

Air Pollution In Yangon Before and During Covid19

Submitted By

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Abstract

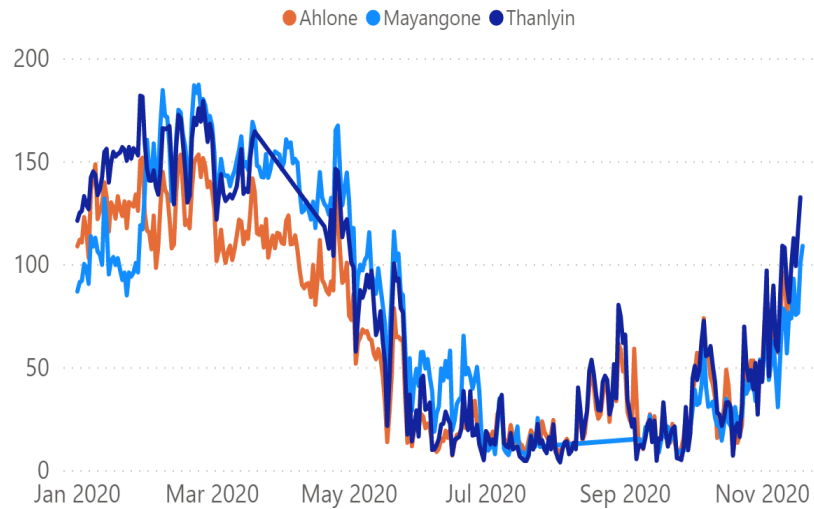
- We use the Power Bi(Business Analytics Service) for visualization in Air Pollution Datasets.
- We use the data from the sensors around the Yangon.
- We can easily see the Air Pollution in Yangon before and during Covid19.
- We can easily see the Real Time Data Steaming for Air Pollution include humidity, temperature, PM2.5 Value, Air Quality Index and Health Level Concern.

Dataset

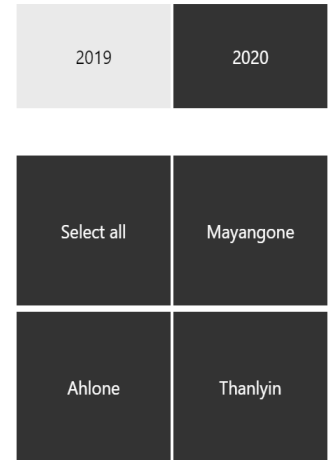
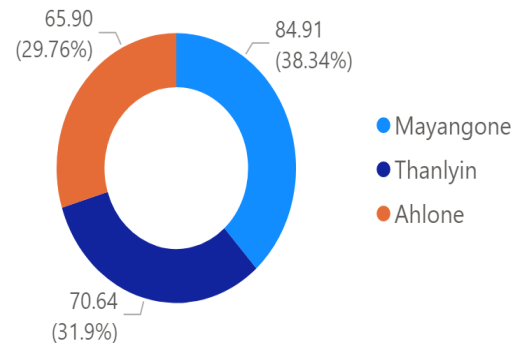
- Ahlone (Myanmar Centre for Responsible Business Sensor Outside)
- Thanlyin (Dulwich College Yangon Sensor Outside)
- Mayangone (7 Mile Sensor Outside)

Result

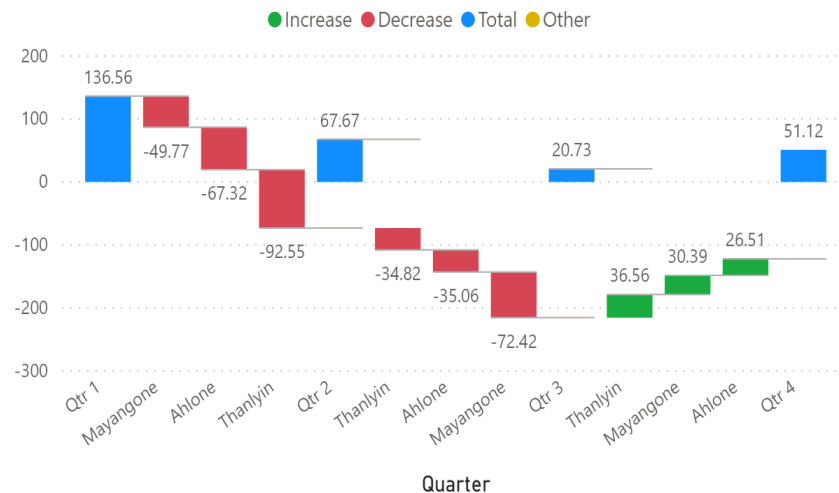
Average of AQI by Date and Location



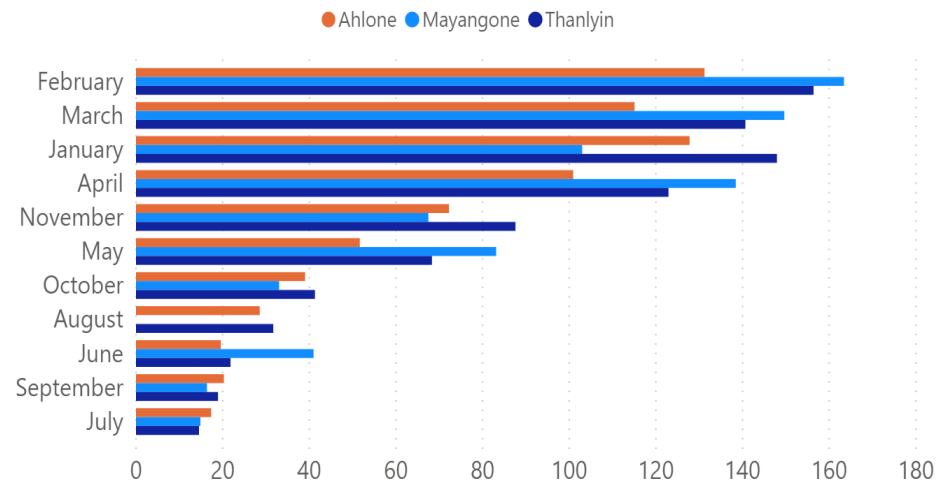
Average of AQI by Location



Average of AQI by Quarter and Location

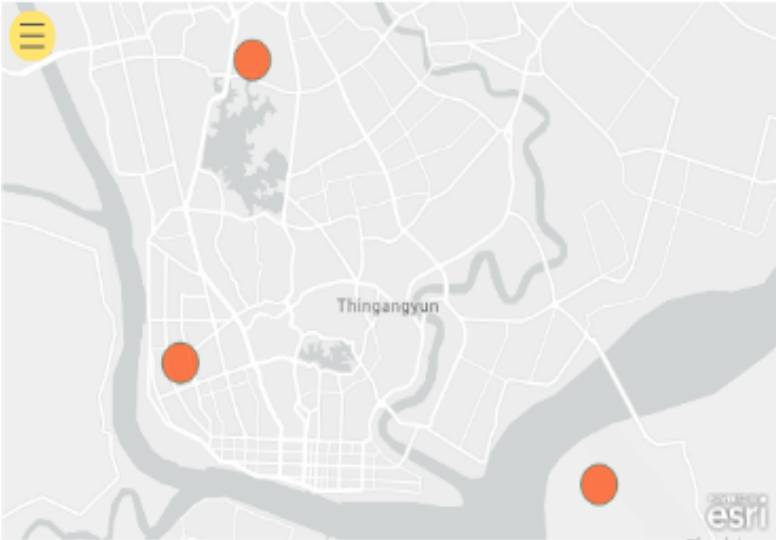


Average of AQI by Month and Location

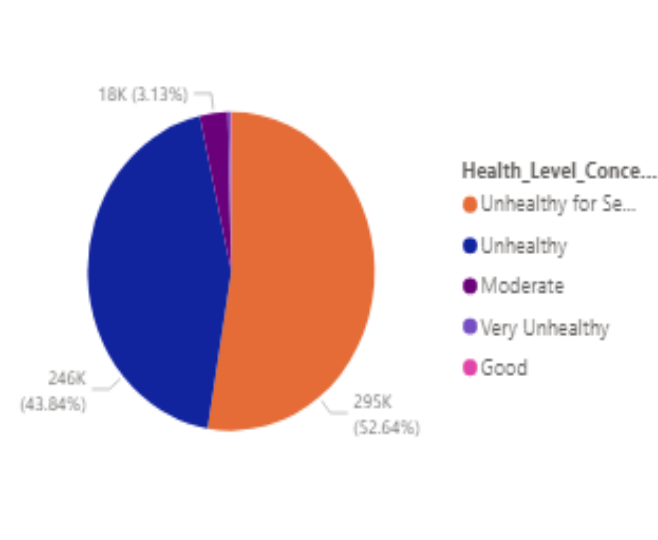


Result

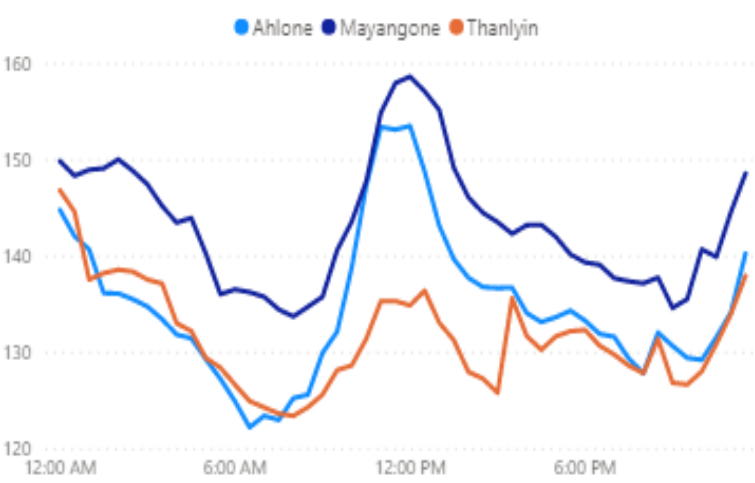
Average of AQI by Location, Latitude and Longitude



AQI by Health_Level_Concern



Average of AQI by Time and Location

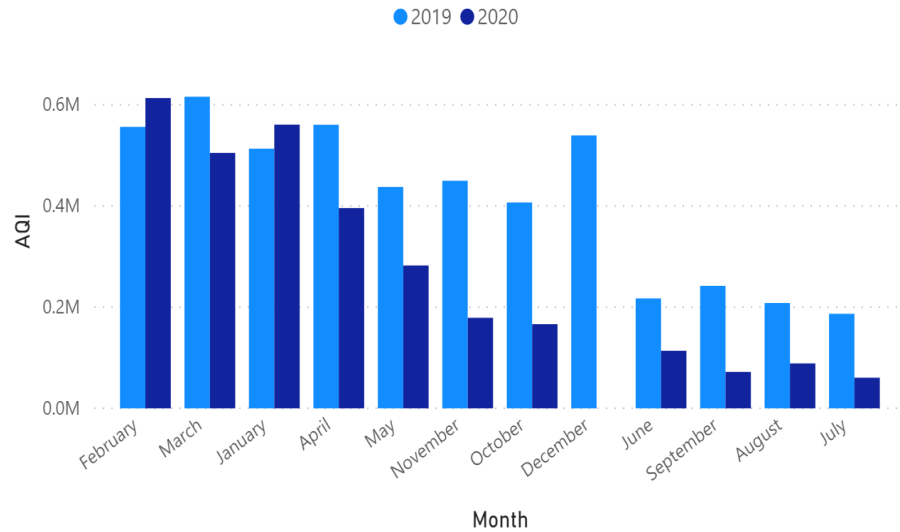


Location	Health_Level_Concern	AQI
Thanlyin	Good	321
Thanlyin	Moderate	8368
Thanlyin	Unhealthy	67514
Thanlyin	Unhealthy for Sensitive Group	106827
Thanlyin	Very Unhealthy	206
Mayangone	Moderate	3688
Mayangone	Unhealthy	101320
Mayangone	Unhealthy for Sensitive Group	80704
Mayangone	Very Unhealthy	617
Ahlone	Good	142

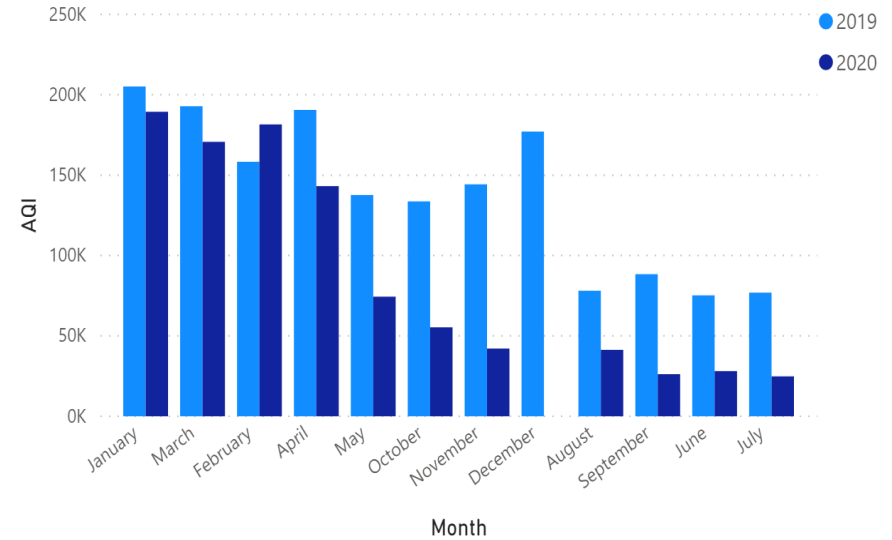
Select all	Mayangone
Ahlone	Thanlyin
2019	2020
April	June
August	March
December	May
February	November
January	October
July	September

Result

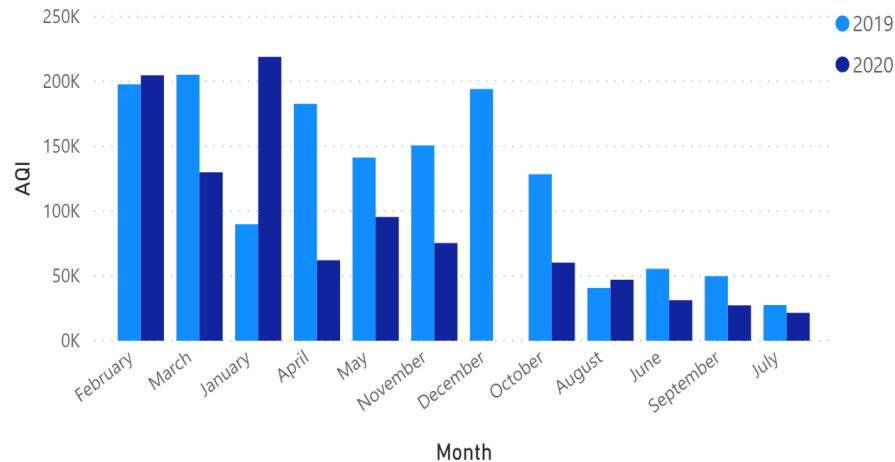
Three Township AQI by Year and Month



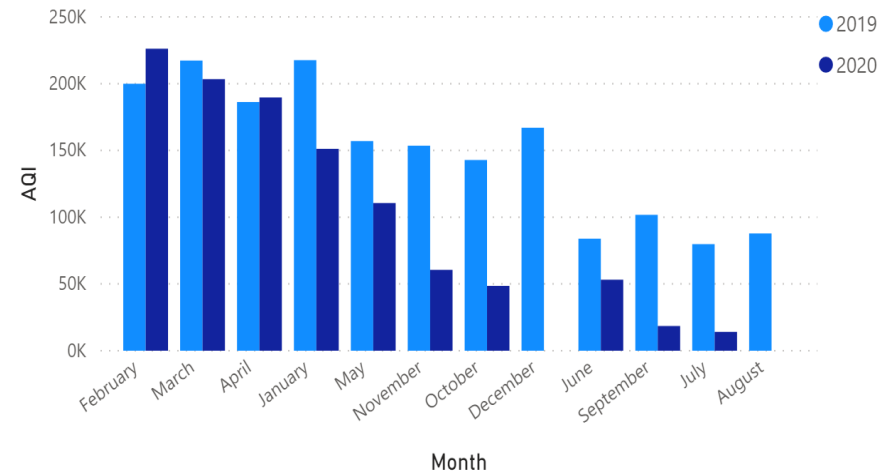
Ahlong Township AQI by Month and Year



Thanlyin Township AQI by Month and Year



Mayangone AQI by Month and Year



Real Time Data Streaming

အလံမြို့နယ် (Myanmar Centre for Responsible Business Sensor)

PM 2.5 Value
REAL TIME

38

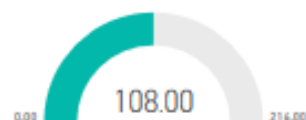
Humidity (%)
REAL TIME

39

Temperature (F)
REAL TIME

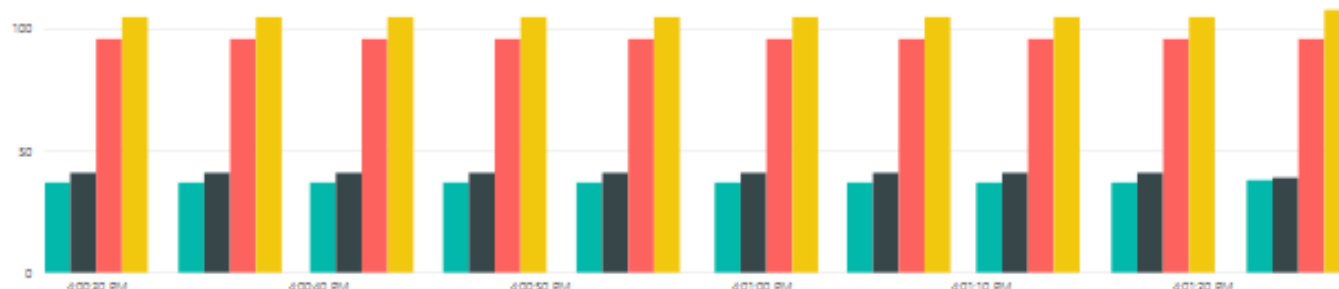
96

Air Quality Index (AQI)
REAL TIME



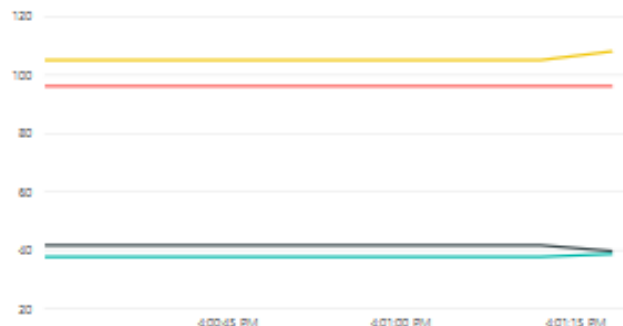
PM 2.5, Humidity (%), Temperature (F), Air Quality Index (AQI)
REAL TIME

PM2.5_ATM Humidity temp_F AQI



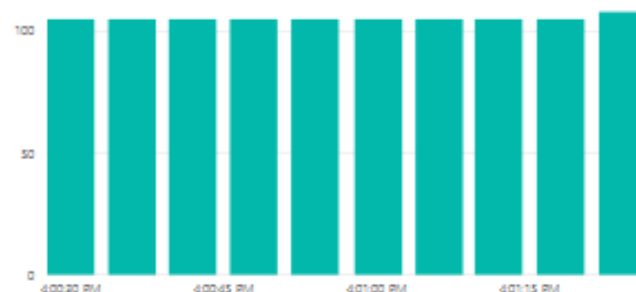
PM 2.5, Humidity (%), Temperature (F), Air Quality Index (AQI)
REAL TIME

PM2.5_ATM Humidity temp_F AQI



Health Level Concern
REAL TIME

Health_level_Concern Unhealthy for Sensitive Group



Real Time Data Streaming

သန်လျင်မြို့နယ် (Dulwich College Yangon Sensor)

PM 2.5 Value
REAL TIME

39

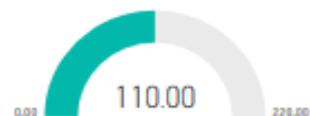
Humidity (%)
REAL TIME

55

Temperature (F)
REAL TIME

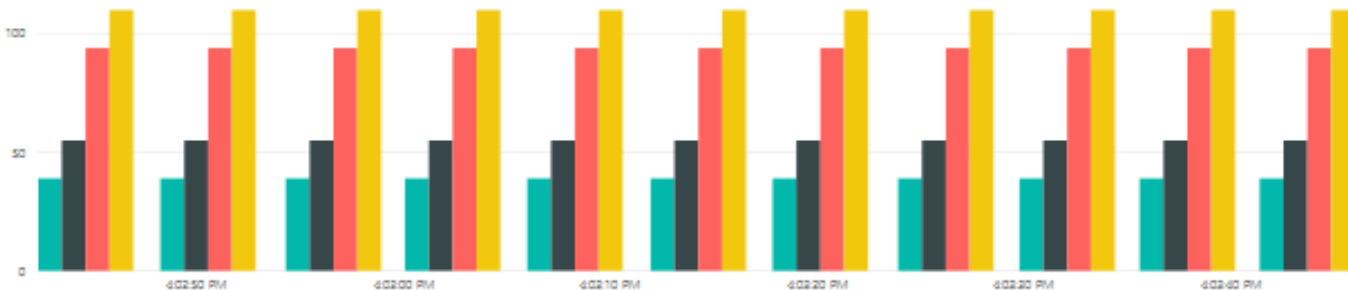
94

Air Quality Index (AQI)
REAL TIME



PM 2.5, Humidity (%), Temperature (F), Air Quality Index (AQI)
REAL TIME

PM2.5_ATM Humidity temp_F AQI



PM 2.5, Humidity (%), Temperature (F), Air Quality Index (AQI)
REAL TIME

PM2.5_ATM Humidity temp_F AQI



Health Level Concern
REAL TIME

Health_Level_Concern Unhealthy for Sensitive Group



Real Time Data Streaming

မရမ်းကုန်းမြို့နယ် (7 Mile Sensor)

PM 2.5 Value
REAL TIME

12

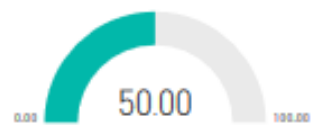
Humidity (%)
REAL TIME

35

Temperature (F)
REAL TIME

95

Air Quality Index
REAL TIME



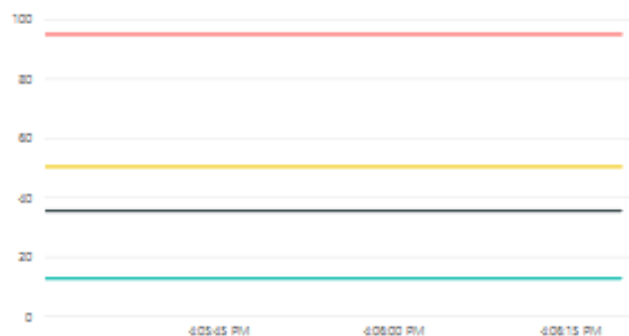
PM 2.5, Humidity (%), Temperature (F), Air Quality Index (AQI)
REAL TIME

PM2.5_ATM Humidity temp_F AQI



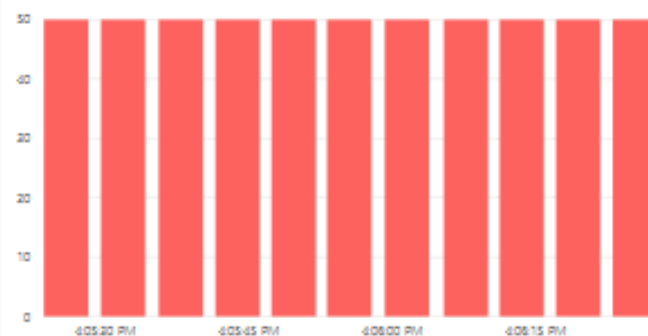
PM 2.5, Humidity (%), Temperature (F), Air Quality Index (AQI)
REAL TIME

PM2.5_ATM Humidity temp_F AQI



Health Level Concern
REAL TIME

Health_Level_Concern Good



Vision

- We will create the web app, android app and connect with IOT hub.
- We will put the air sensors around the country.
- We will analyze the data from the air sensors
- We give the knowledge to the user by visualization via web app, android app.
- As a product level, we will create the mini air purifier.

Thank u for your attention