



Visitor Analytics for Retail using IoT

Techmango Technology Services a Digital Transformation and IT consulting company founded in 2014 with a strong focus on emerging technologies. It holds a primary objective of delivering strategic solutions towards the goal of its business partners in terms of technology. By providing digital solutions aided with the best available technologies, we assure the quality of the delivery on the defined time-line.

DOMAIN

Retail

METHODOLOGY

Agile with sprint every 2 weeks

DURATION

1 Year

RESOURCES

6

PROJECT STATUS

Completed

TECHNOLOGY USED



Glue



Lambda



Data Catalog



Athena



S3

BACKGROUND

Solution is about analyzing demographic using the IoT sensor data from offline stores. Customers were looking for a scalable data platform that can be reused and extended for multiple customers and brands. Understanding the user behavior, predicting the visits and optimizing sales conversions are some of the key use cases.

SOLUTION IMPLEMENTED

- AWS IoT - Developed streaming pipelines using Lambda and Python
- S3 based data lake for raw storage
- Scalable architecture that allows millions of streaming data from several locations
- Unified model to integrate data from multiple locations
- AWS RDS for curated data store - data mart
- Power BI Dashboards with Row level security
- Customizable floor map visualization.
- ML Models for detecting and removing outliers
- Model for analyzing frequently used paths

OUT COMES

Solution helped to perceive clear visibility on the dwell time and head counts on various stores in a mall space. Using the visualization and report, brand owners and mall owners were able to optimize the revenue and operational staff.