

INTERNET OF THINGS INNOVATION: FUTURE FOR RETAIL

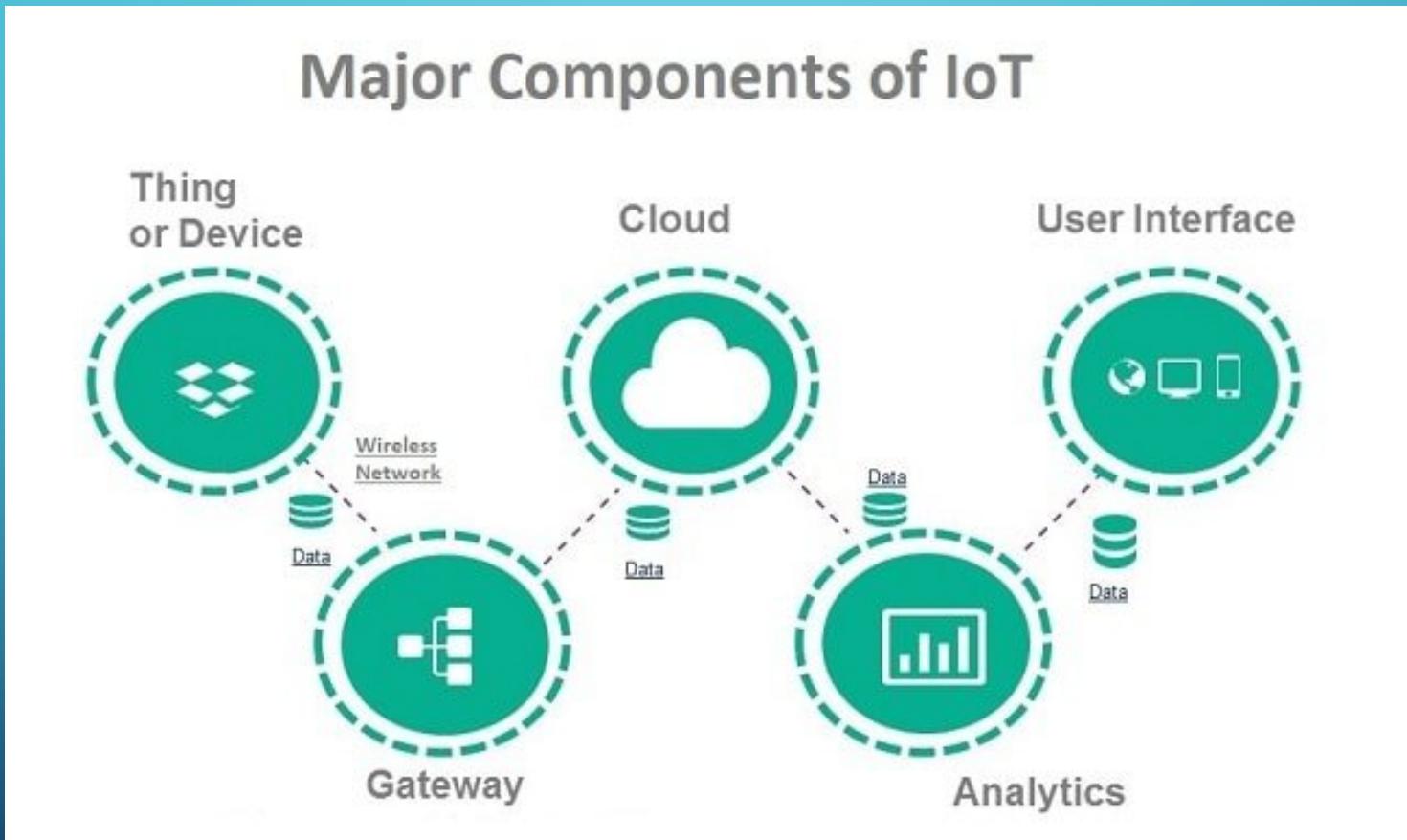
PRESENTED TO YOU BY: AMIR SHUKRI



WHAT IS THE INTERNET OF THINGS (IOT)?



HOW IT WORKS



WHY IOT IS IMPORTANT FOR YOUR BUSINESS?

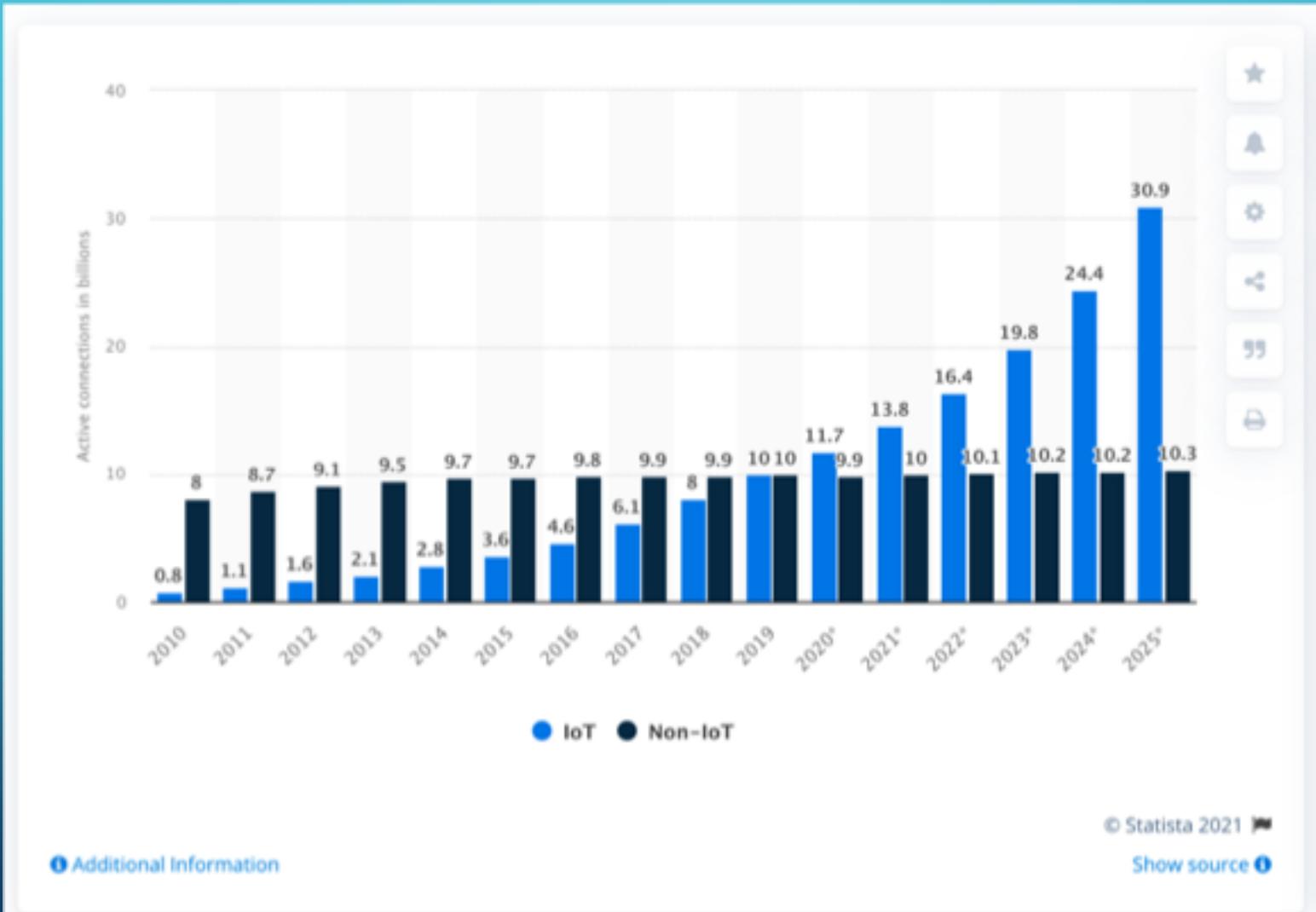
- 1. Households have ten connected devices on average and will rise to 50 in 2021**

(Economic Times)

- 2. Worldwide IoT spending surpassed \$1 trillion in 2020 alone**

(Sdx central)

GROWTH PROJECTIONS FOR IOT (IN BILLIONS)



UNDERSTANDING FOOT TRAFFIC

- Measuring the movement of people within a given space. Particularly relevant to gauge people coming in and out of stores.
- Important to:
 - Understand customer behaviour
 - Optimise staffing
 - Measure and quantify marketing campaigns
 - Understand impact of external factors

FACTORS AFFECTING FOOT TRAFFIC

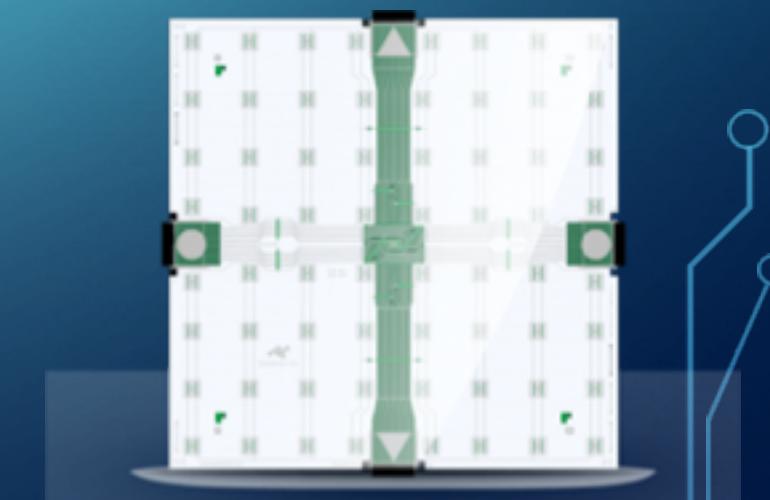
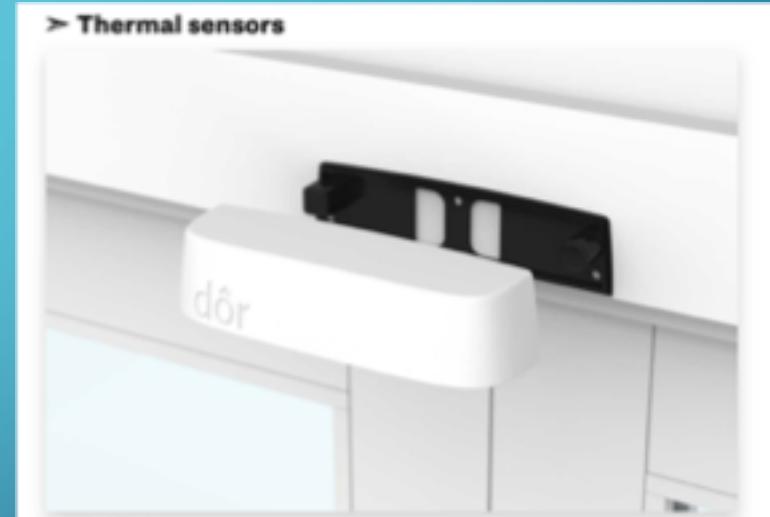
- Weather
- Economy
- Consumer Demand and Trends
- Seasonality
- Marketing Campaigns
- Location

PROBLEM STATEMENT

What technologies within the IoT space can assist with understanding foot traffic analytics and consumer behaviour?

TECHNOLOGIES FOR FOOT TRAFFIC

- Beam Sensors
- Thermal Sensors
- Pressure Sensors
- Wifi Counting
- Video Analytics



FACTORS WHEN CHOOSING TECHNOLOGY

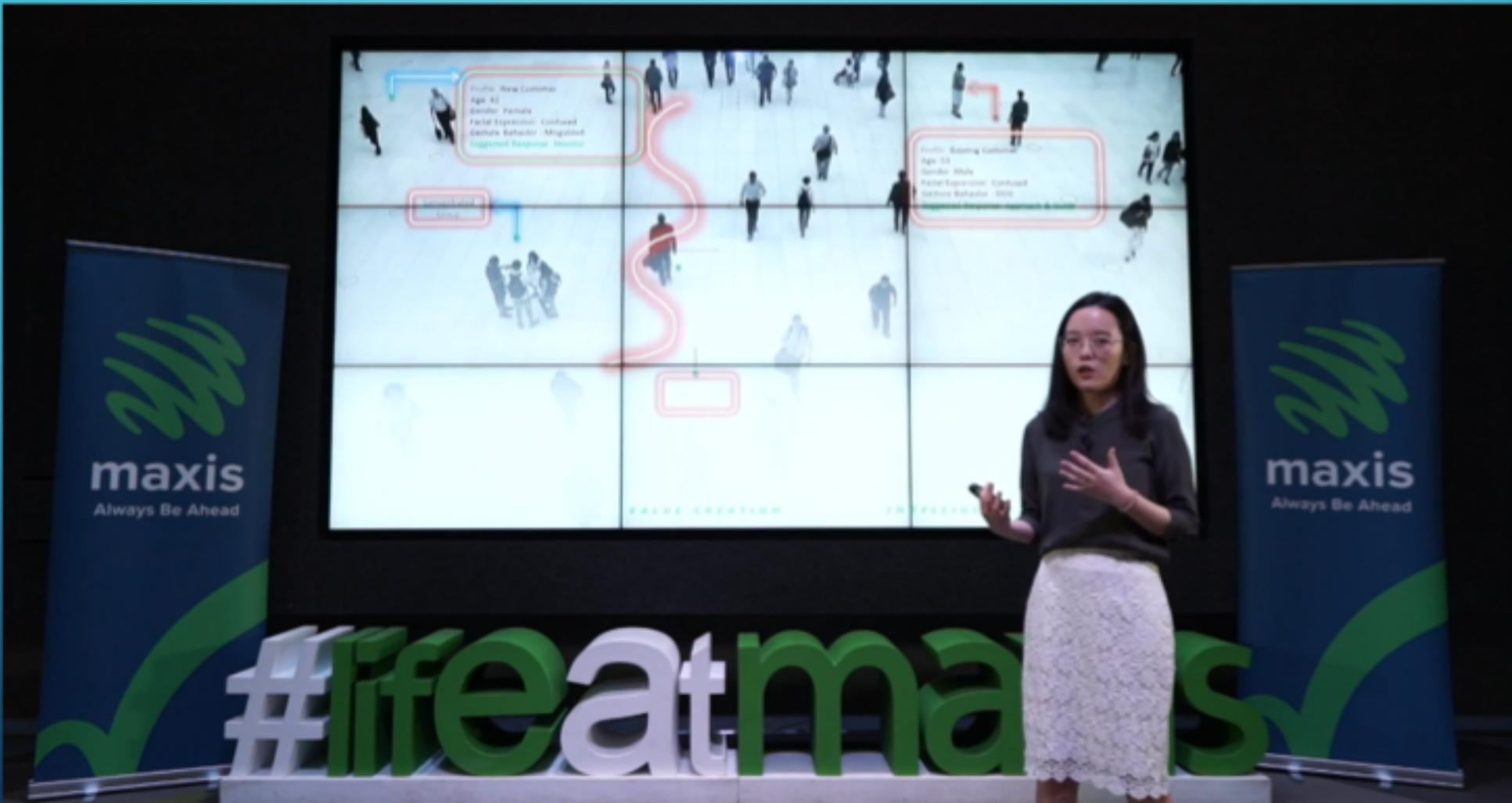
- Does it integrate with the existing system well?
- Exactly what data are you getting and how useful is it to your business?
- How expensive is the solution?
- How easily can it integrate to your current system?
- Does it violate customer privacy regulations?

VIDEO CAMERAS: THE MOST ACCURATE

- High accuracy
- Potentially can be integrated to existing security system to monitor in-store activity by installing video analytics algorithm.
- Avoid privacy issues compared to wifi counting method, information anonymised while giving accurate footfall and dwell time.
- Only downside is its expensive costs.



HOW MAXIS USES PEOPLE COUNTING TECHNOLOGY



FURTHER IMPLEMENTATIONS: HEAT MAPS AND ZONE ANALYTICS



FOOT TRAFFIC WITH IOT

A STEP IN THE RIGHT DIRECTION



Amir Shukri, 2021