

# Advanced Footfall analytics with AWS & Power BI for a renowned Digital Infrastructure Solutions Provider

**Service offered :** Development of dynamic and unique Power BI solution for actionable insights

**Industry :** IT

## Overview

- ✓ The client is a renowned neutral digital infrastructure player transforming and offering next-gen digital connectivity solutions for businesses and institutions. However, the client has been facing certain challenges in getting accurate insights into customer behavior, preferences, and patterns and determining peak times and areas of high traffic. These insights will eventually help in tailoring services, better-allocating resources, making strategic decisions, identifying the best times and locations for promotions, and so on.
- ✓ So, the client approached us to build a comprehensive solution to get a complete picture of footfall analytics for distinct shopping malls, stores, and brands worldwide. With our perfect integration of AWS platforms and the Power BI dashboard solution, the client was able to pave the way for its users to attain advanced data collection and visualization to drive ROI by improving operational efficiencies and visitor experiences.

## Business Challenge



- 01 Lack of clear, end-to-end user data insights within the premise.
- 02 Difficulty in ensuring the accuracy of footfall insights into customer behavior, preferences, patterns, and determining peak times and areas of high traffic, etc.
- 03 Scalability and cost constraints in processing and analyzing high-volume real-time insights

## Solution Implemented



- ✓ Our team discussed the client's expectations and devised a unique concept for developing an IoT-powered solution.
- ✓ Better utilization of the client's iFind IoT devices app with a strong data cleansing strategy with preprocessing and deduplication to ensure reliable data on footfall counts (total and repeated visitors), visitor dwell times in specific areas, movement pathways, crowd density, and store-wise performance metrics based on footfall and sales data.
- ✓ A dynamic dashboard was built with Power BI & with several striking features to visualize detailed real-time visitor data precisely for actionable decision-making. The features include key metrics overview (visitor analytics, dwell time insights), trend charts, geospatial visualizations (footfall heatmaps, crowd density zones), indoor navigation visuals (pathways and routes, hotspot analysis), top-performing stores, marketing effectiveness reports, and so on.

## Outcome

<p><b>3x</b></p> <p>Better accuracy in complete visualization of real-time insights</p>	<p><b>2x</b></p> <p>Scalability and cost-effectiveness in getting data insights</p>	<p><b>35%</b></p> <p>Improvement in customer experience</p>	<p><b>2x</b></p> <p>Enhancement in operational efficiency</p>
---	---	---	---

The client was happy with the solution built and the company successfully serves 170 shopping malls across India. With Techmango's team by their side, the client was able to deliver the best solution for the Mall Owners.

- ✓ To perform highly advanced data collection, cleaning, and visualization
- ✓ To boost operational efficiencies by deploying housekeeping, security, and maintenance teams based on crowd density and time
- ✓ To optimize underutilized zones and identify opportunities for new store placements

The client was able to help brand stores and shop owners in the following ways

- ✓ Attain promotional effectiveness by leveraging high-traffic zones for campaigns and kiosks
- ✓ Carry out data-driven campaigns by assessing the ROI of promotions by tracking increased footfall and dwell times

## Store managers were able to benefit from our solution

<p> By understanding shopper behavior patterns to optimize merchandising.</p>	<p> Improving customer engagement strategies to enhance footfall and revenue.</p>
---	---

## Partner with us

Let's build your success story together! Reach out for your digital transformation, data, and business technology needs. Whatever may be your next-gen IT service needs, including GenAI, Data Engineering, Advanced Analytics, or Microsoft Dynamics 365, we have got you covered with tailor-made solutions for your business. Our commitment to delivering top-notch services ensures that we never compromise on quality. Your innovation journey starts here!

[Consult our experts](#)



### Expertise

- Data Engineering
- Generative AI Services
- Microsoft Dynamics
- Data Analytics Services

### USA

**Atlanta**  
1201 W Peachtree St, NW Ste 2625 #506203, Atlanta, GA, 30309, USA

**New York**  
30 Wall St, 8th Floor New York, NY 10005  
+1 (678) 957 7872

### UAE

**Dubai**  
1007, B2B Tower, Marasi Drive, Business Bay, Dubai, UAE . PO BOX NO: 23075

### India

**Chennai**  
37, Bhuvaneshwari Street, RV Garden, Tambaram, Chennai – 600046, Tamil Nadu, India  
+91 99940 23236

### Compliance



### Social Media

