# Smart City, Responsive City

Leveraging the Power of Bigdata and Artificial Intelligence to Enhance City Services









#### eBdesk & Indonesia Indicator (i2)

- established in 2000 (eBdesk) and 2013 (i2)
- product development based on artificial intelligence (AI) + bigdata

#### Places, People, Clients

- 7 offices in Jakarta, Bandung, Kuala Lumpur
- 10 local offices in Indonesia
- more than 500 people
- more than 200 corporations and government
- managing 600 ebdesk's servers and 1200 client's servers

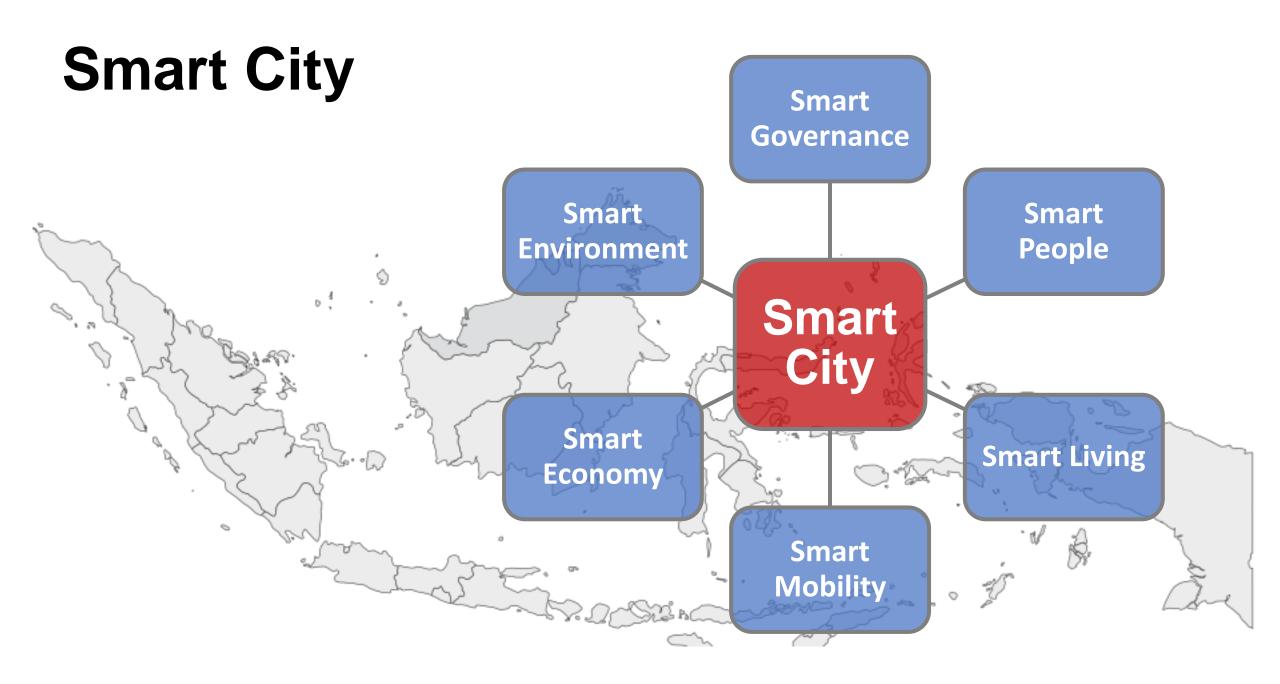
#### Products

- IAS (Information Admiralty System)
- EWS (Early Warning System)
- IMM (Intelligence Media Management)
- IPA (Intelligence Perception Analysis)
- IPS (Intelligence Profiling System)
- IPQ (Intelligence Predictive Quest)
- ISR (Intelligence Social Robot)
- ICT (Intelligence Cyber Troops)
- IPD (Intelligence Portal Data)
- Intelligence Smart City

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#### **Local Governments**





# Why Smart City ?

- Nearly half of the world population has migrate to the cities in 2013. This urbanization brings other issues such as population explosion, high cost of living, pollution, social conflict, rising of crime rates and the higher cost in the provision of public infrastructure.
- Technology enable to support city services for the well-being of its inhabitans. Internet, automation, sensors, IoT (Internet of Things), is applied to simplify and expedite the flow of city dwellers, information, goods, education and economy as a whole.
- Internet has spread across Indonesia, as a 24-hour real-time infrastructure to connect people, data access, transaction, disseminating information, equipment control, and other facilities.

## **Smart City Implementation**

- Smart city is not just a law enforcement tool: CCTV usage does not limited to monitor and punish violator
- Fast services isn't everthing, but a daily service that's matters → targeted population : citizen
- Resident  $\rightarrow$  New Gen $\rightarrow$  Mobile Gen
- Smart city invest meant for well-being, not burdening the citizen
- City thrives on economy flow → employability→ money
- The beginning of smart citizen  $\rightarrow$  starts from human

# eBdesk Smart City Platforms

#### Smart Citizen

- Smart News & Info
- Smart Reporting
- Smart Security
- Smart Mobile Economy
- Smart Transport
- Smart Commerce
- Smart Jobs
- Smart Property
- Smart Health
- Smart Education
- Smart Tourism

#### Smart Government

- Intelligence Media Management (IMM)
- Intelligence Perception Analysis (IPA) – Social Media
- Intelligence Profiling System (IPS)
- Intelligence Portal Data
- CCTV Analysis
- Alerting Systems
- Smart City Sensors
- Smart City Portal
- Business Intelligence

#### Smart Business

- Local B2C Portal
- Local B2B Portal
- Job & recruitment market
- Property market
- Services
- Advertising
- Sponsorship

# **Smart Citizen**

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### Smart Info & News

- Smart Reporting
- Smart Mobile Economy
- Smart Transport
- Smart Commerce
- Smart Jobs
- Smart Property
- Smart Health
- Smart Education
- Smart Security

# **Smart Citizen**

- How does technology support activities of the population in terms of information, transportation, employment, trade, food, communications, and everyday activities.
- How technology maximize on local proximities (local loop) for exchange of goods and services.
- How to integrate the available city-related data on commerce site (C2C and B2C), property, vehicles, services etc. in real time.

### Smart Citizen

- Smart Info & News
- Smart Reporting
- Smart Mobile Economy
- Smart Transport
- Smart Commerce
- Smart Jobs
- Smart Property
- Smart Health
- Smart Education
- Smart Security

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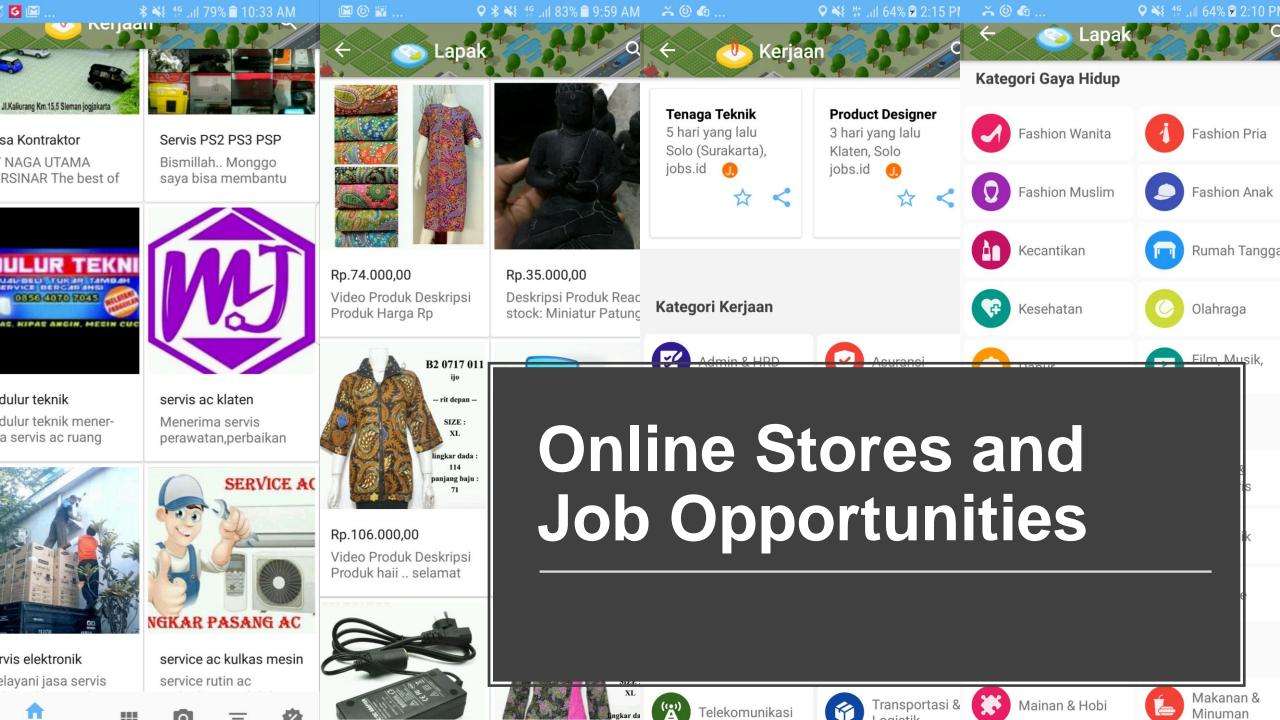




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# **Property &** Automotive

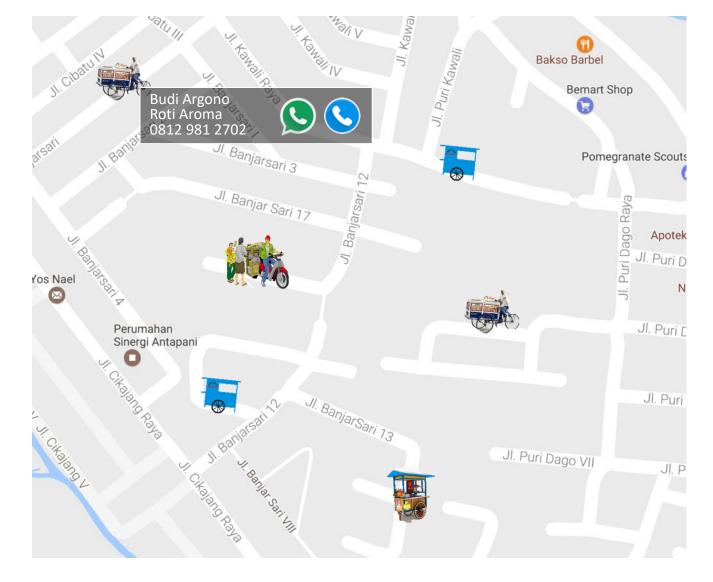
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# **Mobile Economy**

How to find the bakers, vegetable sellers, street hawkers, motorcycle, transportation, etc.? Connecting the sellers and buyers, and increases the flow of transactions and microeconomics in the area.

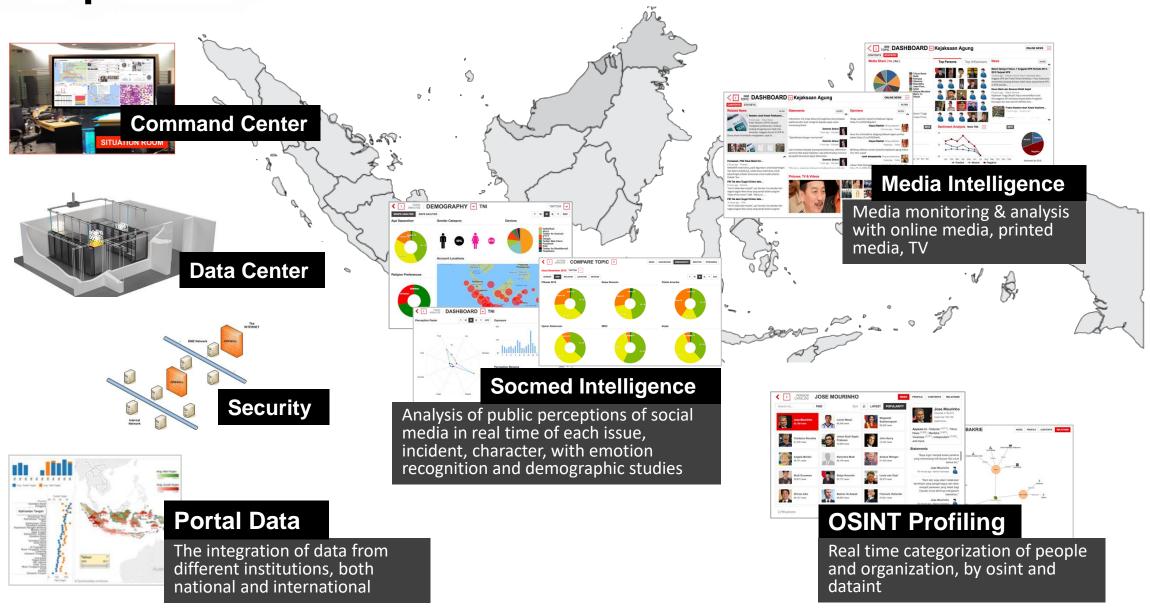




# **Smart Government**

- Intelligence Media Management
- Intelligence Perception Analysis
- Intelligence Profiling System
- Intelligence Portal Data
- CCTV Analysis
- Alerting Systems
- Smart City Sensors
- Smart City Portal
- Business Intelligence

### Components

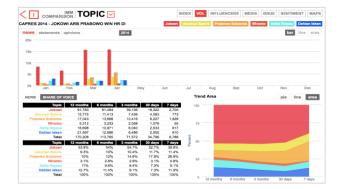


## **Intelligence Media Management**

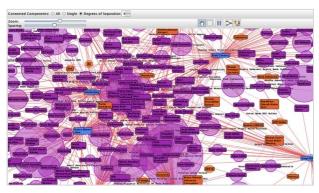
IMM collects data from online media, printed media, TV, social media, and then analyzing trend, expose, influencers, issue, sentiment, media share, mapping, network, and comparison between issues. IMM assist decision makers to know what happened in realtime accurately.



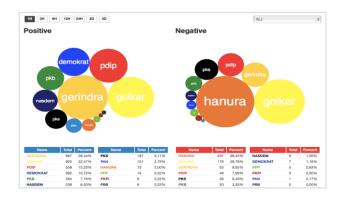








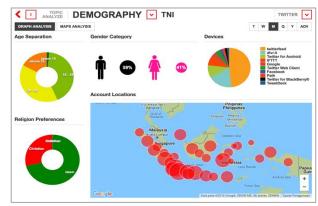


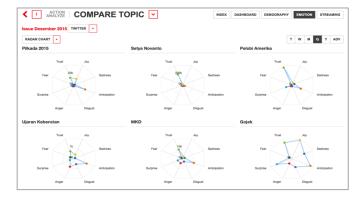




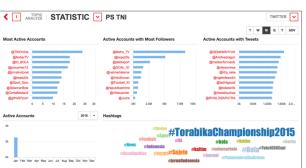
## **Intelligence Social Media**

Conduct analysis of public opinion from social media in real time to get the public's perception of the events, characters, organizations, case, issue, or policy. Twitter's data is used to get demographic profile based on the age, gender, location, activity, awareness, influence, hobby.









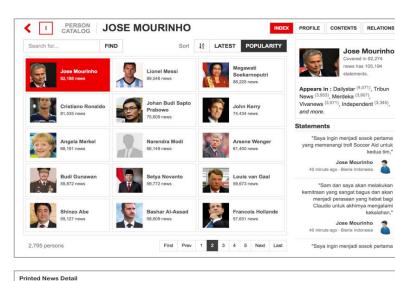


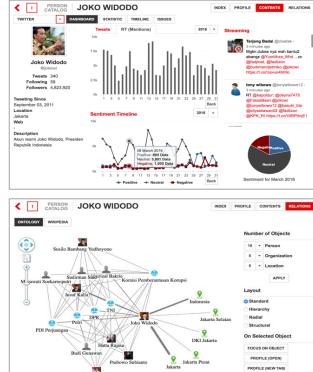




## Intelligence Profiling System

Real time catalog that will automatically complete the profile of millions of people, with the contextual linking ontology properties.





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Sumber

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TOP ISSUES



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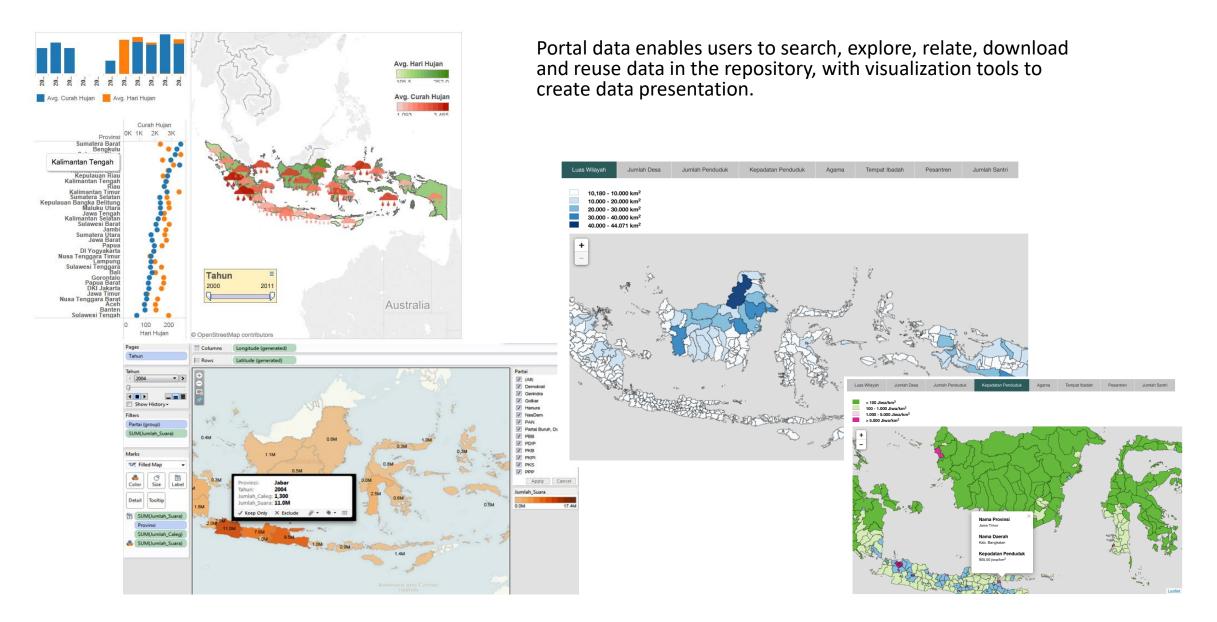
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INDEX PROFILE CONTENTS RELATIONS



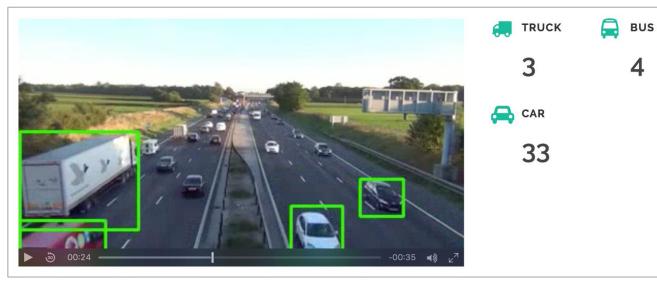
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### **Intelligence Portal Data**



### **CCTV** Analysis

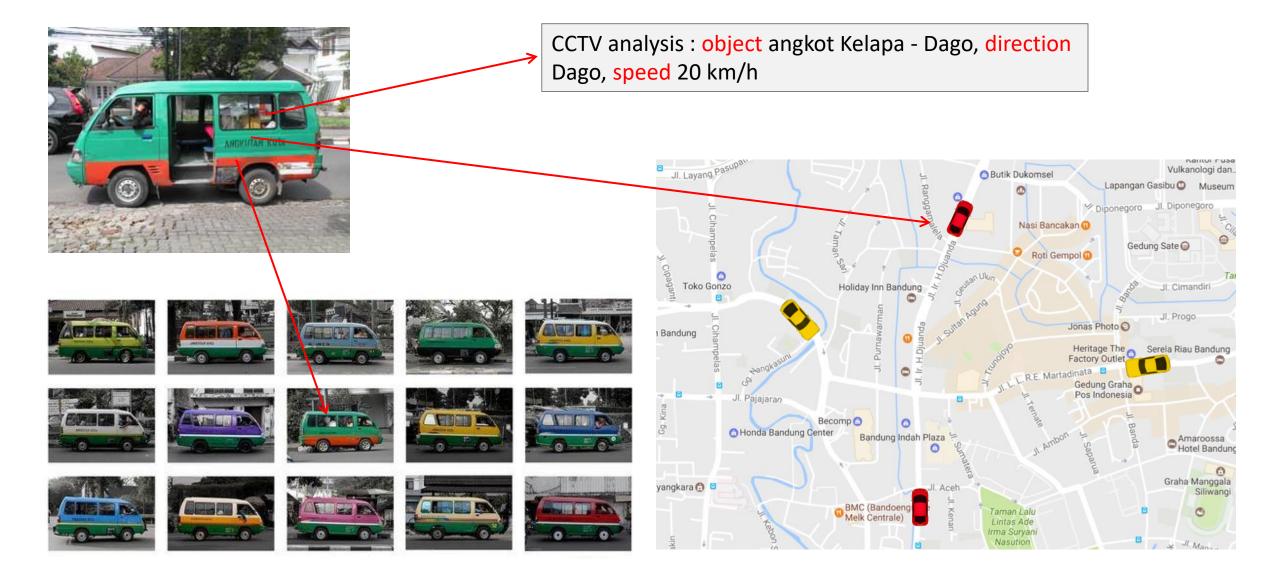




Analysis of CCTV video can be used to monitor the movement of people and vehicles. For example, counting the number of vehicles such as motorcycles, automobiles, transportation, trucks, buses, so that the load path can be calculated accurately.

Enabled smart traffic flow planning. Create flexible schedule traffic lights by studying the traffic density.

# **Smart Transport / Mobility**



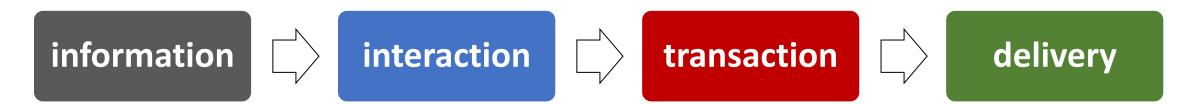
# **Smart Business**

Local E-commerce
Local C2C Portal
Local B2C Portal
Local B2B Portal

Job & recruitment market
Property market
Automotive market
Services

AdvertisingSponsorship

# **Stages of Commerce**



#### • INFORMATION:

- Preliminary data were taken by crawler machine from Google and other related commercial sites
- Data will be gathered from field survey

#### • INTERACTION :

 Data will be registered by public, starting from public info, location, topic of interest, fashion and other commercial activities

#### • TRANSACTION :

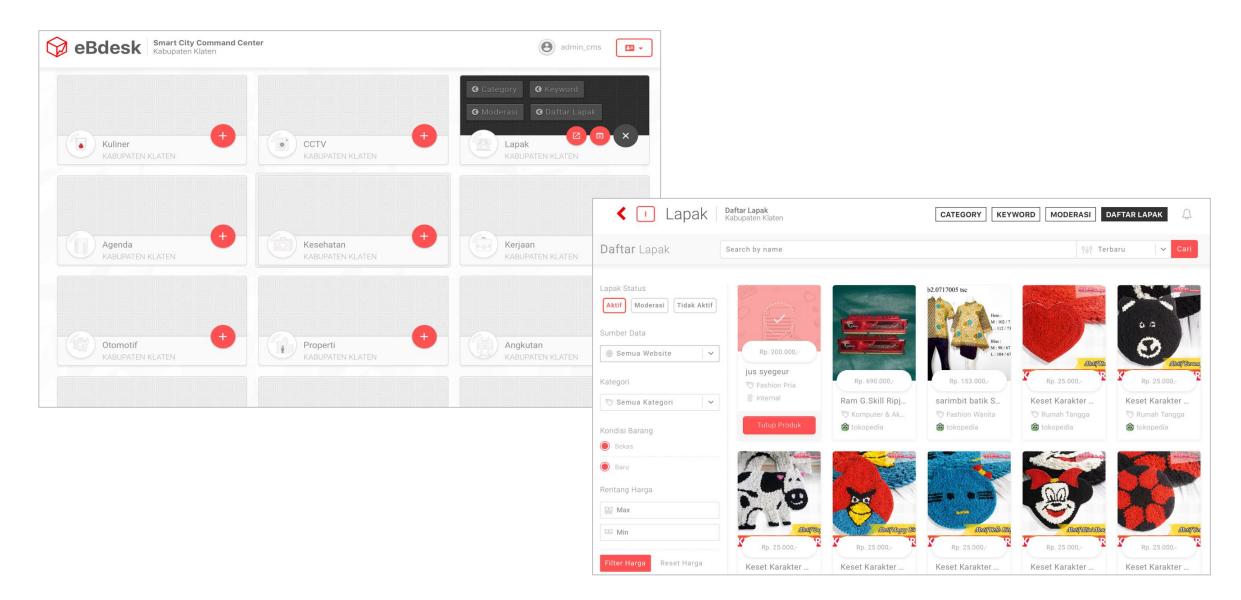
• Service order and payment

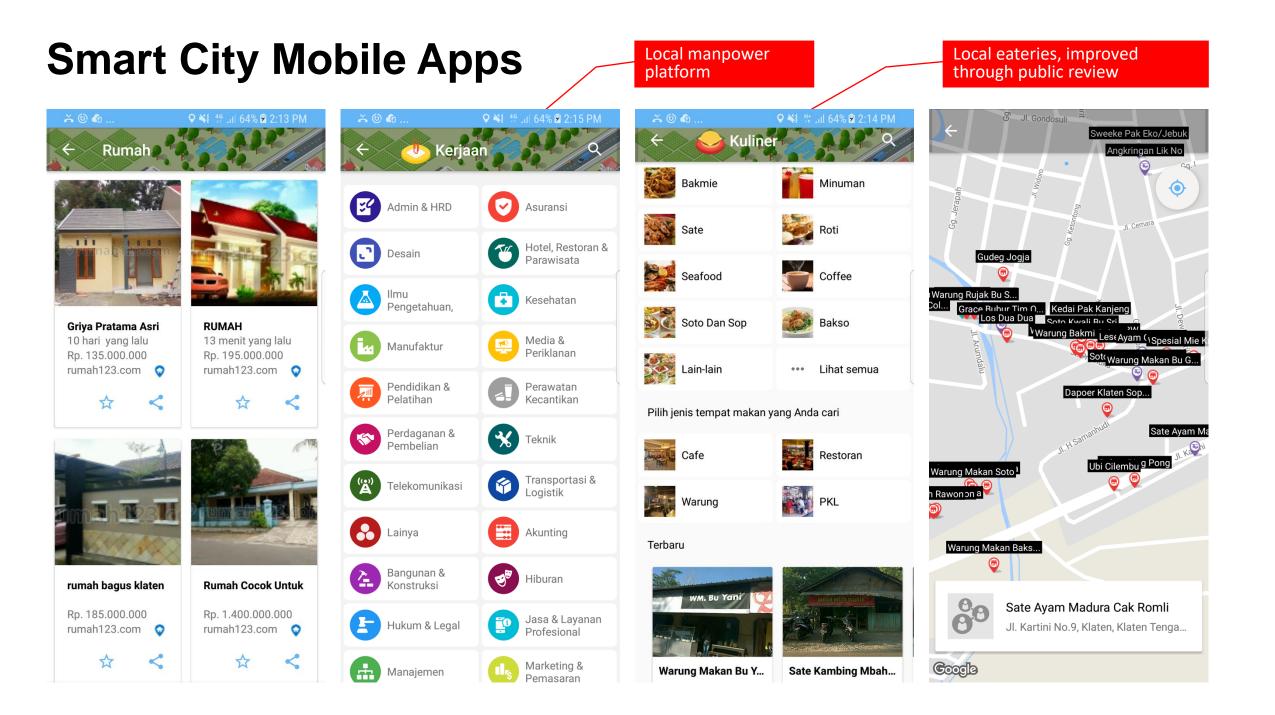
#### • DELIVERY :

• Local delivery



### **Smart City Command Center**





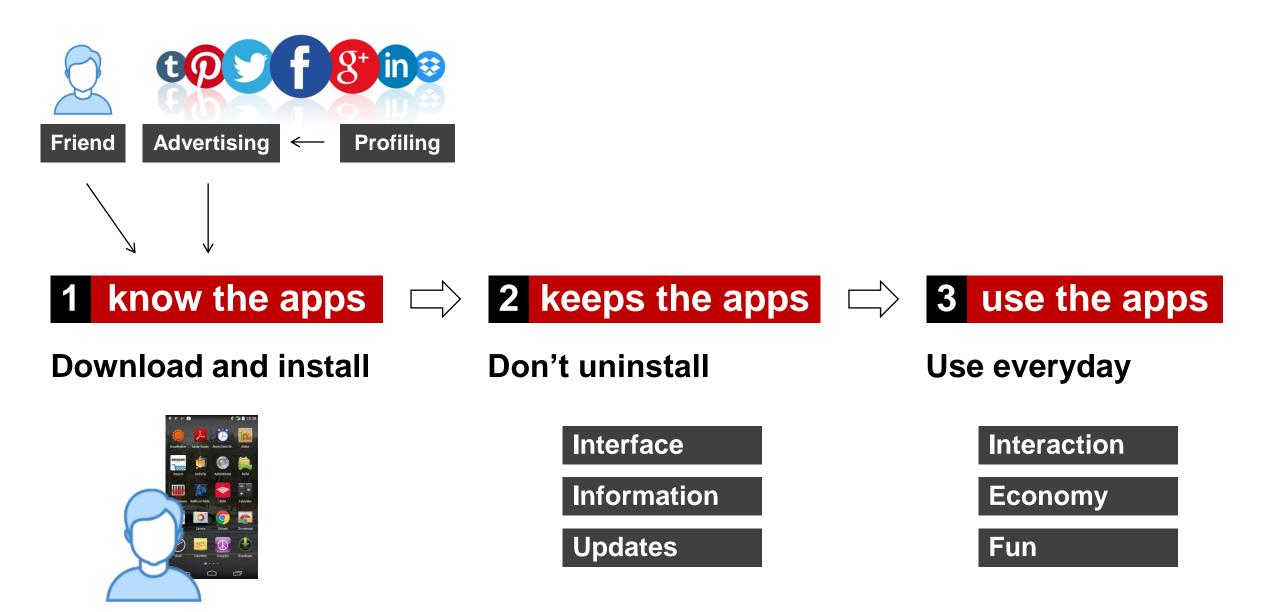
# SmartCity Implementation

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# eBdesk Smart City Concept

- Focusing on public services through apps such as Smart Economy, Smart Mobility, Smart Commerce, Smart Jobs, Smart Property
- Focusing on execution, not limited to information, to improve the residents living standards and day-to-day activities
- Location Based Services (LBS), leveraging location-based information to improve local economy
- Data is made available through automated robots
- Smart and FUN CITY to attract the youths with the use of social media (status, chat, sharing), city game and etc.
- Automated process and data analysis by used object and facial recognition, NLP, Real time analytics & predictive





## eBdesk Smart City

#### managed by Government

#### Smart Citizen

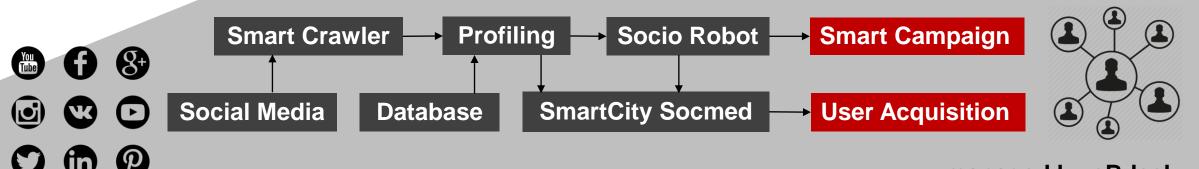
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managed by eBdesk