiveness of W-Fi offload. Real time analytics from devices, Easy integration with roaming carrier partner networks and complete partner settlement features, Captive portal editor to build professional, responsive Captive Portals without coding
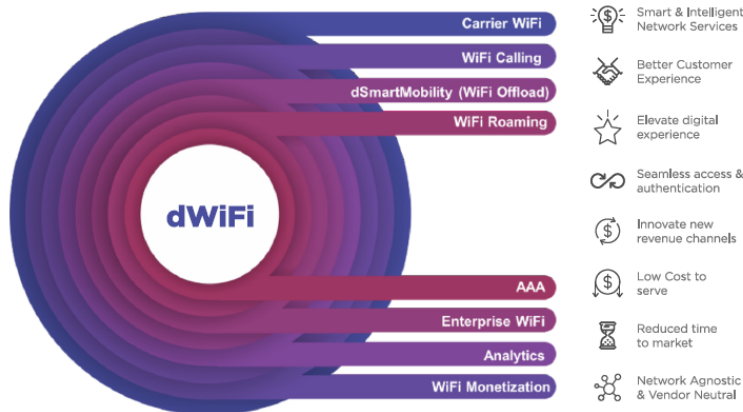
SOLUTIONS

dW-Fi value proposition
dW-Fi platform is DevOps enabled, Web-scale and comes with integrated analytics. It is designed to help Telcos to provide wide range of innovative offerings at speed and scale, create differentiated services across segments such as public, enterprise, retail, education and hospitality and generate new revenue streams.

› dW-Fi is available in **flexible deployment models** to meet different customer needs such as Stadium W-Fi (implemented for a large annual sporting event in India), Public Transport (implemented for Dubai's public transport authority as a part of the Smart Dubai program), Public Hotspot (multiple implementations including one of India's largest telco providers), Smart offloading (for a large Telco in India impacting 200+M customers)

› **Competitive pricing models** - STL's extensive global W-Fi experience is complemented not only by the breadth of our W-Fi solution innovations but also our competitive pricing models which includes 1) Fixed Price Or 2) subscription based pricing based on number of concurrent sessions or number of subscribers or number of Access Points.

› **Proven for robustness, capabilities and scale** – dW-Fi is implemented at over 40 telco service provider globally.

› Thus, with STL's dW-Fi, operators can offer seamless user experience, compelling products, services and support as well as reduce churn. The dW-Fi converged platform helps unlock new business models, implement innovative use cases and differentiate in the market. We are also updating the product to stay ahead of latest consumer needs, technological and standards changes. The product has been updated according to the W-Fi 6 standards.

› One stop solution for managing W-Fi services for telcos which includes W-Fi Offload, W-Fi Calling, W-Fi Roaming and W-Fi Monetization

› Most powerful AAA (along with support of Diameter and SCTP) available in the industry

› Multifunctional Captive Portal Editor which allows you to instantly create Login pages through drag and drop widgets

> Web Scale Based Architecture for zero touch deployments, auto scalability with support of virtualization (CNF and VNF)

IMPACTS TO PEOPLE AND INDUSTRY

Success Story

Customer and customer situation - A leading telecom operator in Dubai, was officially selected as the enabler for fulfilling the UAE's envisioned goal of Smart City and rolling out W-Fi services at public places including malls, beaches, DIFC, Burj Khalifa, Metros and Trams, Dubai taxi etc.

STL solution - STL dW-Fi solution enabled the operator to offer seamless W-Fi connectivity to their subscribers across the entire length of public places and helped them to monetize the service through advertisements and location-based promotions. W-Fi analytics dashboard helped them to get the better customer/business insights to plan better network and services.

Challenges that STL faced (and mitigated)

> Effectively roll out W-Fi across the country and establish W-Fi as a base for smart city vision

> Offer seamless internet connectivity at high speed but at cheaper rate

> Monetize and generate ROI from their W-Fi infrastructure

> Reduce CAPEX/OPEX

> Offer value added services to their subscribers for customer experience and improving NPS

Results

› Wi–Fi Solution for Public Internet Access Provider (PIAP) deployed in less than 10 days

› Increased W-Fi Access to subscribers at 165+ locations (highly densed and most popular locations) with 12000 Access Points installed across the city\

› 10K+ Taxis (RTA) in Dubai now offers free W-Fi to the passengers for improving their journey experience.1 million+ impressions/month for the ad campaigns

› Average 75K daily unique users availing the W-Fi services offered by the operator leading to increased data consumption on an average 22TB/week.

› Played a major role in operator' Smart City Mission by offering connectivity on the go to the subscribers and devices by offering an enhanced service experience and increased monetization opportunity

CONCLUSION

Roadmap for W-Fi 6

Year 2021 has a razor sharp focus on assisting our customers with adoption of 5G and the W-Fi6/802.11ax. The roadmap for STL in W-Fi6 domain is to ensure that we offer our customers end to end W-Fi Stack. While most of the needed components are already existing, the aim is to ensure a thorough testing for those components, and bridging the solutions for Access Point, controller, and gateway. STL has a robust edge analytics software which will be integrated across the touch points to ensure that network dashboards are enriched with W-Fi related data. Here is quick look at the overall Roadmap for W-Fi stack