



## TECHNICAL SPECIFICATION

# Software Overview

Omayya was created out of the sole purpose of traffic analysis. Be it the flow of customers passing through a shopping complex looking for their favorite shops, a theme park with guests looking for hyped attractions to a small scale convention event tracking the best booths.

Using Omayya, enterprises will be equipped with the perfect people counting solution that can accurately compute visitor locations, discover popular zones, and their movement patterns across other zones.

Going beyond simply tracking the number of people who walk through the door, the data collected helps you to make the right decisions at a strategic and operational level. Underpinning the trend analysis and retail occupancy levels, these immediate insights show where store improvements are needed to drive conversions.

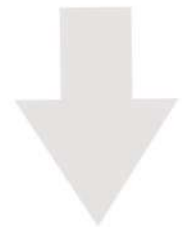
# How Does Wi-Fi Analytics Work



Every devices would transmit a Wi-Fi beacon signal every 2-8 seconds



Each Wi-Fi beacon carries a MAC Address which is unique to each device.



The signal strength of probes can give approximate location of each visitor.



By detecting to the MAC Address, the counter can identify every each unique visitor.



# Analytics

## Features



### Benchmark

Compare venue or your outlets performance in a glance and find top performing outlet or venue.



### Cross Visit

Understand and analyze how users return move between outlets.



### Cross Path

Uncover new users movement behaviour by analyzing how users movement path within the venue.



### Dwell Time

Dwell time analytics provide you analysis of your venue engaged user dwell time group by time.



### Entry & Exit

View and analyze bounce rate of your user in venue or outlets.



### Loyalty & Distribution

Perform analytics on user return rate to venue or outlets, understand how many users are new and how many are return users, understand return user pattern when was their last visit to your locations.



### Visit

Understand how users movement behaviour understand how many users are there per day at venue, how many are engaged user, how many users pass by and how many users visited the venues.



### Venue Map

View users congregation in your venue maps over time provide a visual analysis of users movement and density.



### API

Our rich API interface allowed Omayya to integrate and provide data synchronization or trigger to 3rd party apps.



### Filtering

Our advance filtering AI is able to determine between users and permanent devices as well as staff and will omit the analytics of users which is able to filter Random mac address boardcast by users mobile phone and able to determine users actual device count.



### Location Trigger

Omayya is able to link with our captive portal Kiwire solutions and perform location based trigger, Send Notification or Alert to users when they are detected within a venue or outlet.

## Presence

Presence mode Omayya will utilize one of the venue wireless access point to count and track the users movement within the venue. From data derived from in-store access points, Presence Analytics can identify and remember nearby Wi-Fi-enabled devices, such as smartphones and tablets.

Because these devices correlate to people, the information derived can help retailers answer the following questions for each store in the company:

- How many people pass by the store?
- How many people enter the store and become customers?
  - How often do customers return to the store?
  - How many are new and how many have been to your location before.
  - How much time do they spend in your location?

## Triangulation

Our solutions will utilize all the wireless access point in the venue to triangulate like GPS and determined the location of users within the venue with up to 3 meter accuracy.



### Triangulation Zone

The geometric shapes formed by the distribution of APs affect accuracy. AP's arranged in equilateral triangles yield better accuracy than APs that form an obtuse triangle.



### Traffic Analysis

The count of individual visitors, either shopper individuals or shopper groups, entering a location over a defined time period.



### Access Point

WiFi location works by detecting Wi-Fi signals from a smartphone or other Wi-Fi-enabled device and using the strength of the signal as an indicator of distance. If a Wi-Fi system can detect the same Wi-Fi signal from multiple access points (APs), that's even better because the distance vectors can be combined to more accurately pinpoint the exact location of the device.

# Heat Maps

Omayya can track every visitor in the scene and creates summaries of their activities such as passersby, impression and dwell. In other words, Omayya can sense how many visitor passed from any point of the venue, where they stopped and how much time they spent.



## Passerby

The visitors just walking and looking around are classified as passersby.

## Impression

When a visitor stops and starts to spend time at any place, then it is considered as an impression event.

## Dwell

The intelligent software can also measure the time spent by the visitors.