



WILAS WiFi Engagement Portal Proposal for Customer

” Deliver With Commitment, Competence & Pride



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WILAS OVERVIEW

TechStudio WILAS (Wireless Intelligent, Location & Analytics Suite) Platform empower Business Owners to capitalize their IT investment to capture incremental opportunities and achieve operational excellence. The platform aims to help Business Owners generate ROI from their infrastructure investment through revenue generating opportunity, cost cutting opportunity & improved security/safety opportunity.

WILAS is a proven technology that had value-added to several businesses in different vertical. Below is a list of some of the clients that had selected & deployed WILAS to complement their businesses.



WILAS is equipped with 4 major services that can be adopted independently to bring values to a business:

- a) **Visitor Engagement Portal for WiFi (Captive Portal):** Engagement Portal is the first experience when visitors connect up to the WiFi services. It provides a valuable asset for engaging the visitors at the correct place & time.

With WILAS Visitor Engagement Portal Service, business owner can select one of the nine authentication methods to validate the visitors as well as collecting the visitors' information.

WILAS Engagement Portal provide 9 standard Authentication options for Consumer access control with flexibility to customized for specific authentication methods (eg. Corporate AD Login, CRM, etc).

- ✓ T&C
- ✓ Registration & Login
- ✓ Simple Form
- ✓ Predefined Login
- ✓ SMS OTP
- ✓ Email OTP
- ✓ Social Login
- ✓ Voucher Code
- ✓ Mobile App integration

An Online Administration Portal (SM) allow marketers to self-service manage intelligent contents (eg. Advertisement) that the visitors experience in real-time or scheduled as well as to retrieve the collected information without having to access to the network equipment.

WILAS Engagement Portal enable businesses to provide differentiating experience to premium customers and/or to extend the engagement with external value add services.

- b) **Real-Time Intelligent Insight (II):** Intelligent Insight is a big data & analytic platform that analyze large amount of raw data from the network to derive a suite of analytic that are valuable to business owners.

WILAS focus on delivering insights to business users rather than technical stakeholders. Thus, the data are "cleansed" to focus on human carried devices only, while leaving the network to focus on all WiFi devices reporting (regardless of visitors' device or WiFi equipment).

Depending on the module enabled and the data available, WILAS II offers one or more of the following analytic insights:

- i) Analytics Dashboard
- ii) Crowd Density Analytics
- iii) Stay Duration Analytics
- iv) New vs Return Visitor Analytics
- v) Visitor Loyalty Analytics
- vi) Recency Analytics
- vii) Top/Bottom 10 Zones Analytics

- viii) Location Heatmap
- ix) Tabulated Heatmap
- x) Movement Analytics
- xi) Sales vs Visitor Analytic (with 3rd party Data ingestion)
- xii) Device Track & Trace

- xiii) Device Analytic (only available with Engagement Portal)
- xiv) Demographic Analytic (only available with Engagement Portal)

One of the differentiators of WILAS Intelligent Insight is the ability to perform 100% data analytic in real-time, generating most of the insights in seconds from the data availability. The platform also serves as a data source to external system for extended business usage.

In addition, WILAS Analytic provide Crowd Alert & Contact Tracking assistant features to complement the venue initiatives during Covid period.

- c) **Push Marketing:** WILAS Push Marketing platform combine the power of location awareness & user engagement mechanism to maximize the success rate of marketing initiatives.

Marketers can leverage on the platform to delivery advertisement or information using one of the supported channels (eg. SMS, Email & Smart Phone Push). Taking advantage of the demographic & location information, advertisement can be configured to deliver to the correct audience at the correct location/time.

On top of in-door location-based Push, the platform can also be leveraged for mass broadcast, where Marketers can directly broadcast messages (email, SMS or Push Notification) to recipients captured within WILAS with option to filter by demographic. Additional recipients can be uploaded through the provisioning process.

- d) **TITAN (Track, Insight, Trace, Analytic, Notification):** WILAS TITAN platform transform the WiFi infrastructure into a productivity & IoT enhancement facility by enabling the efficiency in monitoring mobile workforce, asset & IoT information. In additional, it can also be deployed to specific venue for complementing the operational monitoring tasks, such as patients in hospital, kids in childcare, etc.

With the automated location tracking & notification service, venue operators can be notified with text messages or video footages when a policy is activated. Eg. Equipment leaving a secured area, kids leaving classroom & enter kitchen, patient leaving wards/hospital, etc.

TITAN Tracking & Analytic features allow venue operators to monitor historical movement as well as generating useful insight of the workforce (staff attendance) or asset (equipment utilization).

TITAN IoT Hub provide a unified platform for the integration of various IoT devices for centralized processing, reporting & visualization.



For the scope of this proposal, WILAS **Engagement Portal** will be proposed. Other services can be add-on in future as part of the roadmap.

SCOPE OF PROPOSAL

This document will propose the deployment of **WILAS WiFi Engagement Portal Service** to complement the Customer Guest WiFi service. The scope includes:

- a) Implementation of a 2x WiFi Engagement Portal for visitors to access the Guest WiFi in Customer environment
- b) To provide Content Management service for authorized administrator to manage the contents published on the Engagement portal.
- c) To provide Report & Analytic Management service for authorized administrator to view & export on the usage & user related reports.
- d) Integration to Customer WiFi infrastructure using selected WiFi network.
- e) Installation & setup of dedicated WILAS in Customer Cloud

SCOPE OF WORK

As part of the project SOW, TechStudio will provide the following services:

- a) Design & Implementation of 2x WiFi Engagement Portal (Captive Portal)
- b) Implementation of access policy & configuration based on Customer requirements
- c) Integration with WiFi Infrastructure
- d) End-to-end User Acceptance Testing Support
- e) Training & documentation

Upon commissioning of the service, TechStudio will continue to provide hosting, maintenance & support for the service.

SOLUTION PROPOSAL

WiFi Engagement Portal (Captive Portal)

WiFi Engagement Portal is the first impression visitors will be presented upon connecting to the guest WiFi, thus it's important that the User Interface & User Experience (UI/UX) are optimized.

In this proposal, **Simple T&C** login will be presented to Customer.

The goal of Simple T&C login is to provide the simplest user experience, yet achieving the objective of protecting CUSTOMER liability with explicit acceptance of T&C & opportunity to disseminate promotional information.

Below is an example of the WILAS WiFi Engagement Portal pages using Simple T&C authentication method. Visitor simply accept the T&C & click on Connect. Once successfully authenticated, Landing page with advertisement opportunities will be presented to engage the users.

To enhance the user experience, WILAS support "Seamless Login Experience" for returning users. For users re-connecting to the WiFi within X days (eg. 90 days), WILAS will bypass the login page & direct user directly to the landing page with WiFi network session granted. This allows the improvement with user experience without holding the network resources.

Reporting & Analytic

Business Administrator can login to WILAS Admin Portal to generate reports & view Analytic in real-time.

Below are some of the Reports & Analytic that is made available:

- a) Visitor Engagement Portal Summary Report: This report shows the daily utilization of the Engagement Portal, include eyeball, unique users, etc.

Date	Engagement Portal	OTP Generated/Login Page	OTP Page	Advertisement Page	T&C Page	Successful Login	%Dropout	Visitors	New Visitors	Return Visitors	%Retention
17/08/2017	CityLink Mall Captive Portal	127	127	0	0%	260	0%	368	0	368	100%
18/08/2017	CityLink Mall Captive Portal	123	123	0	0%	260	0%	417	0	417	100%
19/08/2017	CityLink Mall Captive Portal	128	128	0	1%	304	0%	514	0	514	100%
20/08/2017	CityLink Mall Captive Portal	1	1	0	1%	0	1%	3	0	3	100%

- b) Visitor Profile Report: This report generates all the captured information, based on the login option used.

Dashboard > Report > Visitor Engagement Portal Visitor Profile Report

Visitor Engagement Portal Visitor Profile Report i

Organization: CityLinkMall

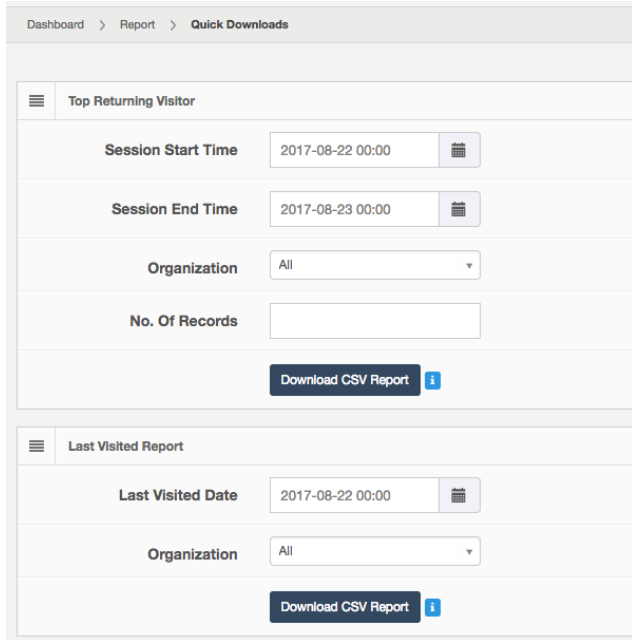
Captive Portal: CityLink Mall Captive Portal

Report Details Show 10 entries

Organization	First Visit Date & Time	Last Visit Date & Time	MAC Address	First Name	Gender	DOB	Age Group	Mobile	Email
CityLinkMall	2017-08-04 00:00	2017-08-04 00:00	00:02:64:17:1F:D4						
CityLinkMall	2017-08-12 00:00	2017-08-12 00:00	00:08:22:00:13:01						
CityLinkMall	2017-08-08 00:00	2017-08-08 00:00	00:08:22:07:4E:4B						

- c) Personal Data Consent Registry Report: According to PDPA, if venue is using the collected data for marketing, explicit consent is required from the users and a consent registry is to be maintained. WILAS automated this process by providing a Personal Data Consent Registry report where audit trail of the user consents will be recorded for easy retrieval when required.

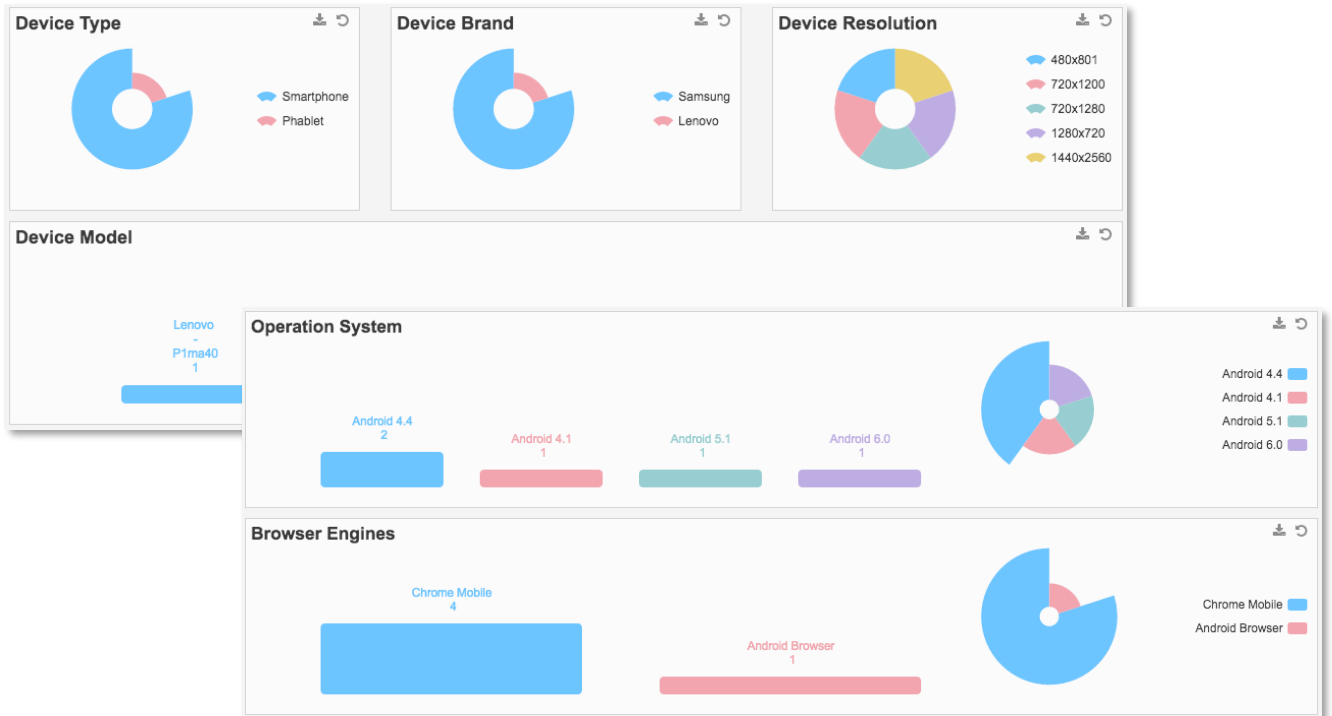
- d) Quick Search Report: This allows administrator to generate frequent returning shopper or shopper who had not returned after certain date.



WILAS Top Returning Report allows marketer to quickly generate a list of frequent returning visitors to execute loyalty campaign.

WILAS Last Visited Report allows Marketer to quickly generate a list of visitors who had not return since (eg. 12 months). This allows marketer to execute campaign to attract visitors back.

- e) Device Analytic: Provide insight of the device profile of the visitors. This information allows Digital Marketers to have better knowledge on the profile of devices that visitors are carrying in order to optimize other digital channels.



Content Management Portal

This self-service admin portal allows non-technical administrator to update the contents on the engagement portal. All updates will be automatically schedule & published according to the configure policy.

Personalized contents can be setup to target specific demographic, location & schedule.

