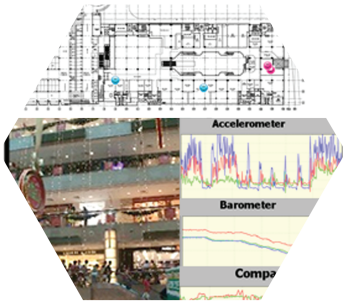


User Wi-Fi Location & Movement Data Analytics



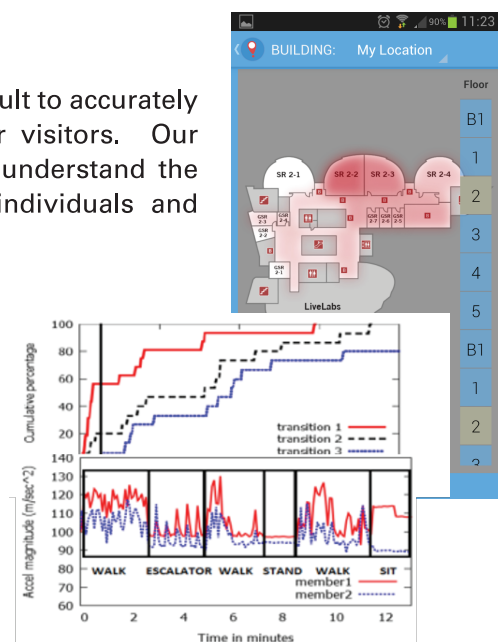
This location Analytics platform provides customised analytics to understand the indoor movement and behaviour pattern of visitors. It provides both retrospective (e.g., Heatmaps and visit duration at different locations, size distribution of visitor groups) and predictive (e.g., likely locations to be visited next) insights. Such insights are critical for a variety of next-generation services such as agile operations (e.g., scheduling janitorial services when a surge of visitors use the restrooms at an airport terminal) or personalised visitor interaction (e.g., tailoring incentives to the size of the visitor group at a recreation park).

Overview

In venues such as malls, office campuses, and airports, it is difficult to accurately track, understand and predict behavioural patterns of indoor visitors. Our Location Analytics platform provides customised analytics to understand the indoor movement and behaviour pattern of visitors (both individuals and groups). Location Analytics provides both

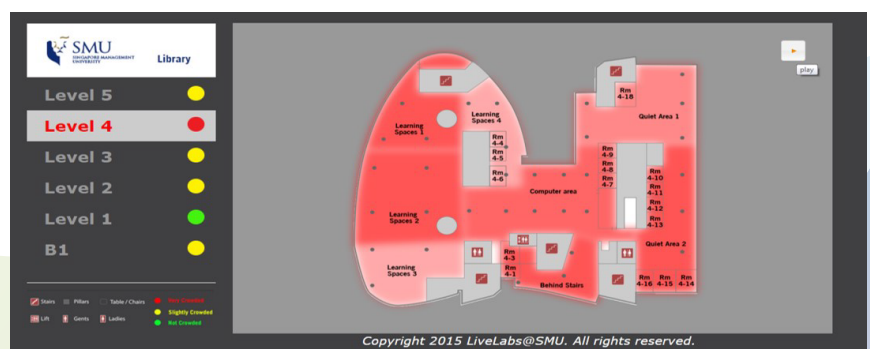
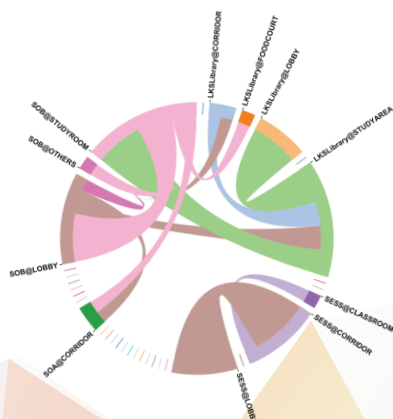
(a) base set of movement and location analytics and visualization, of information such as real-time visitor heat map of the indoor environment multiple charts of daily and hourly trend of visitor occupancy, transitions, dwell-times, and visit frequency, and

(b) advanced/customised analytics such as group counting, next-place prediction and understanding of relationships/ties among visitors



Features & Specifications

The technology comprises two web portals. One is an external heat-map portal which can help the visitor understand the real time visitor occupancy of venues. And another portal is used for venue operators. The operators can observe daily and hourly occupancy trend, visitor transition, visiting frequency, visitor group counting...etc.



User Wi-Fi Location & Movement Data Analytics

Potential Applications

This technology is applicable in the following industries:



Owners/operators of public venues

Such as shopping malls, convention centres and hotels: Such operators may track the individual and aggregate location of visitors, both to understand movement patterns and also for a variety of operational needs (such as safety and evacuation tracking, on-demand deployment of service staff & footfall-based pricing of different locations).

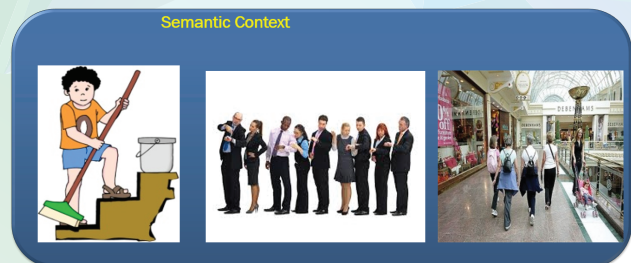


Facility managers

Similar to venue operators, Facility Operators might leverage upon the location tracking and movement prediction components to fine-tune various operational functions, such as security & surveillance (sending security staff to locations with unusual visitor density) and energy management (adjusting HVAC operating schedules based on predicted occupancy levels).

Market Trends and Opportunities

Wi-Fi networks and public Wi-Fi access has become ubiquitous in thousands of public venues. Leverage the indoor location tracking capability of such networks to transparently understand the movement behaviour of visitors inside such venues. Such location tracking analytics requires zero infrastructure investment cost, and can provide new forms of customised & personalised services to millions of visitors to such public venues.



Customer Benefits

With the use of Location Analytics, public venue operators will be able to obtain

(a) *retrospective insights of visitor patterns, and*

(b) *predictive forecasts of individual and collective movement flows. Moreover, Location Analytics also provides individual visitors with a real-time snapshot of the occupancy status and crowd density of the venue.*