



# Building a SMART CITY 4.0:

## A Collaboration for a Better Jakarta

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Provincial Government of Special Capital Territory of Jakarta

Jakarta Smart City

# 4 LEVELS OF CITY EVOLUTION

by Marcus Foth,  
Professor of Urban Informatics,  
Queensland University of Technology

CITY  
4.0

The city government as a collaborator.  
Citizens as co-creators.

CITY  
3.0

The city government as a facilitator.  
Citizens as participants.

CITY  
2.0

The city government as a service  
provider. Citizens as consumers.

CITY  
1.0

The city government as an administrator.  
Citizens as residents.

Governor's Vision and Mission

# Maju Kotanya, Bahagia Warganya

the More Developed the City is, the Happier the Citizens are

## Jakarta City 4.0's objectives:

- use appropriate technologies to foster digital economic growth; and
- improve the well-being and quality of life of Jakarta's citizens.

# Sustainable Development Programme

Collaborator

Government

Co-Creators

Citizen

Academia

Media

Industry/Business/Investor

Other Governments

Vision and Mission  
JAKARTA CITY 4.0

Digital Technologies and Innovation

Cloud

Big Data

AI

IoT

Blockchain



Road Congestion



Medical Services



Parking space



Flooding



Waste Management and Recycling



Air Pollution



School education



Local government services



Public Transport



Drink Water



Unemployment



Green spaces

Jakarta's Problems

Citizen's Needs

Developed City

Happy Citizens





# Jakarta City 4.0

4 Principles

5 Stakeholders

6 Outputs

7 Strategies





## ABOUT

# JAKARTA SMART CITY

- Established in 2015
- A management unit under Department of Communications, Informatics and Statistics of Jakarta Provincial Government
- When it comes to decision making process, we departed from the data taken from the big data and then analyzed by experts who then concluded the results in conclusion

# CITIZEN CENTRIC PLATFORM



**The official information center  
application of the DKI Jakarta Provincial  
Government that integrates various  
public services in Jakarta**



# “ONE APPLICATION FOR VARIOUS NEEDS IN JAKARTA”



## Citizen-Oriented

Complete and facilitate  
access to public services



## ONE-STOP-SERVICE

Official information center  
to help the community



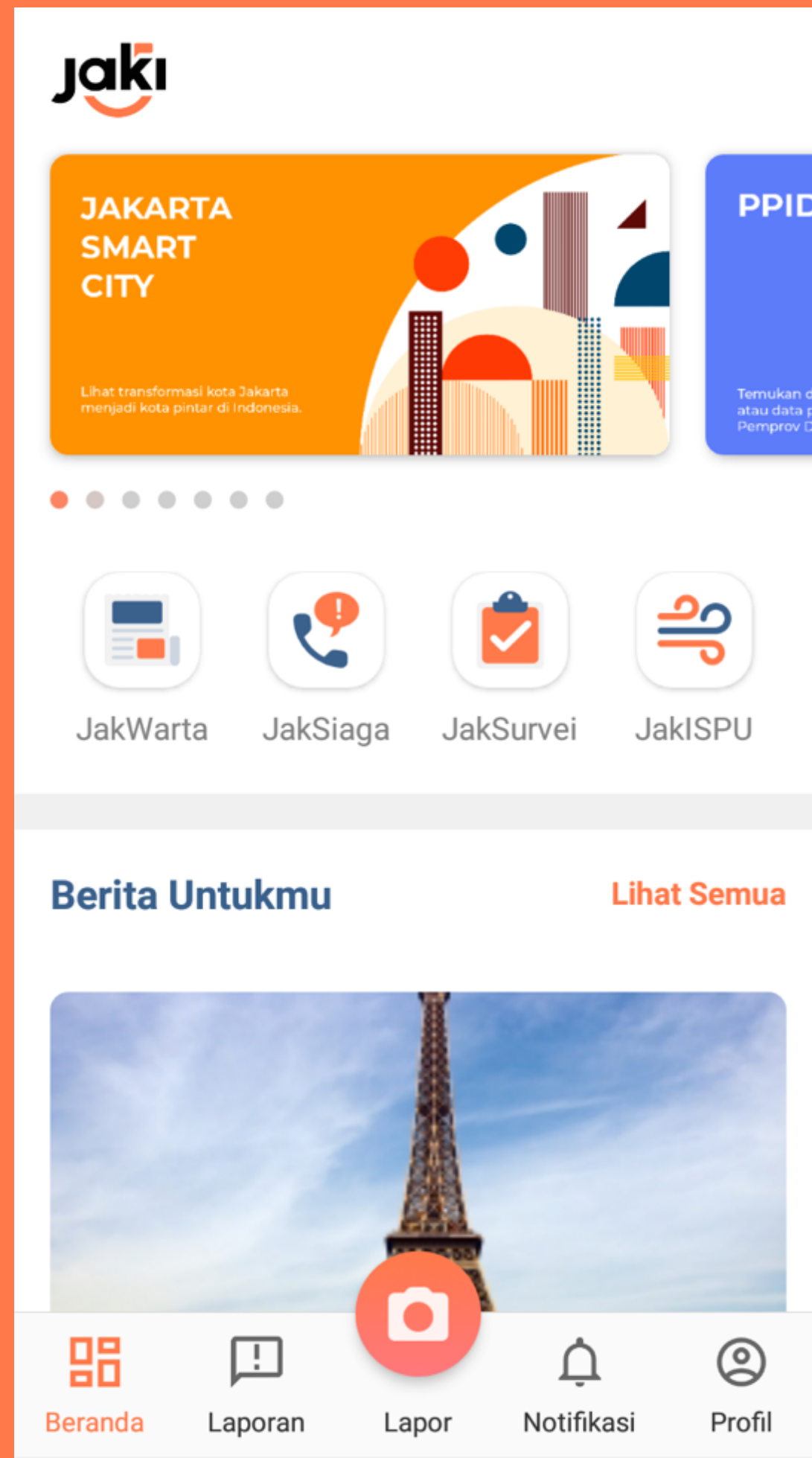
## City-based App

An integrated, inclusive,  
transparent and solutive  
official application



## PROVIDE NEW SPACE

Provide space and  
opportunities to report  
problems



# ONE-STOP-SERVICE



This feature displays various services of the DKI Jakarta Provincial Government that have implemented Information and Communication Technology that can be useful for the community. This banner can also display various applications from the collaboration of the DKI Jakarta Provincial Government and startups as a form of City 4.0 implementation

## Utilizing IoT in Jakarta

IoT uses internet connection to connect devices in order to monitor and control.

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## The Application of IoT by Jakarta

Provincial Government:



Monitors TransJakarta buses



Monitors garbage truck and heavy duty vehicles



Monitors ambulance



Monitors water level



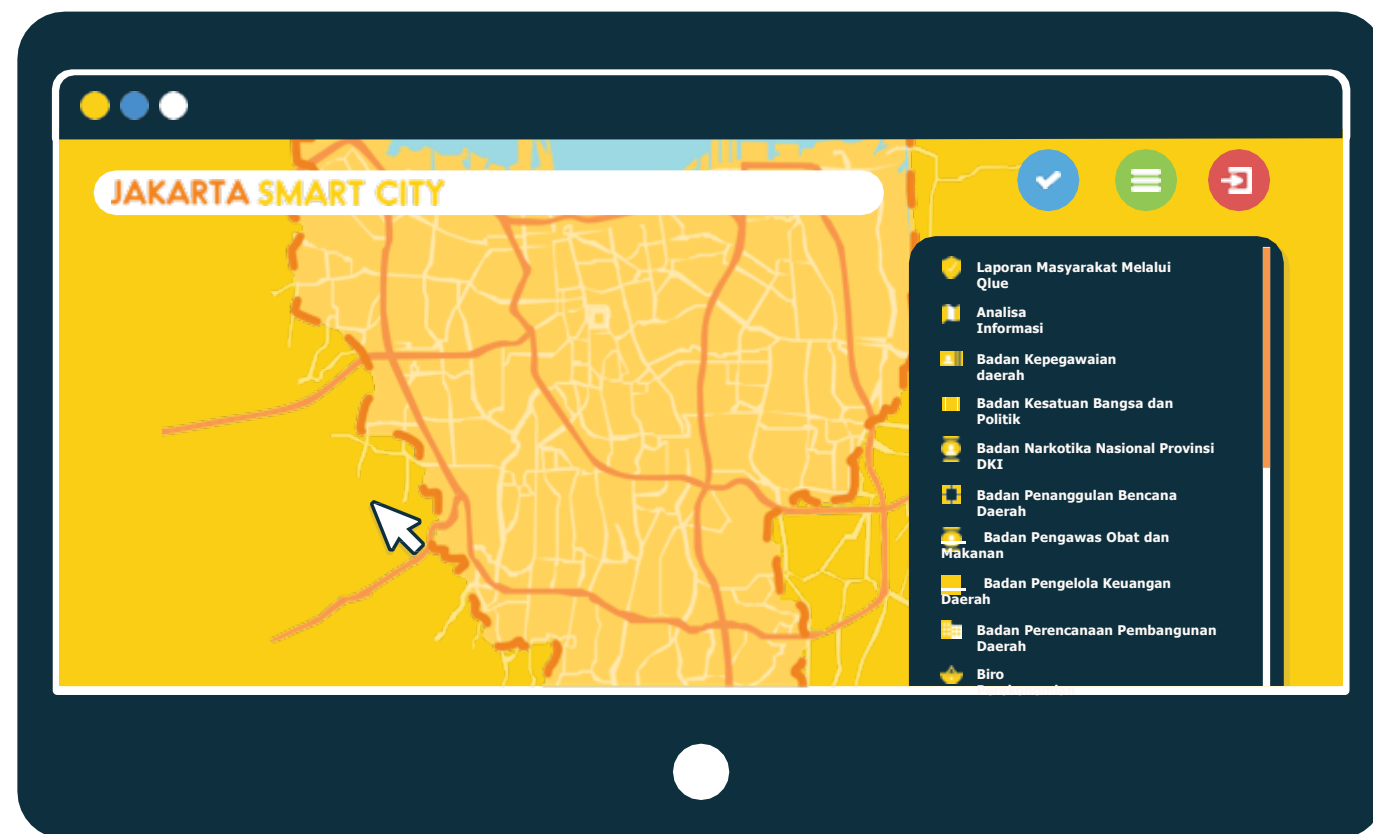
Monitors air quality



Controls public street lights



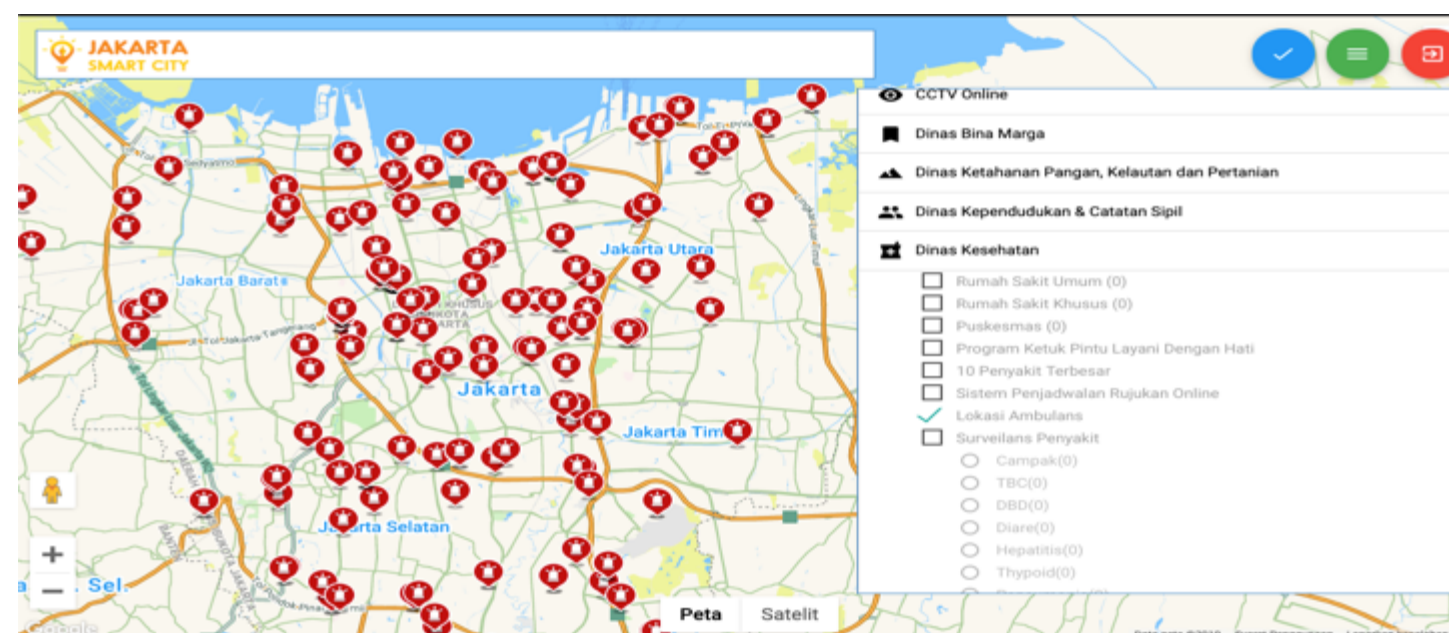
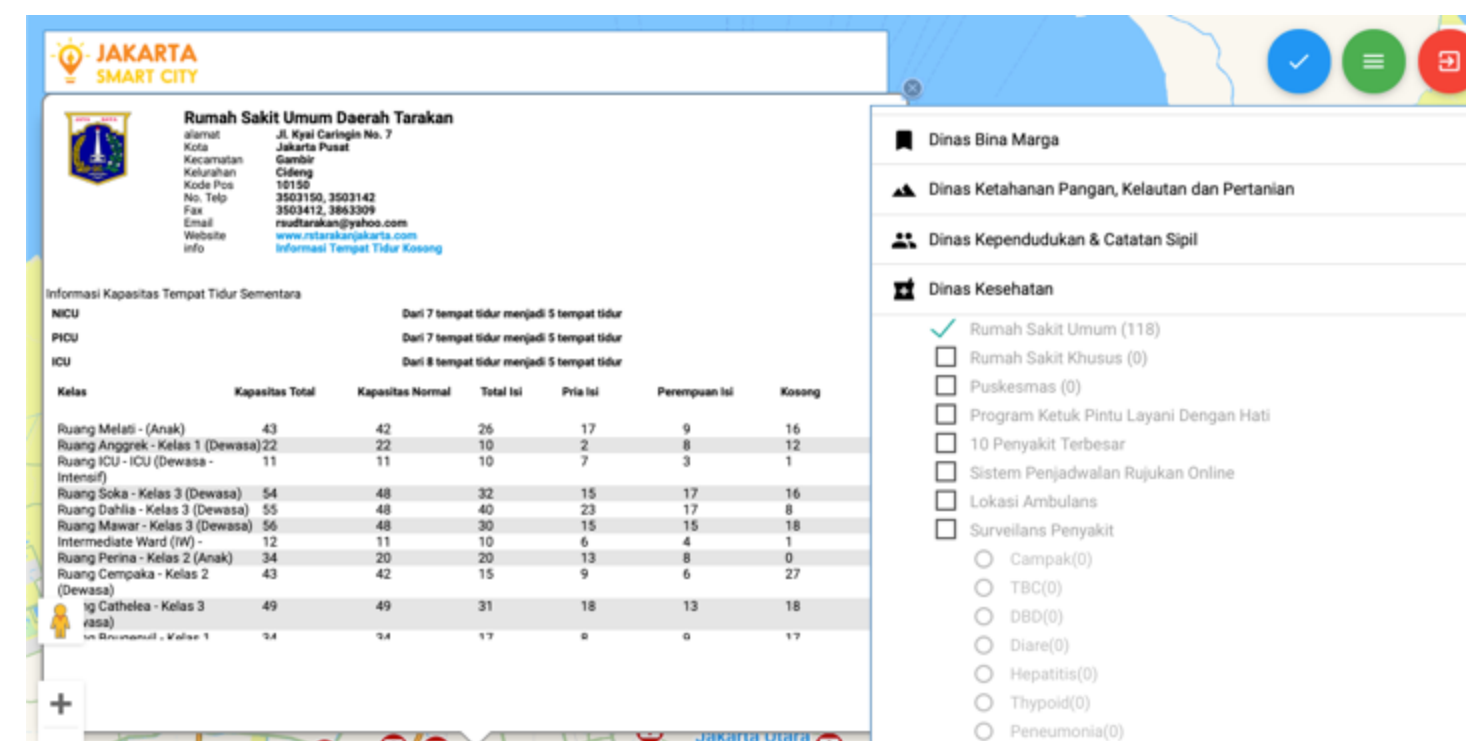
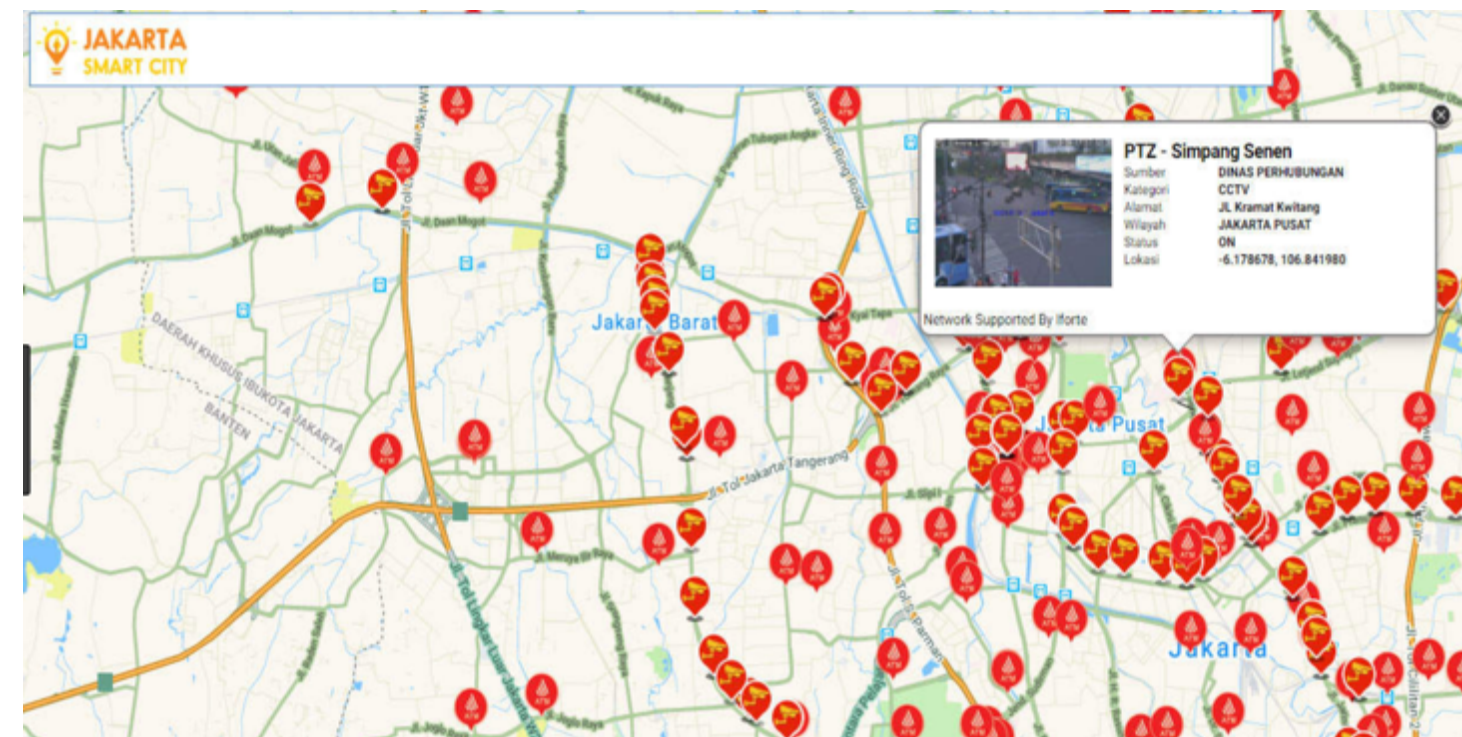
[smartcity.jakarta.go.id/maps](http://smartcity.jakarta.go.id/maps)



## Jakarta Smart City Maps

You can find out information:

- Real-time impressions of more than 7,000 CCTVs throughout Jakarta
- Information on land prices
- Information on availability of Hospital Rooms
- Information on food prices
- Information on SMEs assisted by Jakarta Provincial Government



## CCTV Integration

7.717 CCTVs (\*data on August 2019)

## Hospital Room Availability

## Tracking Ambulances

Jakarta Smart City





## Jakarta Provincial Government Official Aspiration Platforms

A mobile and web application for the Province Level (Agency, Department, and Bureau) and City Administrative Level (District, City, and Sub-Agency) to coordinate and handle the citizen report easily and efficiently.

**Cepat Respon Masyarakat merupakan sistem integrasi seluruh kanal pengaduan untuk dapat ditindaklanjuti secara cepat dan tepat oleh Pemprov DKI Jakarta.**

**Saat ini terdapat 12 kanal pengaduan resmi yang telah terintegrasi dengan Cepat Respon Masyarakat**



@DKIJakarta



Balai Warga jakarta.go.id



Kantor Kelurahan



Pemprov DKI Jakarta



SMS 0811272206



Kantor Kecamatan



QLUE



LAPOR 1708



Pendopo Balai Kota



dki@jakarta.go.id



Sosial Media Gubernur



Kantor Inspektorat

# OPEN DATA

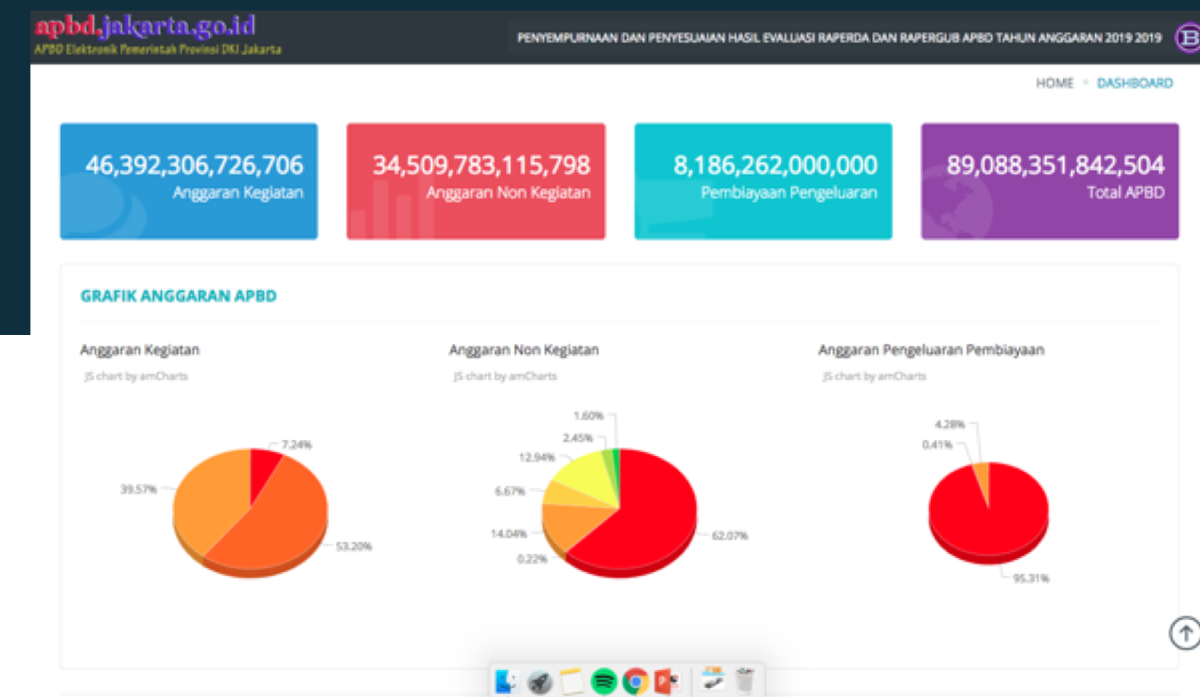
A transparent (open) government can increase public trust in government performance. It is transparent if the administration is easily accessible or known by the community therefore that the community can keep track and evaluate the performance of the government.



## Open Data Portal

Presenting data and information from all Agency of Jakarta Provincial Government needed by the community and fulfilling public rights as a form of e-government implementation in realizing transparent and accountable governance.

***data.jakarta.go.id***



## APBD Jakarta

The DKI Jakarta Electronic Budget is a platform for realizing open government in Jakarta. Through this website, the public can see in detail the DKI Jakarta provincial budget annually.

***apbd.Jakarta.go.id***



# GOVERNOR & STRATEGIC INITIATIVES DASHBOARD

+ a b | e a u

ContentUsersGroupsSchedulesTasksStatusSettings

3

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i

J

Home > 01 Published JSC Dashboard > Internal: Official Dashboard

Internal: Official Dashboard ...

PROJECT

Projects 0Workbooks 6Views 6Data Sources 20Details

< 0 items selected

Sort by Views: All (Most-Least)

Dashboard Qlue

46 views ☆ 0

Dashboard EXPORT ROP V3

45 views ☆ 0

SMART PJU

28 views ☆ 0

DASHBOARD ROP

21 views ☆ 0

Dashboard Qlue for Public

17 views ☆ 0

Dashboard Sampah Weekly Live

61 views ☆ 0

Info Pangan Jakarta

37 views ☆ 0

Dashboard KSD ver 3

34 views ☆ 0

Dashboard KJP Live

21 views ☆ 0

KLJ V.1 (10.5)

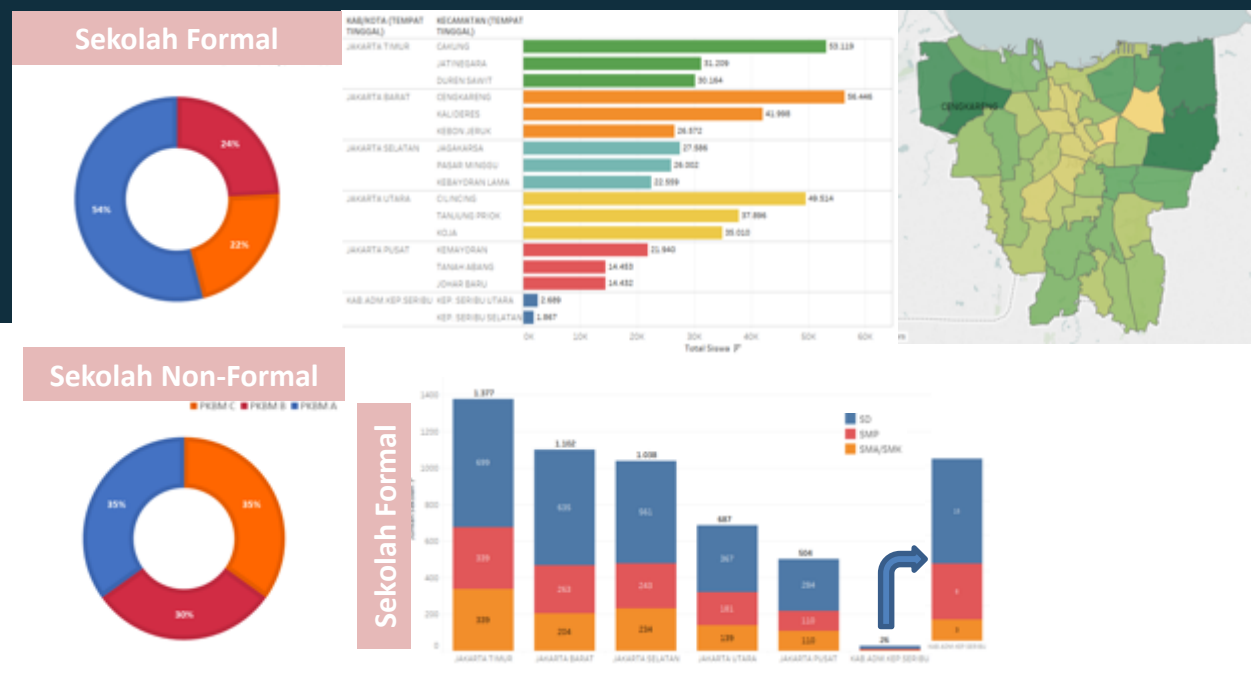
16 views ☆ 0

CRM\_Transportasi\_Public

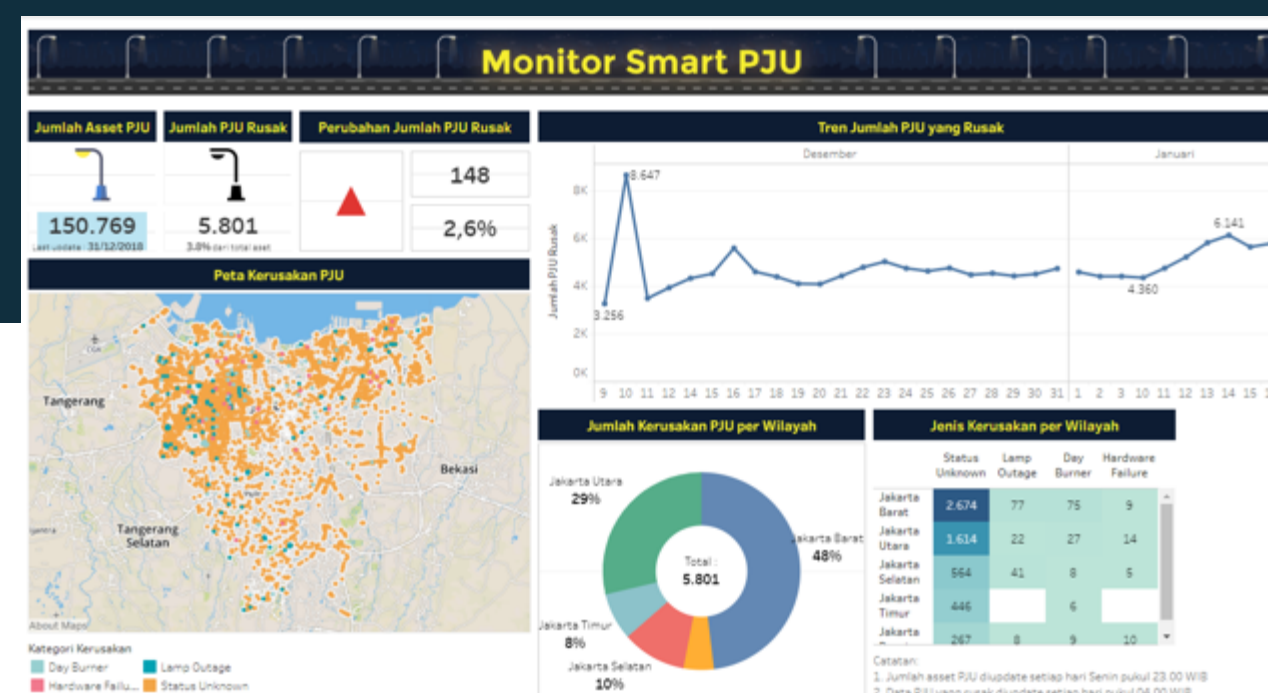
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# DATA DRIVEN POLICY

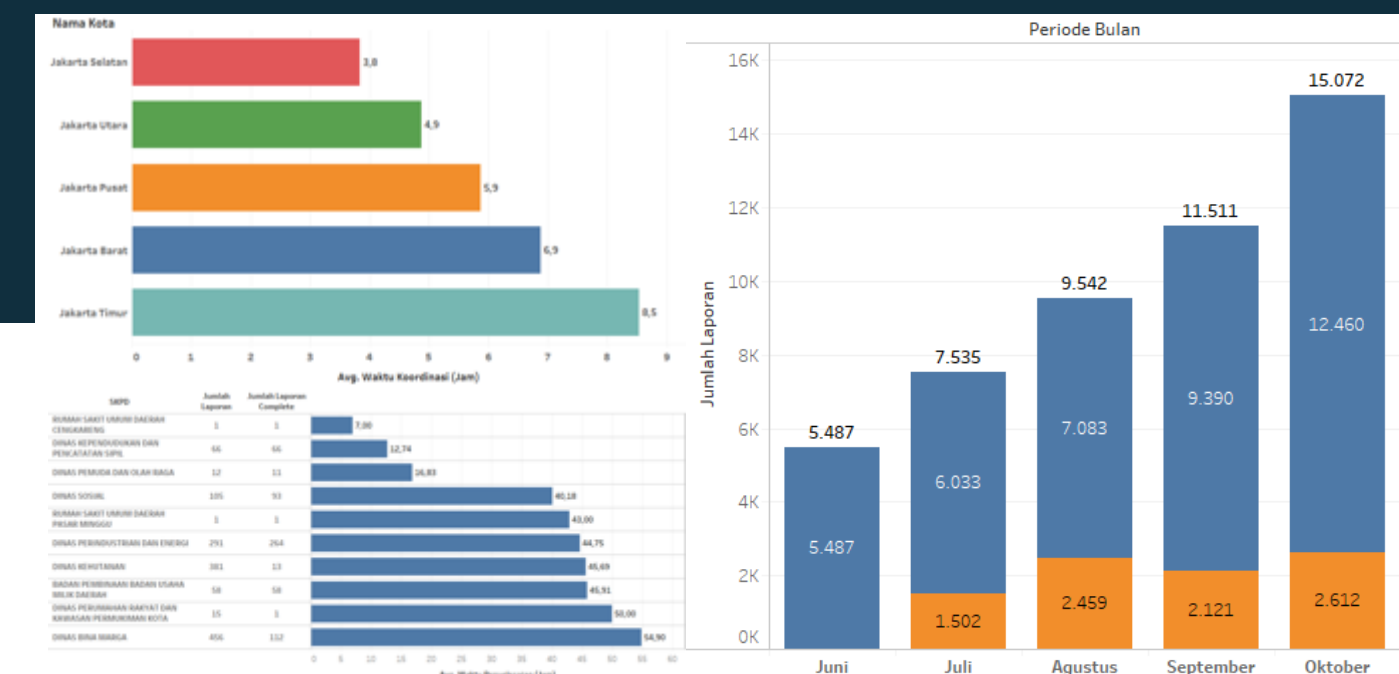
## Analytics Kartu Jakarta Pintar Plus



## Public Street Light Smart System Dashboard



## Analytics Citizen Relation Management



- Supervising and detect irregularities in the use of KJP together with the Jakarta Education Agency and Bank Office
- Supporting policy making relating to underprivileged school students (eg book bazaar, cheap basic food, free Transjakarta)
- Providing information regarding the habitual pattern of KJP usage transactions for each student
- Providing information regarding the problem use of KJP and the absorption of the KJP budget

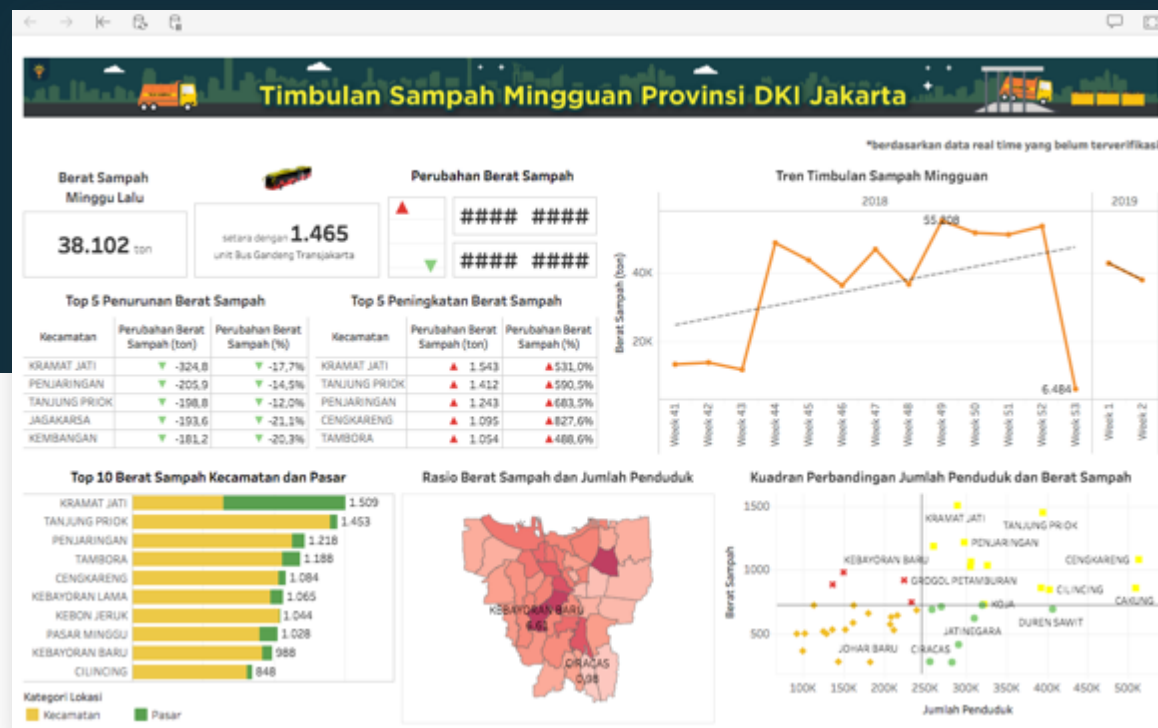
- Knowing the number of public street lighting assets
- Displaying a map of public street lighting damage in DKI Jakarta
- Percentage of damage to public street lighting per city area in DKI Jakarta
- Analyzing damage to lamps that are routinely monitored
- Trends of public street lighting damage per day for the past two months

- Knowing the number of reports that enter each month
- Knowing how long it takes to solve problems in each category and sub category
- Knowing how long it will take between SKPDs to coordinate reports
- Knowing the number of reports in each report category and sub-category
- Knowing the distribution of reports throughout the DKI Jakarta area



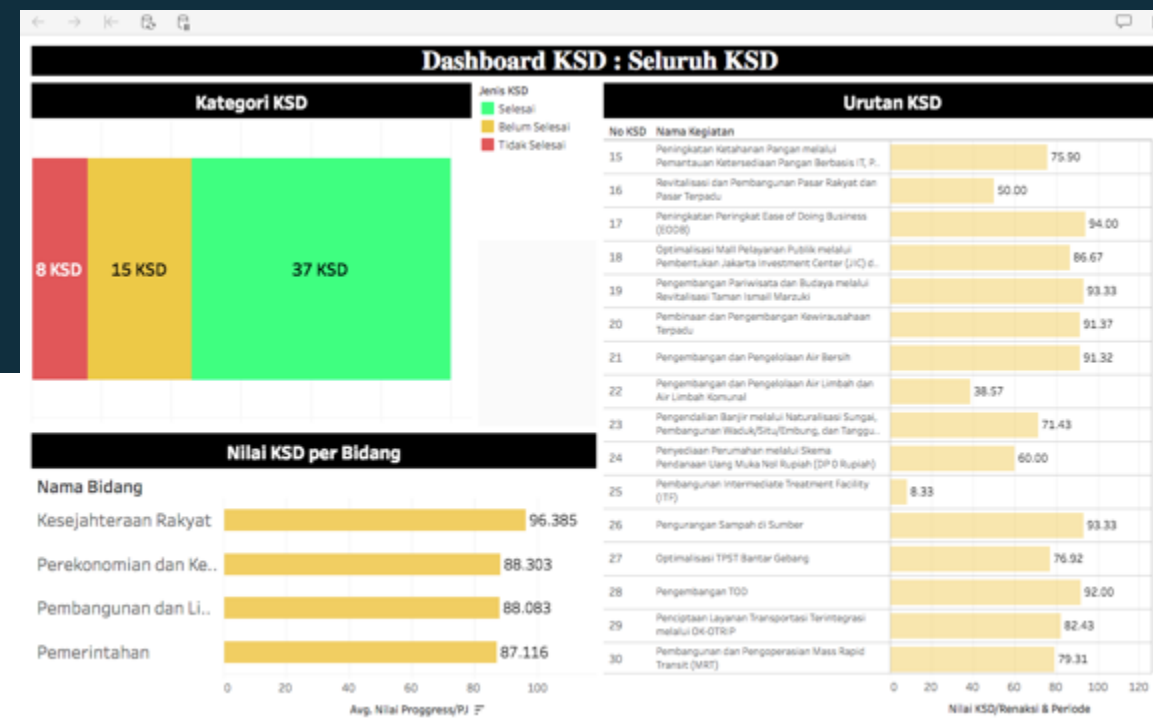
# DATA DRIVEN POLICY

## Waste Data in Jakarta Dashboard



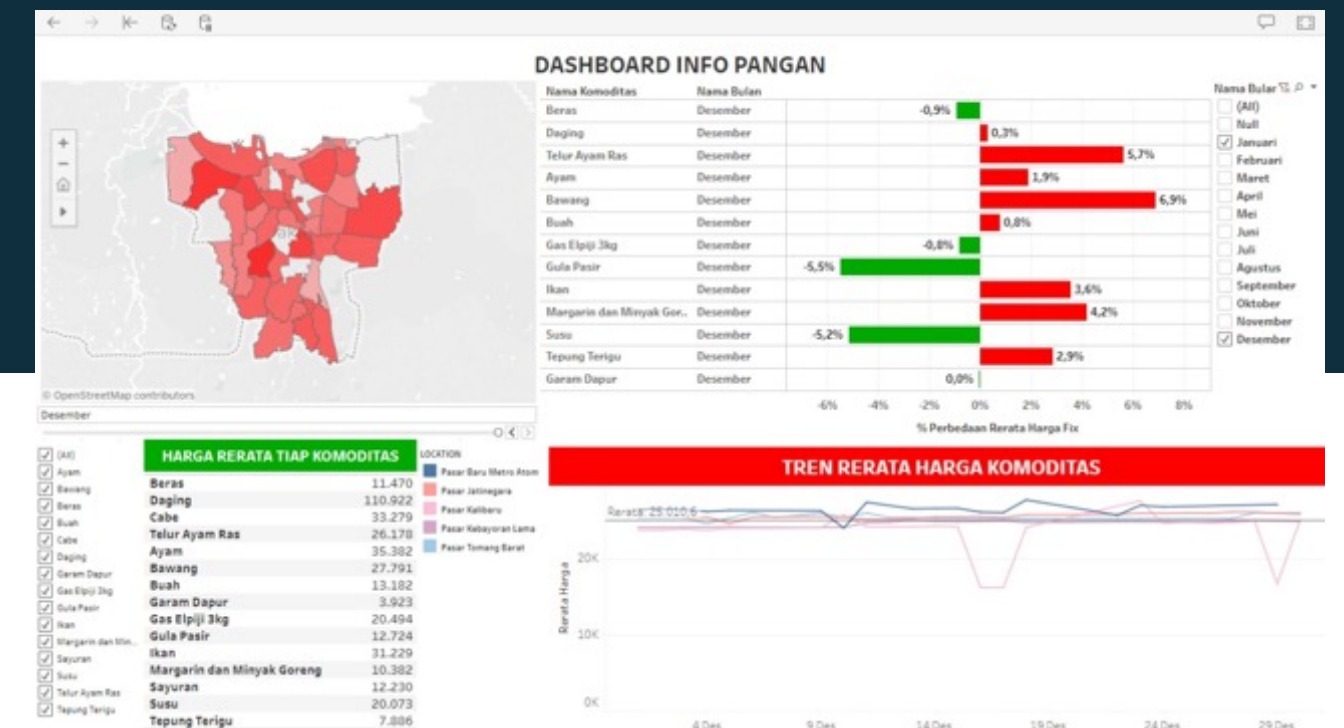
- Waste data per sub-district
- Manage the movement of garbage trucks
- Analyzing waste generation data

## Regional Strategic Activity Dashboard



- Data on achievement of regional strategic activities from various Regional Organizations in Jakarta
- Perform data analysis on regional strategic activities:
- Analysis of achievement of regional strategic activities

## Food Information Dashboard in Jakarta



- Daily commodity price data in Jakarta
- Analyzing food info data in Jakarta:
  - Analysis of commodity price trends in Jakarta
  - Analysis of commodity price trends per region in Jakarta

# Collaboration Partner

nodeflux

gojek

Grab

BukaLapak

tokopedia

Shopee

duit

BOTIKA

waze  
OUTSMARTING TRAFFIC, TOGETHER

qlue

GO FOOD  
POWERED BY GOJEK

Indo  
relawan  
.org

iJak

zomato

PJ

RAGINAN  
Zoo

Trafi I>>

BERiDE

GOBES

Jakarta Smart City

# Future Program



## ICT Innovation Cluster: A City Tower

Provide One-Stop ICT Center with Maximum Efficiency

- **Open Innovation Center**
- **Start-up Cube**
- **Campus**
- **Dream Lab**
- **Support Center**
- **Square**

# Thank You

