Solutions Meet Cities: Online Matchmaking Webinar

June 22, 7:00-8:20 GMT | 16:00-17:20 KST (Zoom)

WeGO
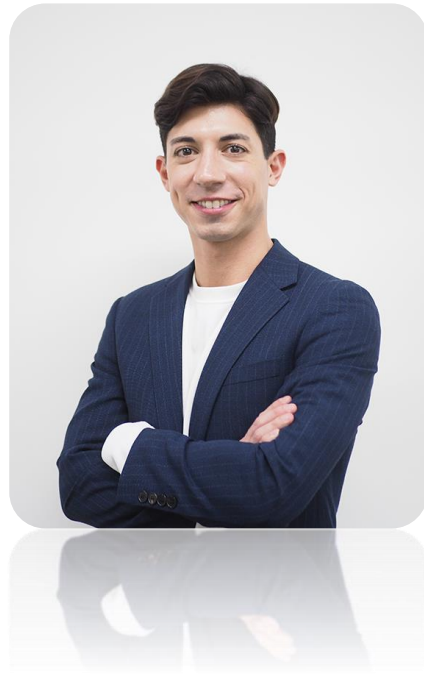World Smart Sustainable Cities Organization

Opening Remarks

Eunbyul (Elena) Cho

Program Manager
World Smart Sustainable Cities Organization (WeGO)

Program Introduction

Todor Merdjanov

Corporate Partnerships Officer
World Smart Sustainable Cities Organization (WeGO)

WeGO
World Smart Sustainable Cities Organization

Program

How can cities solve their urban challenges using smart city solutions?

How can companies promote their innovative solutions and form partnerships for international smart city projects?

Where should cities search for the right solutions, how to connect and who can assist in the process?

![WeGO — World Smart Sustainable Cities Organization]

Program

16:00   Introduction by WeGO

16:10   City Proposals: Projects and
         Partnership Opportunities

         - Seberang Perai
         - Abuja (Digizens)

16:30   Matchmaking: Providing
         Solutions and Feedback on
         Proposals

         - SRPOST Inc.
         - Qlue
         - WeavAir

17:00   Discussion. Q&A

WeGO
World Smart Sustainable Cities Organization

Introduction to WeGO & the Smart City Driver

World Smart Sustainable Cities Organization (WeGO)

01

Achieving smart sustainable cities for a better future

WeGO's definition
of smart sustainable cities:

"Innovative cities that leverage digital technology and connectivity to improve the quality of life, efficiency of urban operation and services, and economic prosperity for all citizens, while ensuring long-term economic, social, and environmental sustainability."

01 | What is WeGO?

WeGO is an international association of

Local Governments

Corporations

National & Regional Institutions

Committed to the transformation of cities into smart sustainable cities.

WeGO's Purpose

VISION

- Smart Sustainable Cities for All

UN SDG 11

MISSION

- To promote and facilitate the transformation of cities to smart sustainable cities worldwide.

- To be a global platform for cities to transform into smart sustainable cities.

- To foster international exchange, cooperation, and networking among members.

WeGO's Network

213 Members

Regional Offices

Organizational Chart

Local Governments	Corporations	Institutions
158	36	19

AFRICA Regional Office	EAST ASIA Regional Office	EURASIA Regional Office	LATIN AMERICA Regional Office	MEDITERRANEAN Regional Office

VICE PRESIDENTS

Addis Ababa
Beyoğlu
Ha Noi
Jakarta
Mexico City
Moscow
Ulyanovsk Region

PRESIDENT

Seoul

REGIONAL OFFICES

Chengdu
Ulyanovsk Region
Beyoğlu
Mexico City
Abuja

EXECUTIVE COMMITTEE

Addis Ababa, Beyoğlu, Bucharest, Chengdu, Goyang, Ha Noi, Hebron, Jakarta, Khartoum State, Kigali, Makati, Mexico City, Moscow, Nairobi, Pittsburgh, Seberang Perai, Seoul, Ulaanbaatar, Ulyanovsk Region

GENERAL ASSEMBLY

All members

WeGO's Network

213 Members

158   36   19
Local Governments   +   Corporations   +   Institutions

LOCAL GOVERNMENTS | 158

WeGO
World Smart Sustainable Cities Organization

Knowledge-sharing & Networking

Capacity Building

Knowledge-Building & Research

Project Implementation

WeGO SMART CITY DRIVER

Regional Networks

Governance Meetings

WeGO Awards

Briefing Sessions
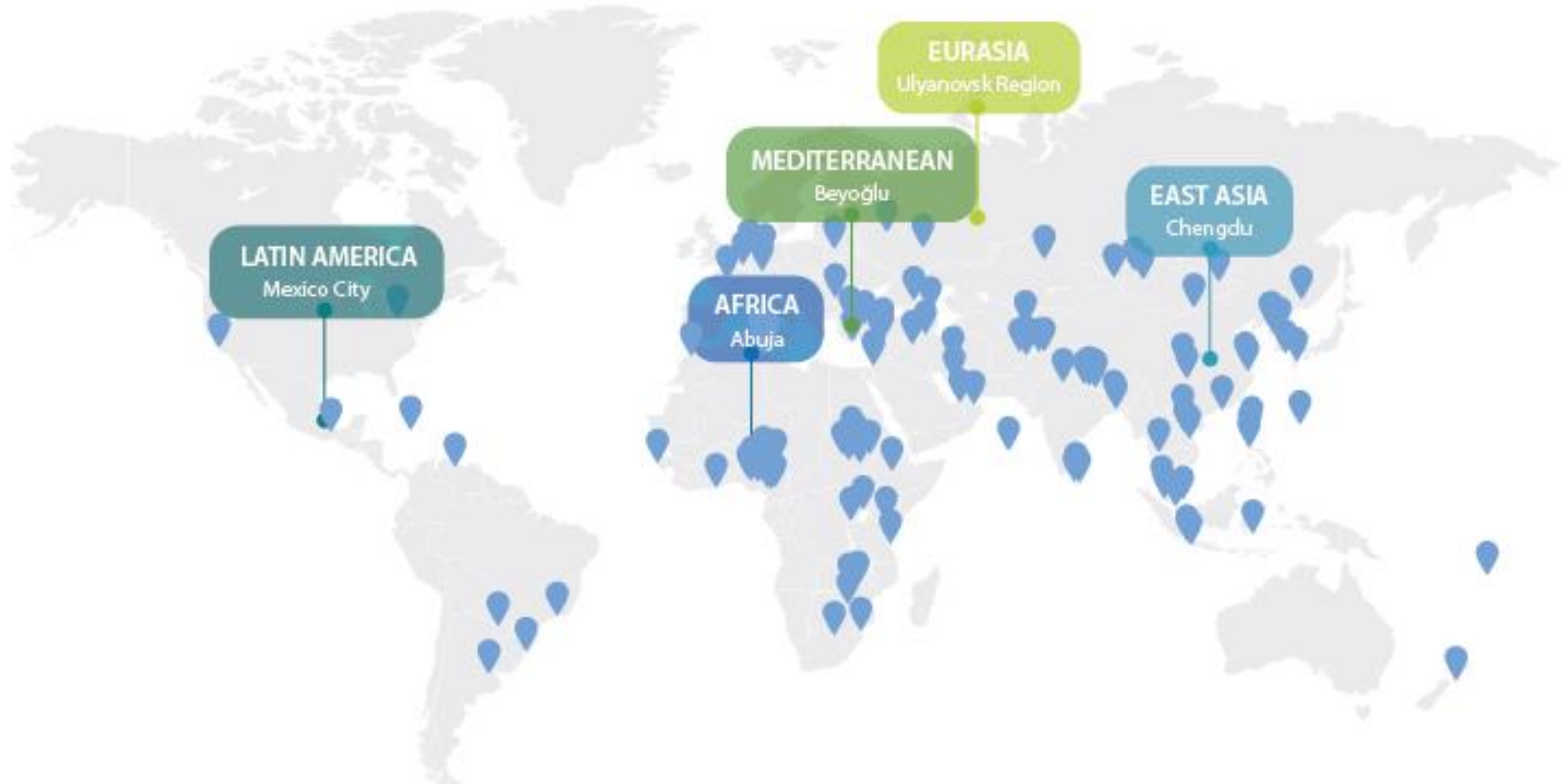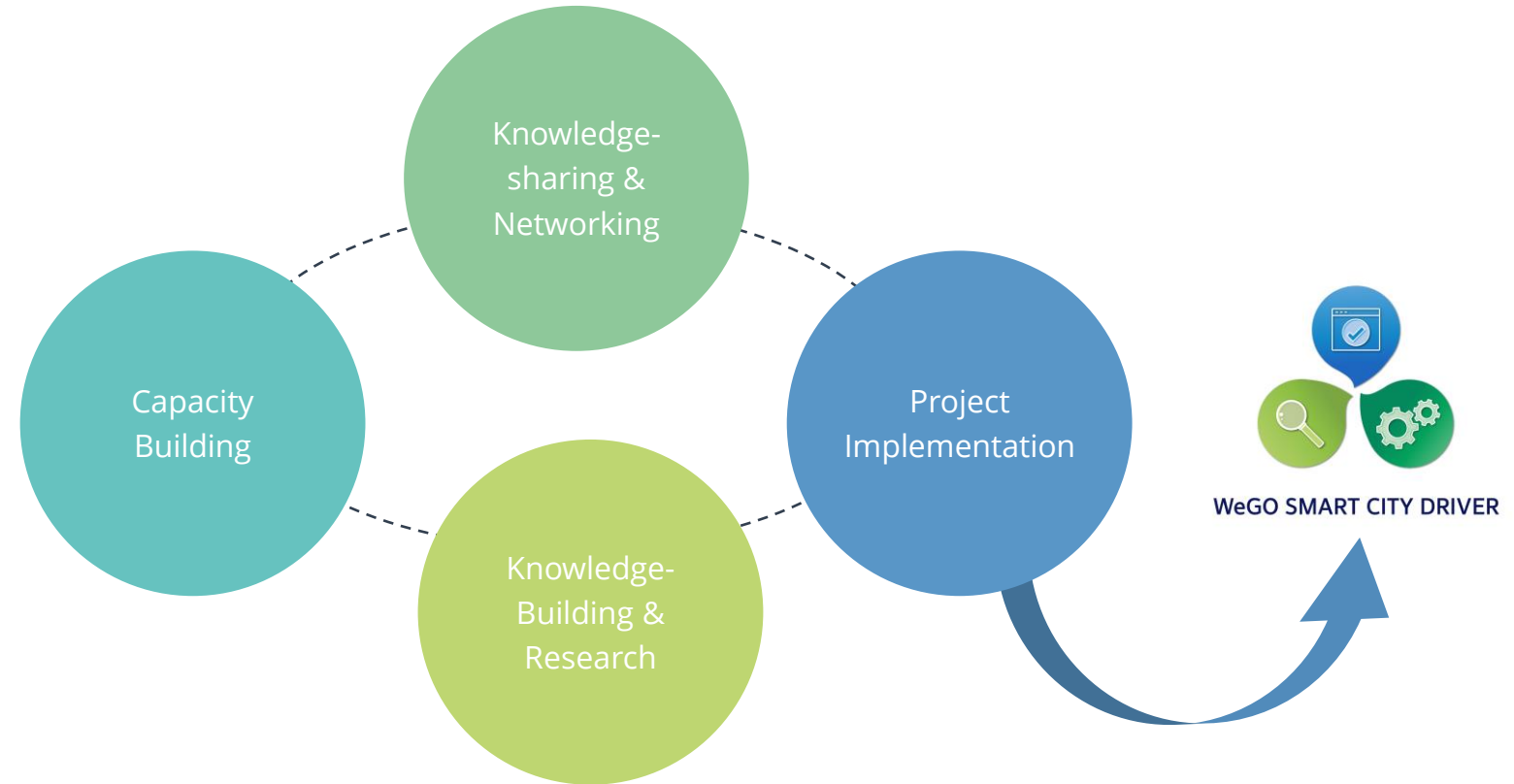
03 Past feasibility study and pilot project programs

Overview of feasibility studies conducted since 2010.

$1.3 mln.
14 beneficiaries
since 2010

Bharatpur & Kathmandu

Ulaanbaatar

La Marsa

Seoul

Kampala

Addis Ababa

San Fernando, La Union

Hanoi

Dar es Salaam

Seberang Perai

Danang

Buenos Aires

Maputo

Feasibility Studies & Pilot Projects

2019 WeGO Feasibility Study Recipient: Kampala, Uganda (KCCA):
The Smarter City, the Greater Kampala Metropolitan: The Unified Smart Parking Platform

- ✓ **2018-Da Nang, Vietnam** - Data Analytics for Smart Traffic
- ✓ **2017-La Marsa, Tunisia** - Smart Waste Management System
- ✓ **2016-Seberang Perai, Malaysia** - Smart Street Lamp & Traffic Light Monitoring System
- ✓ **2015-San Fernando, La Union** - Civic Participation System
- ✓ **2014-Hanoi, Vietnam** - Civic Participation-Based e-Government System
- ✓ **2013-Addis Ababa, Ethiopia** - e-Office System
- ✓ **2013-Maputo, Mozambique** - Claims & Solid Waste Management
- ✓ **2012-Dar es Salaam, Tanzania** - Digitalization of Administrative Tasks
- ✓ **2012-Ulaanbaatar, Mongolia** - Spatial Data Infrastructure (Underground Facilities such as Network
- ✓ **2012-Buenos Aires, Argentina** - Smart Citizen Service Hub with Smart Card
- ✓ **2010-Dar es Salaam, Tanzania** - e-Government Development Status Report & Recommendations
- ✓ **2009-Kathmandu, Nepal** - e-Government Development Status Report & Recommendations

03 Past feasibility study and pilot project programs
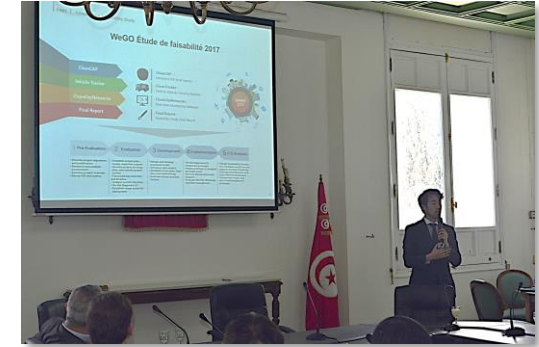
WeGO Feasibility Study 2017

Implementing Smart Waste Management System in La Marsa, Tunisia

CleanCAP (CCP)
Ultrasonic fill-level sensor

CleanCityNetworks (CCN)
Real-time analytics and monitoring software

CleanTRACK Module (CTM)
Comprehensive vehicle data gathering module and vehicle tracker; GPS
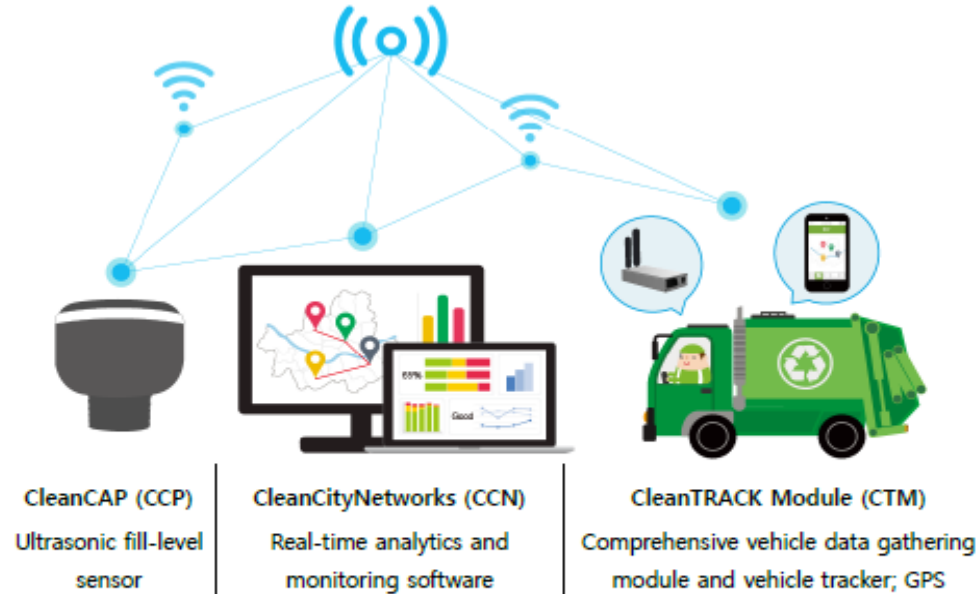
The prototype system entails three primary components: two types of hardware technologies (CleanCAP and CleanTRACK) and a cloud software network (CleanCityNetworks, CCN).

IT ACTUALLY WORKS!

✓ Melbourne City Council – 85% collection reduction
✓ Seodaemun District, Seoul – 45% collection efficiency increase
✓ Dublin Airport – 94% collection decrease
✓ Ghent, Belgium – 60% operational efficiency increase
✓ PSSI, California, US – 50% collection reduction

03 Past feasibility study and pilot project programs

Data Center and DATRAMAC Monitoring Center

Traffic Data Flow from CCTV

WeGO Feasibility Study Program 2018

Data Analytics Platform for Smart Traffic in Da Nang

IGB & COMPANY | WeGO World Smart Sustainable Cities Organization | Data Streams

Data Source		Data Center	Organization
72	CCTVs for Traffic Management	Traffic Data → DATRAMAC Monitoring Center	Department of Transportation
6	CCTVs for Traffic Management	Traffic Data	Department of Information and Communication (CENTIC)
1800	CCTVs for Public Security	Traffic & Security Data / Traffic Data → Public Security Authority Monitoring Center	Public Security Authority

03 Past feasibility study and pilot project programs

Kampala, Uganda – Smart Parking System

SMART PARKING
in Kampala Capital City
2019 *Final Report*
WeGO Smart Sustainable City Feasibility Study Program
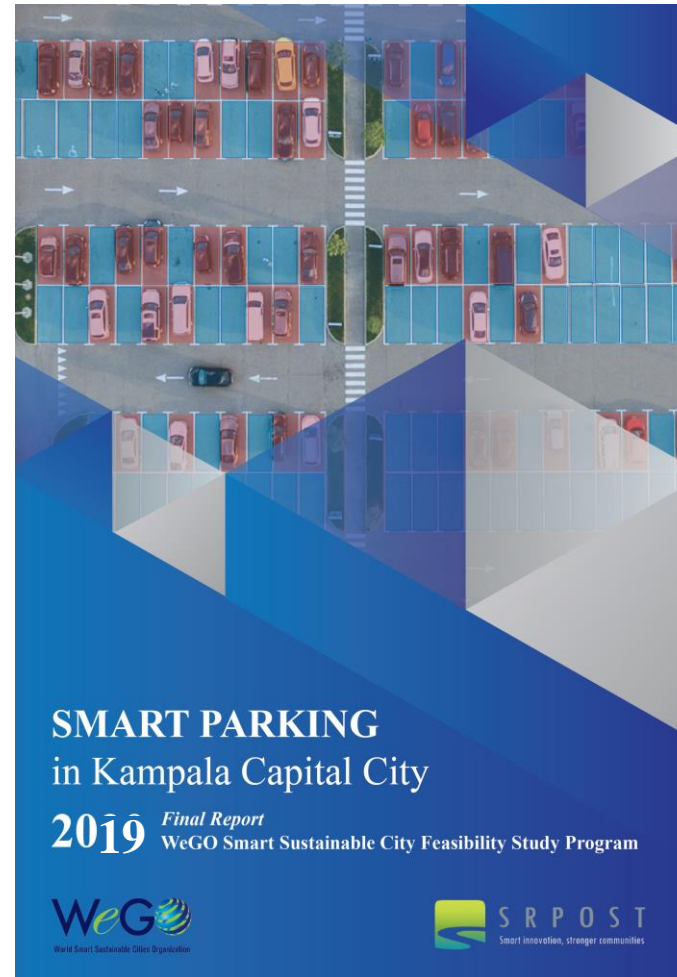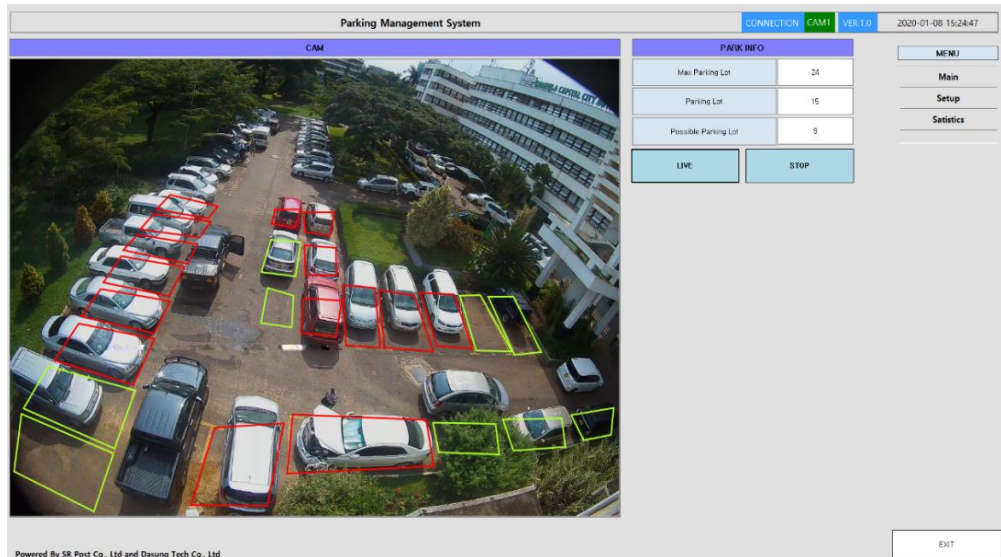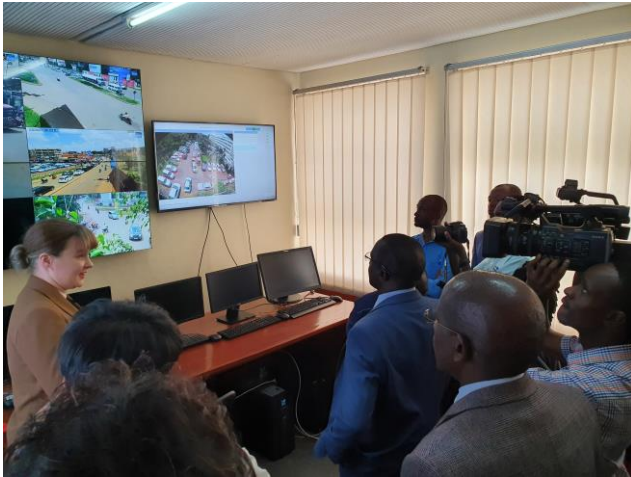
KCCA to decongest Kampala with smart parking system

By Juliet Waiswa and Diana Babirye

Kampala Capital City Authority (KCCA) has partnered with the World Smart Sustainable Cities Organisation (WeGO) to reduce traffic jam in the city and enable motorists to save fuel.

KCCA acting deputy executive director, Samuel Sserukuuma, said the system will be rolled out in the central business district, which is most affected by lack of enough parking space.

How the system works
Speaking yesterday at the roll out of the smart parking system in Kampala, Sserukuuma said motorists will be required to download an application on smartphones to obtain information about which streets have free parking space.

Drivers will also be able to pay for parking fees using mobile money.

The first five minutes of parking will be free.

Sserukuuma said the companies currently managing street parking, such as Multiplex, will compete with others for the tender.

"As of now, KCCA is going to acquire space where vehicles will park as they pilot the system," he added.

Anastassia Brehhunova, one of the innovators of the system, said a study was carried out three months ago.

Brehhunova said a CCTV camera will be installed at the entrance of the parking slots to ensure safety of vehicles.

Parks around Kampala such as Namayiba Bus Terminal, New and Old taxi parks and Usafi Park were visited in order to design a better system.

Some road users, however, say KCCA should first get rid of bodaboda cyclists because they take up parking slots.

Kampala is estimated to have a day population of 2.5 million people and 1.5 million at night. This means that one million people enter Kampala during the day and leave in the evening daily using over 12,500 taxis.

04 | WeGO's Network

213 Members

158   36   19
Local Governments + Corporations + Institutions

CORPORATIONS

beCloud   BREEZE TECHNOLOGIES   Danfoss   DaiBon UK Limited — Trade, Real Estate, Sustainability.   DATA ALLIANCE   DAMOGO — Create taste, Not waste.   FANTOM   SEADS — Sea Defence Solutions

FATOS   (주)가보테크   GEOMEXSOFT.,LTD. — GEOGRAPHIC MAP ENGINE & EXTENSION   HAEZOOM   HANCOM — HANCOM Inc.   ICONLOOP

IGB & Company — We Make The Globe a Better Place   iin   InsightAir — Connected through Air Quality   kbsys   Tmoney   LifeBlocs   MANAGEON

(주)엔티시스 NT SYSTEM   qlue   SCANETCHAIN — Commercialized AR Blockchain   SiM   SRPOST   Sycros   TG

UCWare Inc.   WeavAir   WINITECH   USIS — Unicorn of Smart IoT Service   UMAY Inc.   WINNER TECHNOLOGY   XnTREE

INSTITUTIONS

NITA — NATIONAL INFORMATION TECHNOLOGY AGENCY   CITO   BOCRA   ASIA PACIFIC FOUNDATION OF CANADA   FIWARE   enactus   KISA

Seoul Digital Foundation   sba   SH 서울주택도시공사   AFRICAN SMART CITIES INNOVATION FOUNDATION   Gigizens   NITDA

SOLAR IMPULSE FOUNDATION   BIZERTE 2050   NITA UGANDA

04 What is WeGO SMART CITY DRIVER

WeGO SMART CITY DRIVER

The WeGO Smart City Driver is WeGO's overarching framework for cities to help plan, finance, and deploy their smart city projects through a range of customized solution packages and matchmaking with strategic partners that can assist in citywide implementation.

04 What is WeGO SMART CITY DRIVER

WeGO
Activator

Project
Implementer

Solution
Finder

WeGO SMART CITY DRIVER

04

WeGO Activator

WeGO Activator

An innovative, comprehensive, and collaborative online platform, which serves as the WeGO Smart City Driver's main enabler and is a tool that helps streamline the application process for the Solution Finder and Project Implementer.

WeGO Activator

How To

1. Go to the <u>homepage</u>, and create your account.

https://smartcitiesactivator.com

2. After verifying your identity and account, the WeGO Secretariat

will grant you access to the Activator platform.

04

WeGO SMART CITY DRIVER

Choose the statement that best fits you:

You have a vague understanding
of your city's challenges,
but seek to have
a comprehensive understanding.

Or/And

You know both your challenges
and how to solve them,
but lack implementation partners
(smart solutions and/or funding).

WeGO Solution Finder

WeGO Project Implementer

WeGO Solution Finder

WeGO Solution Finder

A comprehensive survey that extracts key data on ongoing or prospective smart city projects by local governments–at any stage of their lifecycle–which is then used to pinpoint and propose "packages" of solutions that can contribute to and strengthen the resources necessary for successful, citywide implementation. Packages consist of custom solutions available for export by smart city consultants, tech companies, development aid agencies, and other strategic partners around the world.

WeGO Solution Finder

How To

1. Answer the questionnaire with the content you have.

2. WeGO will schedule a one-on-one call with you to further discuss in details your answers.

3. With your answers, WeGO will produce a short summary.

4. The city confirms the summary.

WeGO SMART CITY DRIVER

Project Implementer

WeGO Project Implementer

WeGO flagship program to help cities assess their current smart city development status, draw practical strategies and implement projects that align with the local and/or national development goals and plans, in cooperation with the selected consultants. For each beneficiary local government whose project proposal is selected, WeGO sponsors approx. USD 92,000 toward services from a consultant and solution provider with the needed expertise.

Project Implementer

Option A:
Be selected by WeGO
for its own program.

Option B:
WeGO connects you with partners
for solutions and funding.

04 | WeGO Smart City Driver Workshop at 2020 EXCOM

• City: Ramallah

- **Challenge: Public Transportation**

- **Partner: Solar Impulse Foundation**

- **Tracks utilized: Solution Finder, Project Implementer**

→ **Outcome: Solution providers shortlist and connection**

• City: Abuja

- **Challenge: Public Traffic**

- **Partner: Smart Cities Council**

- **Tracks utilized: Solution Finder, Project Implementer**

→ **Outcome: Expert consultancy for planning**

Smart City Ecosystem Map

04

International Organizations

Country-specific: National Government

Regional/National Associations

Consulting Firms

Local Governments

Citizen Groups

Public Agencies/ Companies

SMART CITY

Citizens

Research Institutions

NGOs

Academia

Private Sector Solution Providers

Media Outlets

Startups + Startup Ecosystem

Established Companies SMEs, MNCs

WeGO's Network

213 Members

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Local Governments +	Corporations +	Institutions

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IGB & Company · iin · InsightAir · kbsys · Tmoney · LifeBlocs · MANAGEON

(주)엔티시스 NT SYSTEM · Qlue · SCANETCHAIN · SiM · SRPOST · Sycros · TG

UCWare Inc. · WeavAir · WINTECH · USIS · UMAY Inc. · WINNER TECHNOLOGY · XⁿTREE

INSTITUTIONS

NITA · CITO · BOCRA · ASIA PACIFIC FOUNDATION OF CANADA · FIWARE · enactus · KISA

Seoul Digital Foundation · sba · SH 서울주택도시공사 · AFRICAN SMART CITIES INNOVATION FOUNDATION · Gigizens · NITDA

SOLARIMPULSE FOUNDATION · BIZERTE 2050 · NITA UGANDA

04 WeGO's Partners

MOU PARTNERS | 16

04 | WeGO Smart City Driver

Q. Who can use it?
Exclusively accessible to WeGO members – local governments, institutions, and corporations.

Q. How can I access the WeGO Smart City Driver?
Register for an Activator account. Once approved by the WeGO Secretariat, you can access all the features of the Activator and participate in the WeGO Smart City Driver.

Q. How can I use the Activator?
Visit http://we-gov.org/wego-activator/ for detailed information on how to use the Activator.
With your approved Activator account, access the Activator: https://wego.smartcitiesactivator.com

04

Knowledge-building & Research Activities

Knowledge-Building & Research

- Smart City Resources
  - ➢ Projects Catalog

Projects Catalog

WeGO SMART CITY DRIVER

05 Benefits of joining us

- Access to all our events and services

  ➢ Attend international events with WeGO

  ➢ Eligibility to our training programs

  ➢ Access to the Smart City Driver, eligibility for the WeGO Project Implementer

- Matchmaking of local government with solution providers and other partners.
  ➢ At the ideation stage
  ➢ At the implementation stage

- Funding of one feasibility study and pilot project per year

- Opportunity to share your best practice, and/or learn from others

- Jointly organize programs that you might want to do

WeGO SMART CITY DRIVER

Project Implementation

Knowledge-sharing & Networking

Capacity Building

Knowledge-Building & Research

Thank you.

🌐 https://we-gov.org

f /WeGovOrg

🐦 /WeGovOrg

▶ /WeGO Secretariat
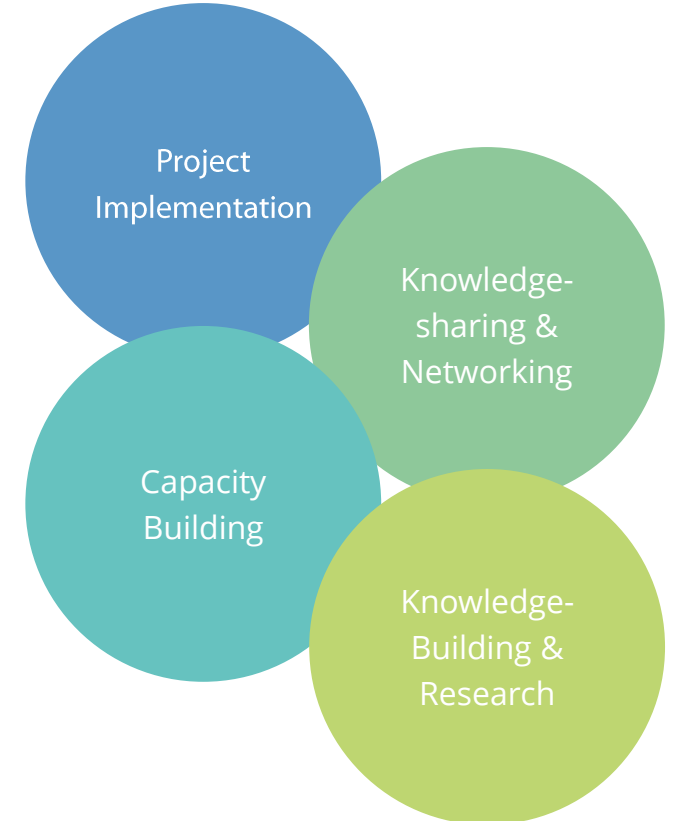
WeGO
World Smart Sustainable Cities Organization

SESSION I

City Proposals: Projects and Partnership Opportunities

Survey Results

6. Which of the following are the main target regions for your company?

11 responses
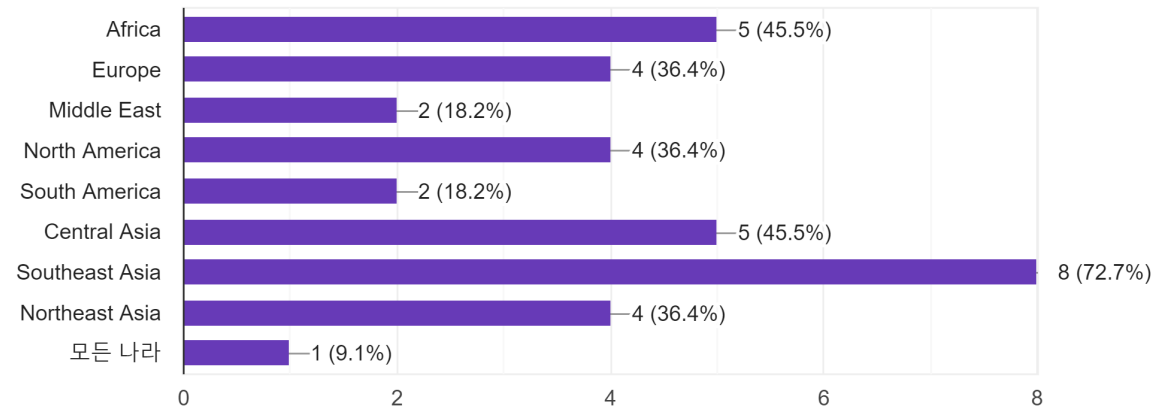
11. Is your company interested in presenting its products and solutions in a matchmaking session with WeGO city members and partners?

11 responses
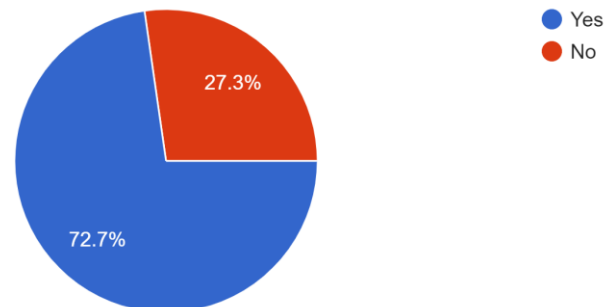
Survey Results

8. Which smart city areas is your company most interested in?

11 responses
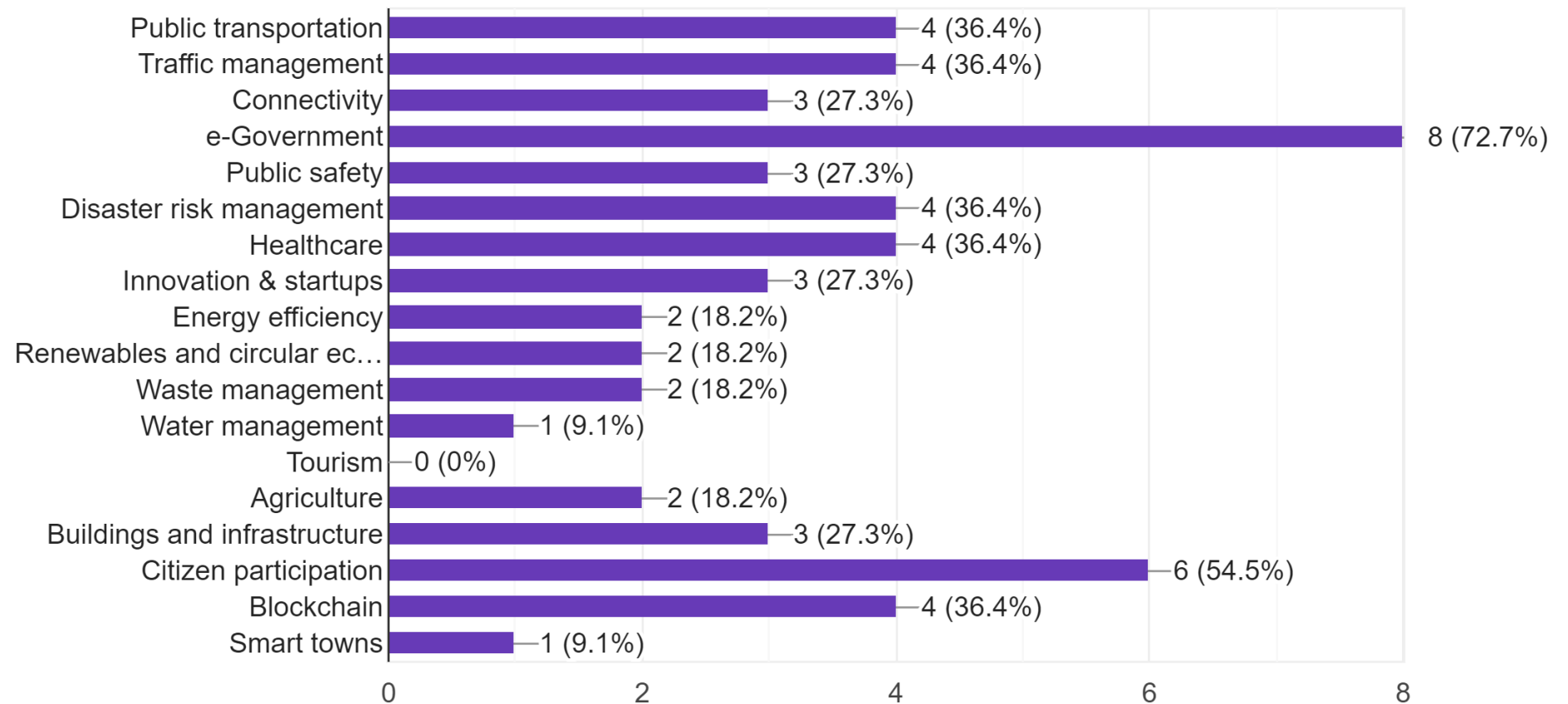
Session I

Nadia Faradila Binti Jalawi

Senior Assistant Director of Engineering (Electrical) at the City Council of Seberang Perai
Seberang Perai

Bernard Ewah

Founder of Digizens Collaborative, Deputy Director of National Information Technology Development Agency, Nigeria
Digizens Collaborative

WeGO
World Smart Sustainable Cities Organization

Nadia Faradila Binti Jalawi

Senior Assistant Director of Engineering (Electrical) at the City Council of Seberang Perai

Seberang Perai

World Smart Sustainable Cities Organization

"SEBERANG PERAI ASPIRING CITY OF TOMORROW"

CITY COUNCIL OF SEBERANG PERAI
PENANG, MALAYSIA

Ms NADIA FARADILA JALAWI

SENIOR ASSISTANT DIRECTOR
(ELECTRICAL ENGINEER)
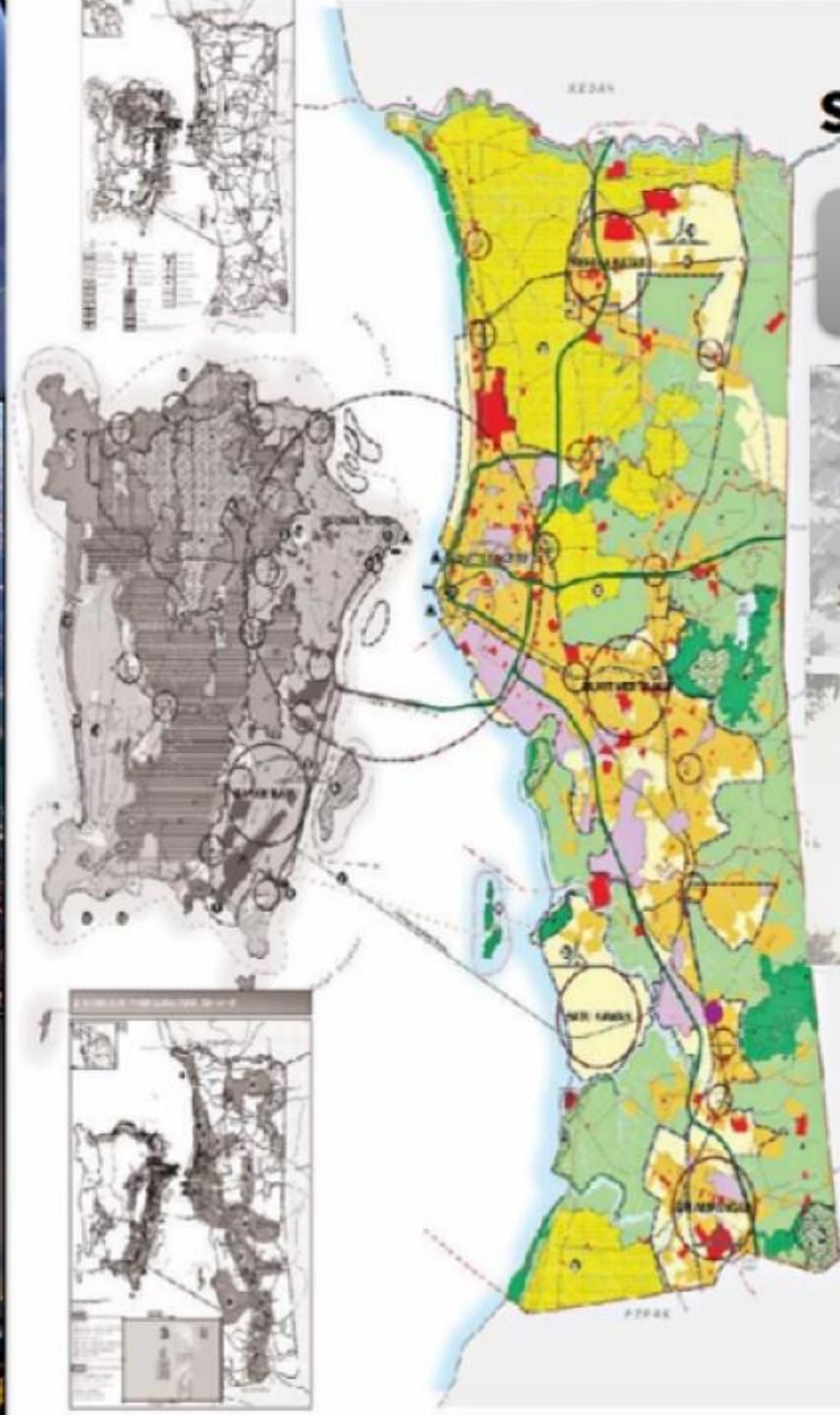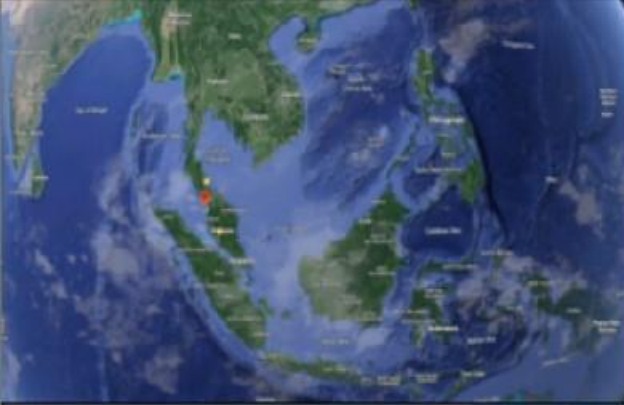
SEBERANG PERAI | Land use

POPULATION 1,062,000 RESIDENTS	POPULATION DENSITY 1,414 / km²	SIZE / AREA 751km²

Housing	Commercial	Industrial	Agriculture
14%	**1%**	**4%**	**48%**
10,859 Hectare	1,302 Hectare	3,484 Hectare	32,712 Hectare

Institution	Infrastructure	Transportation	Green Area
5%	**1%**	**9%**	**12%**
3,171 Hectare	755 Hectare	6,353 Hectare	8,923 Hectare

Water Bodies	Total
6%	**100%**
4988 Hectare	73,800 Hectare

SEBERANG PERAI CORPORATE TARGETS

Low Carbon City
by Year 2022

Carbon Neutral
by Year 2030

Zero Carbon City
by Year 2050

Seberang Perai City Council is committed to work with other cities in the world to address climate change in order to limit global warming to 1.5 degrees celcius.

SEBERANG PERAI STRATEGIC PLAN 2018-2022

PENANG 2030

RESILIENT

COMPETITIVE

GREEN

INCLUSIVE

The Outcome Of This Vision And Strategic Plan

Transformation of Seberang Perai into a Smart Sustainable City by the year 2030 which is the "Aspiration of Seberang Perai Future City". The corporate outcome answered the implied meaning of our tag line " Aspiring City Of Tomorrow"

SP01 Safe Environment

SP02 High Quality Facilities And Infrastructures

SP03 Healthy Lifestyle

SP04 Green Development And Clean Environment

SP05 Application Of New Technology

SP06 Competitive Urban Economy

SP07 Strengthening Culture And Heritage

SP08 Resilient And Liveable City

SP09 Community Involvement

SP10 Inclusive And Impartial Urban Development

INTRODUCTION

➢ *Seberang Perai has been an active member of WeGO since 2012.*

➢ *Seberang Perai was the* **BENEFICIARY** *of the 2016 WeGO Smart Sustainable Cities Feasibility Study Program on Smart Street Lamp and Traffic Light Monitoring, which was conducted by Gabotech.*

➢ *The three parties share several years of cooperation, through knowledge sharing seminars and capacity building, etc.*

➢ *Seberang Perai is committed to smart city development, winning the WeGO awards in 2017 in the category of Digital Inclusion.*

LETTER OF INTENT FROM WeGO

COMMITMENT FORM FROM SEBERANG PERAI

Letter of Intent

WeGO — World e-Governments Organization of Cities and Local Governments

July 15, 2016
WeGO 16-242

Sr Hj Rozali bin Hj Mohamud
Municipal Secretary

WeGO e-Government Feasibility Study Project 2016
"M-Government"
Announcement on Beneficiary City

Dear Sr Hj Rozali bin Hj Mohamud:

We are very pleased to inform you that **Seberang Perai, Malaysia** has been selected as the final beneficiary city of the WeGO e-Government Feasibility Study Project 2016!

Seven WeGO members submitted their applications for the WeGO e-Government Feasibility Study Project 2016 and the beneficiary city was selected by the WeGO Secretariat in consultation with the Selection Committee, considering a number of selection criteria such as relevance with this year's theme "m-government", alignment of the project with the Government's ICT strategies and vision, expected outcomes, local support to the Project Consultants to be provided by the city, and the city's commitment to the post-project implementation.

The WeGO Secretariat concluded that the proposed project *"Street Lamp & Traffics Light Monitoring System"* submitted by Seberang Perai well reflects this year's theme of the WeGO e-Government Feasibility Study Project. Also in light of the City's strong commitment to the post-project implementation, the WeGO Secretariat determined that the Feasibility Study Project will bring a promising advancement in Seberang Perai's city administration.

The WeGO Secretariat will now recruit and select the IT/Project Consultants for the WeGO e-Government Feasibility Study Project by the mid of August. The Project will kick off in late August and the IT/Project Consultants will conduct the Feasibility Study Project until the end of the year pursuant to diverse methodologies including site visits to Seberang Perai and presentation of the final report in December 2015. More details will be shared once the IT/Project Consultants are selected in August.

Please contact the WeGO Secretariat should you have any questions on Feasibility Study Project at secretariat@we-gov.org.

We ask for Seberang Perai's active cooperation on the WeGO e-Government Feasibility Study Project as the beneficiary city and Project Partner, and wish for the most successful implementation of the Project!

WeGO Secretariat

WeGO Secretariat
Postal Address: 10F Seoul Global Center, 38 Jongro, Jongno-gu, Seoul 100-739, Republic of Korea
Tel: +82 (0)2 720 2934~7 Fax: +82 (0)2 720 2939 Email: secretariat@we-gov.org
Website: www.we-gov.org

Commitment Form

WeGO — World e-Governments Organization of Cities and Local Governments

**WeGO e-Government Feasibility Study Project 2016
Commitment Form**

This Commitment Form demonstrates your City's interest and commitment to participate in the WeGO e-Government Feasibility Study Project 2016. To apply for the Project, please send the completed Commitment Form with your City's Letter of Intent to the WeGO Secretariat by Sunday, June 12, 2016 at secretariat@we-gov.org.

We, __Seberang Perai____, hereby express our interest and commitment to participate in the WeGO e-Government Feasibility Study Project as a Project Partner, as an effort to develop an m-Government System in an inclusive and sustainable manner, by submitting this Commitment Form and the Letter of Intent.

We assure that the Letter of Intent was written with full conviction and truth to actively cooperate with the WeGO Secretariat and the Project Consultants to successfully accomplish the Project.

If our City is selected as the beneficiary of the Project,

- We understand that the general expenses of the Project will be fully sponsored by the WeGO Secretariat.
- As a Project Partner, we will cooperate by providing all requested information and a minimum-level of local assistance to the WeGO Secretariat and the Project Consultants.
- After the completion of the Project, we will be fully committed to realizing the actual implementation of the m-Government System.

WITNESSED AND AUTHORIZED BY:

06/10/2016
Date (MM/DD/YYYY)

Sr Rozali B. Mohamud
Name of Mayor or Head of Executive Authority

Municipal Secretary
Official Title

Signature of the Mayor or Head of Executive Authority

WeGO Secretariat
Postal Address: 10F Seoul Global Center, 38 Jongro, Jongno-gu, Seoul 100-739, Republic of Korea
Tel: +82 (0)2 720 2934~7 Fax: +82 (0)2 720 2939 Email: secretariat@we-gov.org
Website: www.we-gov.org

OVERVIEW AND BACKGROUND OF THE PROJECT

➢ **Title of Project** : Feasibility Study for the Establishment of Street Lamp & Traffic Light Monitoring System of Seberang Perai.

➢ **Project Period** : The project started on September 22, 2016, and ended on December 31, 2016

➢ **Background of the Project** :

a) To share knowledge and experience in e-Government, the World e-Governments Organization of Cities and Local Governments

(WeGO) provides consulting services to member cities through ICT feasibility studies.

b) To improve quality and efficiency of work.

c) Managing thousands of street lamps and traffic lights is a crucial issue to secure public safety. To resolve their safety concerns, establishing a new monitoring system based on ICT.

OBJECTIVE OF THE PROJECT

The main purpose of implementing e-Government in the MPSP is to improve the quality of citizen lives.

EGovernment is also expected to reduce paperwork in public services by using ICT to enhance the flow of information through all levels of public organizations in Seberang Perai.

By implementing a "smart system" using ICT for street lamps, Seberang Perai will be able to have the foundation for better eGovernment services and safety of citizens.

LED STREET LIGHTS INSTALLED

EQUIPMENTS INSTALLED
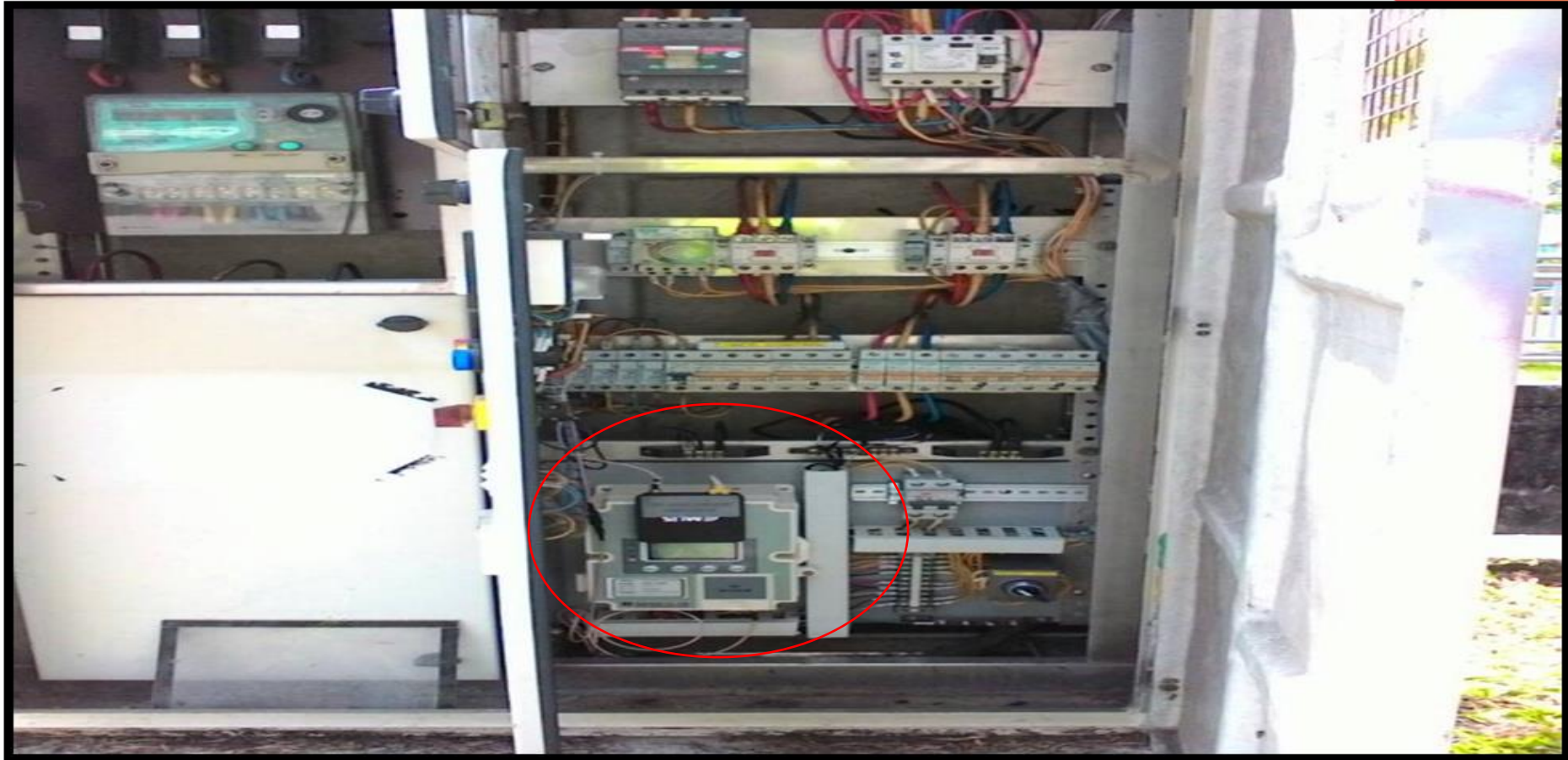
WEB BASE / MONITORING PLATFROM PROVIDED

BENEFICIARY OF THIS PROJECT

1

ACKNOWLEDGEMENT

Participation in International Organizations

2

RELATIONSHIP

Strengthening relationship with Korea

3

KNOWLEDGE TRANSFER

➤ In a world of rapid technological change, WeGO has become one of our main resources for connection in learning a bout the latest proven technology happening around the world nowadays.

➤ Learning and experiencing hands on smart city component project management has enable us to value most commitment from idea brainstorming to project realization

CHALLENGES OF THE PROJECT

TECHNICAL EXPERT

Limited knowledge to handle the equipments.

SPARE PARTS

Difficulties to find the same spare parts / equipments.

SYSTEM BYPASS

The system bypass the manual system, if tripping/breakdown happened to the system, then the street light could not function manually.

K-CITY NETWORK 2021

SOLUTION DEMONSTRATION PROJECT

This project will render support for demonstration projects in order to roll out or expand Korean smart city solutions in cities overseas that seek to adopt a smart city approach. This program aims to apply and demonstrate Korean smart city technologies in cities overseas to build a platform to promote and spread model solutions overseas and create an opportunity for global cooperation projects.

COMMITMENTS FORM FROM SEBERANG PERAI

Seberang Perai is committed to continuing to develop the relationship and use it to build a stronger foundation for cooperation between Malaysia and Korea.

Seberang Perai do not have financial support for this project, but we will provide in-kind support through the direct personnel hours of our staff, provision of office space, transportation support, and other supports to ensure the successful execution of the project.

COMMITMENTS FORM FROM SEBERANG PERAI

Efficient provision of all required data

Local expert/company to provide assistance to a successful implementation of the project

Logistical support for local transportation and meeting organization

Provision of fully-resourced office space for project team during field missions

Communication support for document translation, meeting interpretation, and relationship management

Direct personnel support to the consulting process, including development of of future implementation model, and to the installation procedure

1   PLAN REVIEW – OUR CURRENT EFFORTS

Guideline - 1st Edition

- Year 2016 – *Encouragement* to install LED street light.

Guideline - Review 2018

- June 2018 – *Compulsory* to all developers, consultants and others related agencies to install LED street light especially the scheme that will surrender to City Council.

Adopted MS 825

- Code of practice for the design of road lighting Part 1: Lighting of roads and public amenity areas

- Recommendation design of street lighting for all types of highways and roads.

- As a reference to make sure that our review base on the minimal standard.
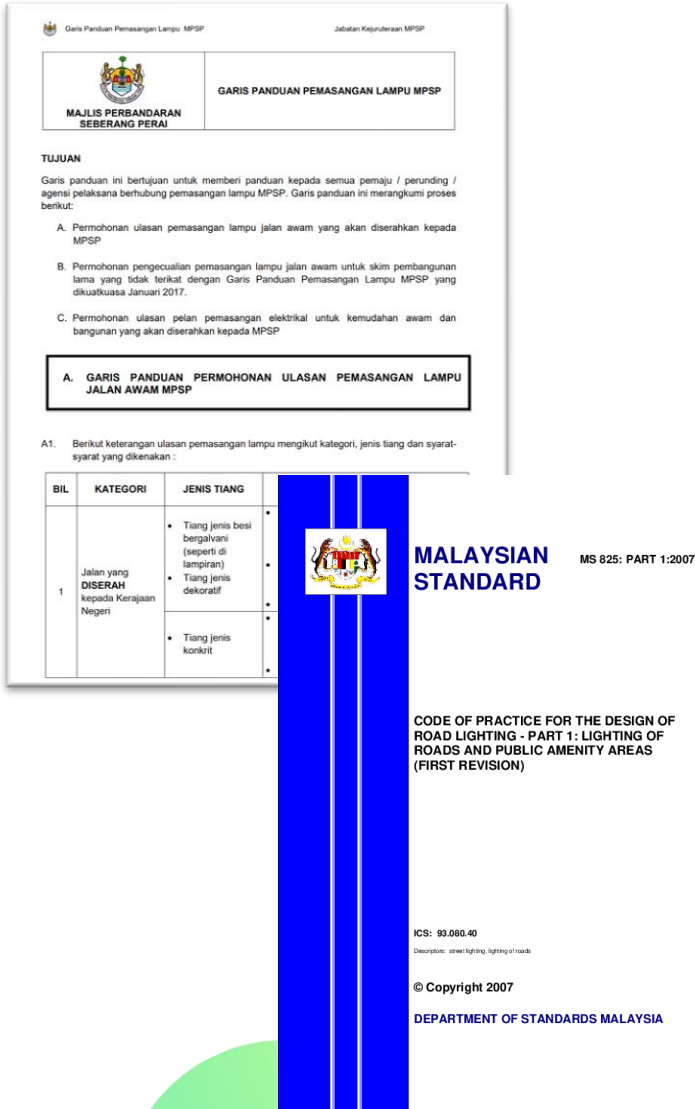
2   RETROFITTING

FIRST PHASE

- January 2019 – 1372 units

- Installation completed May 2019

- Cost RM3.31 millions

- 15 years contact

- Zero capex

SECOND PHASE

- Expected to start July 2021 (14,000 units)

ADVANTAGES :

Green Technology
Less Heat – Fight Climate Change
Energy Efficiency - Save Energy
Less maintenance cost – up to 5 years warranty

OVERVIEW OF OUR HQ
MBSP TOWER

RESPONDENTS' PREFERENCE FOR MBSP SERVICES

| 65.1% | 52.8% | 51.3% | 50.7% | 47.0% | 43.2% |

MAIN 1

MAIN 2
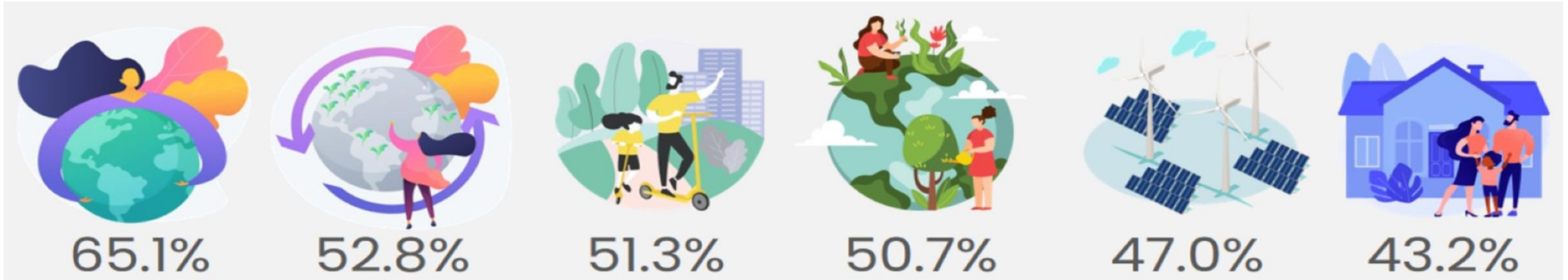
MAIN 3

MAIN 4

MAIN 5

MAIN 6

CLIMATE CHANGE RESILIENCE

CIRCULAR ECONOMY DEVELOPMENT, CLEANLINESS AND GREENERY

GREEN CORRIDOR TRANSPORTATION

GREEN SPACE AND MAINTENANCE OF PUBLIC PLACES

SUSTAINABLE ENERGY USE

ENSURING THE ABILITY TO OWN A HOME TO IMPROVE THE QUALITY OF LIFE

BOOSTING ABUJA CITY ECONOMY WITH AN ONLINE MARKETPLACE FOR ARTISANS

A PRESENTATION ON

sanaa

BY

Bernard Ewah

bernard@digizens.ng

DIGIZENS COLLABORATIVE

ABUJA, NIGERIA

JUNE 22, 2021

Executive Summary

- There is need to improve efficiency of artisans while lowering cost and enhancing trust and satisfaction for residents who rely on artisans
- There is also need to ease the integration of artisans into the formal sector as a means to improve business sustainability and government revenues
- There is need for a digital platform designed for businesses that seek short-term workers/artisans in the building and construction trade in Abuja.
- A platform that acts as a centralised database for businesses to source employment online and for workers to gain access to a larger pool of potential employers.
- We believe this will reduce employment costs for businesses and improves the timing of labour matching.
- With the availability of NIMC API/NIN and ai-powered social scoring system, we can finally address local employers' concerns about artisanal identity/character and proof of competence through a micro-credentialing system.
- No micro-credentialing platform to give credibility to artisans in Abuja.

Problem Statement

Despite accounting for over 30% of total household incomes and 60% of all employed Abuja residents, the reputation of artisans is notoriously poor.

Most artisans lack formal training, professional accreditation and membership.

Users of artisan services have no means to verify the authenticity as well as competency of artisans before they are hired.

90% of transactions are paid by cash depriving AMAC and FCTA tax revenues while artisans themselves continue to be locked out of the financial system.

Abuja residents rely on word of mouth to locate artisans, attracting multiple risks to residents.

Lack of a scalable platform to enable the skilling and upskilling of Abuja's jobless urban youths, artisans in the face of increasing technological automation and rural-urban migration.

UNDERSTANDING THE CHALLENGES FACING ARTISANS IN ABUJA CITY
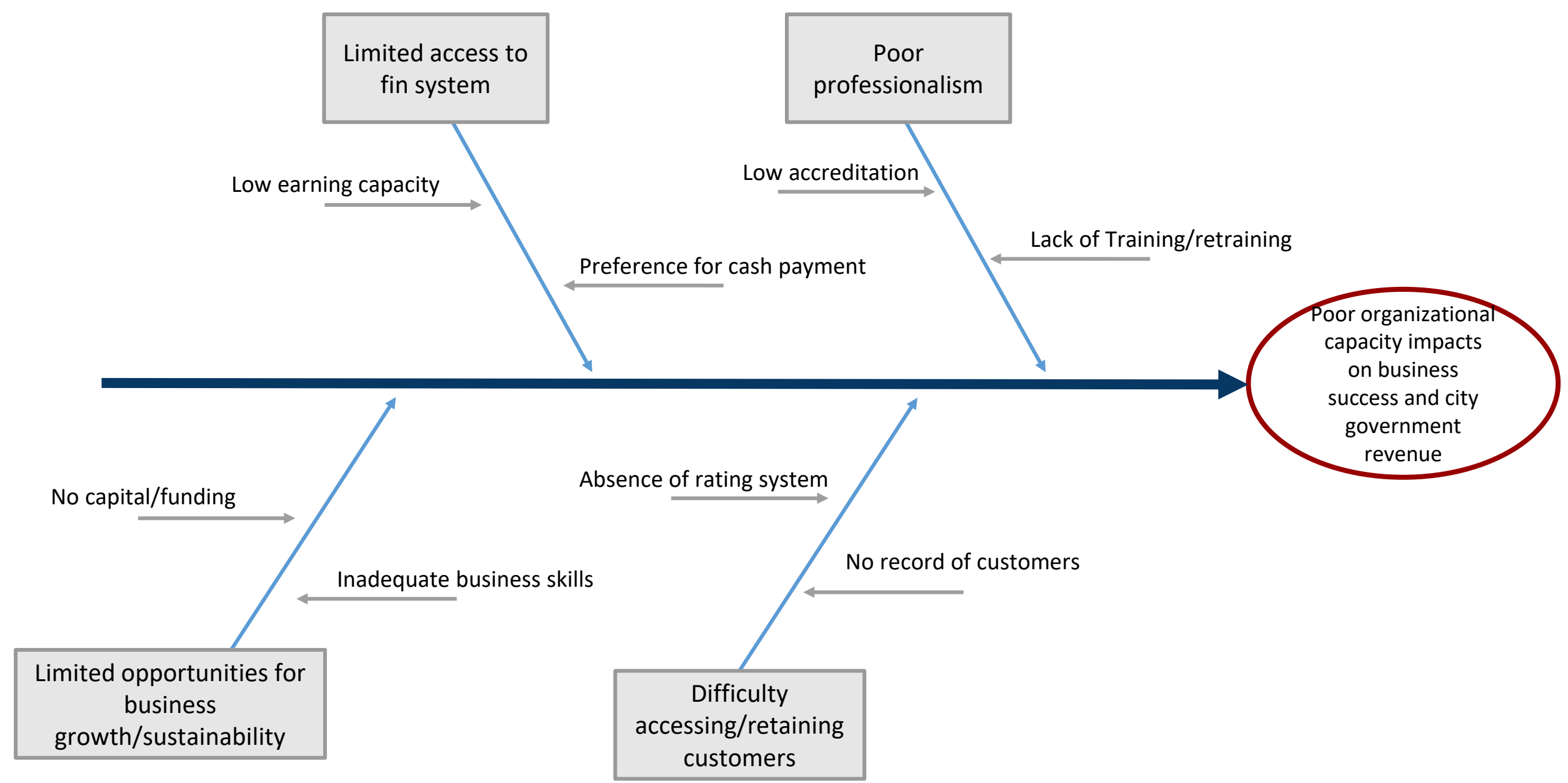
Analysis and Key Findings

Abuja artisans wants to improve their skill and expand their network so that they can earn more.

Abuja residents will hire more artisans if they are able to authenticate their qualifications and quality of services.

Abuja artisans will earn more income and pay taxes to AMAC and FCTA if electronic payment is used.

Log-Frame

Intervention/ Input	Output	Output	Outcome	Impact
• If a digital market platform is established for Abuja artisans	• Most artisans will be incentivized to join freely • More residents will hire more artisans	• The professional quality and competence of Abuja artisans will improve	• The number of users will increase. • Availability of verifiable data will enhance access to fintech benefits	• Higher household incomes and tax revenues • Increased employment and reduced Unemployment

Indicators

• The launch of sana'a.ng • Affiliation with partners	• Registered to artisans and users • Access to professional associations and training orgs • Access to healthcare coverage and fin services	• Use of customer rating and comments • Use of accreditation and certification systems	• Increase in number of artisans and their customers • Number of artisan who with access to healthcare coverage • Number of artisans accessing fintech services	• Revenue reports from AMAC • Employment reports from NBS

ADDRESSING THE CHALLENGE

- Sanaa is a secure place to find trusted and reliable artisans. Sanaa is open to both individuals and corporate organizations. Our goal is to enable every artisan to achieve business scale while providing quality and professional services at all times. Therefore, Sanaa is home to the established professionals and associations, training providers, freelancers and someone who is simply looking to add a new skill to earn extra income.

- Individuals and organizations looking for artisan services can get access to artisans close by at an affordable price.

- For organizations offering artisan services, the Sana'a platform provides access to customers and also opportunities to upskill and network.

- The artisans are provided access to customers and also opportunities to upskill and network.

- Associations and training programs focusing on engaging and training artisans can get members from the Sana'a platform.

Beyond being a digital marketplace for artisanal jobs, Sanaa provides an interactive dashboard, which allows providers to manage their workers, streamline material/equipment procurement and track deliveries.

This dashboard will increase speed and efficiency, especially for MSMEs who often lack the technical capacity to manage their resources.

In addition, it will support construction platforms that operate in the supply phase of the value chain enabling the management of tracking of equipment and/or materials.

KEY ACTIVITIES AND PARTNERS

ACTIVITIES

- Policy development, support and influencing.
- Technology integration.
- Micro-credentials development.
- Capacity building programmers
- Funding and access to government infrastructure.
- Media partnerships/campaigns
- Roadshows and displays
- R&D opportunities

PARTNERS

- Nigeria National Accreditation Systems
- Federal Ministry of Labour, Wages and productivity
- Federal Ministry of Trade and Industry
- Small and Medium Enterprise Development Agency (SMEDAN)
- National Power Training Institute of Nigeria (NAPTIN)
- National Board for Technical Education Board, NABTEB
- Federal Ministry of Women and Gender Affairs
- Ministry of Youth and Sport Development
- The Nigerian Institute of Building, NOIB
- Industry Training Fund

SOLUTIONS AND PARTNERSHIP NEEDED

- Funding provisions for executing our technology integration and roll-out plans.

- Working with public agencies in driving Sanaa market formalization processes.

- Working with both public and private sector players to draft policies to address our skill gap and influence local politics.

- Policy innovations to meet with this decade challenges.

- Technology integration on public and private sector digital platforms.

- Ecosystem research and development to address sustainability opportunities and issues.

- Sanaa will work with ecosystem partners to address supply side issues: job creation.

- Formalizing artisanal association identification numbers.

- To address gender inequality and people with special needs.

HOW COULD WeGO AND PARTNERS HELP?

- Provide/assist in mobilizing investment to execute our technology plan.

- Provide financial support in advertising spend and roll outs.

- Provide free PR where possible on WeGo's network/platform.

- Provide policy expertise and experiences in formalizing Abuja's artisanal market.

- Continuous partnership by way of leveraging our platform for R&D purposes to understand Abuja's artisan market and formalization opportunities and improve market outcomes.

- In developing capacity building programmes targeting Abuja's artisanal market for sustainable jobs.

SESSION II

Matchmaking: Providing Solutions and Feedback on Proposals

Session II
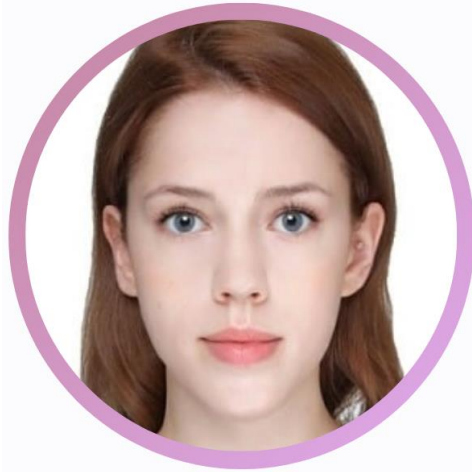
Angelina Khodotova

Assistant Manager for International Projects at SRPOST Inc., South Korea
SRPOST

Yovin Andrian

Enterprise Solution Manager at Qlue, Indonesia
Qlue

Natalia Mykhaylova

CEO of WeavAir, Canada/South Korea
WeavAir

WeGⓞ
World Smart Sustainable Cities Organization

Angelina Khodotova

Assistant Manager for International Projects at SRPOST Inc., South Korea

SRPOST

WeGo
World Smart Sustainable Cities Organization

2021 BUSINESS PRESENTATION

SMART SOLUTIONS THAT POWER UP MUNICIPALITIES
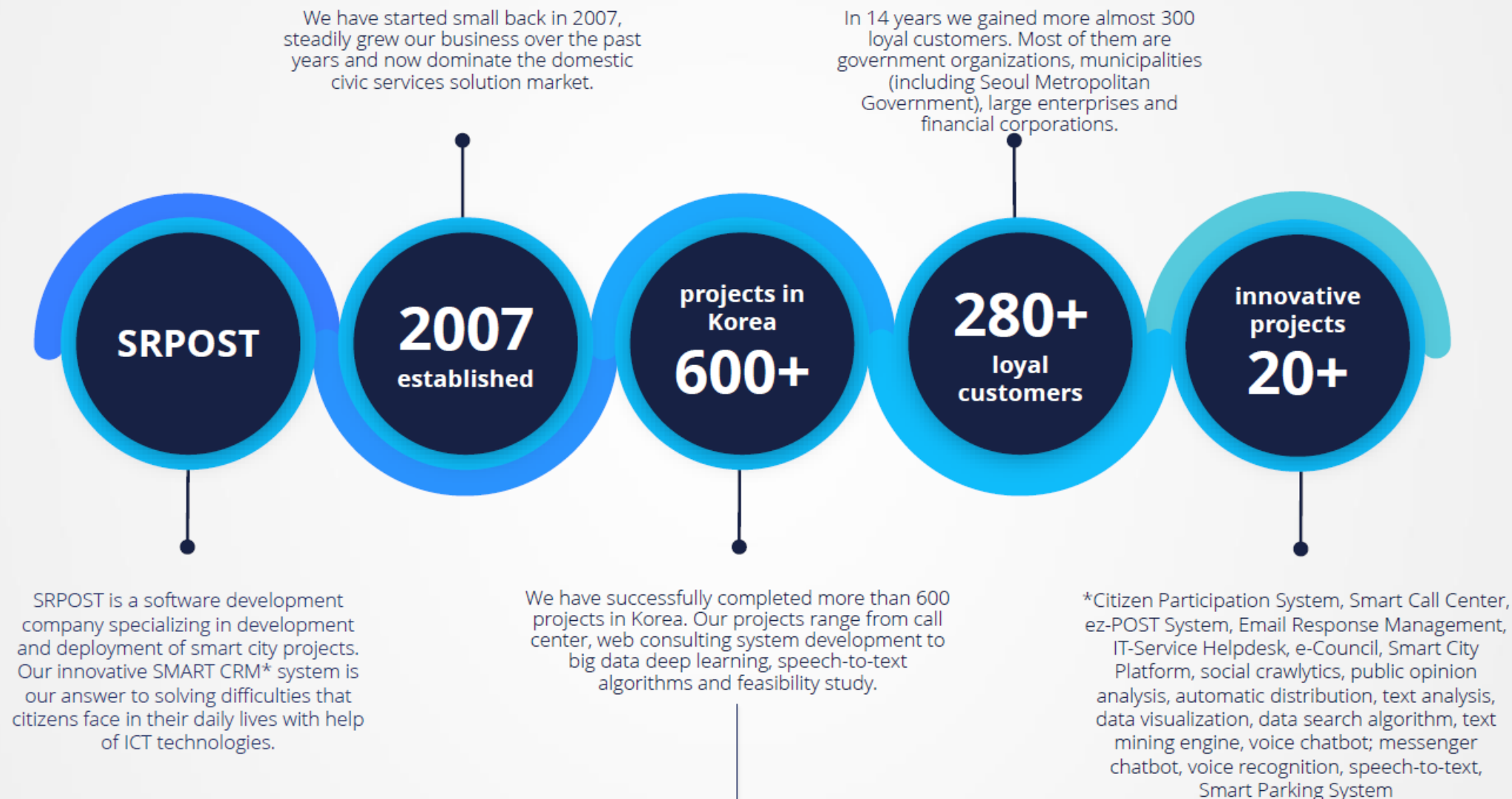
Multiple channels to submit citizen requests
(consolidation of **all** citizen requests into a **single management hub**)

SRPOST

Department head

04

Answer confirmation
Reviews and confirms the answer.
Finalizes the process and sends the answer
to the citizen.

Request processor

03

Review and answer
Reviews and replies to the request.
Submits the answer for review and confirmation.

Department head

02

Internal distribution
Chooses request processor from the list of employees.
If needed, assigns supporters to help process the request.

Integrated platform

01

Request consolidation
Funnels all citizen requests from all
channels into a single platform.

Key contributions of the system
Various functions for better city-citizens communication

- Automated categorization

- Cluster analysis of repetitive/similar complaints

- Suggestions on the relevant processing department

- Model answer recommendations

- Statistics and visualized analytics via generated graphs and charts

- Both public servants & citizens receive processing notifications

- Relevant information is available for citizens online

✓ Facilitated communication between city and its citizens

✓ Increased citizen participation in the city policy making process

✓ Automatization leading to balanced workload

✓ In-depths analysis via requested analytical data, identification of hidden issues

Smartphone AI request submission

Technologies for smarter, faster and convenient on-site reporting
only using your smartphone

Solution for **instant and automated feedback** instead of manual input of all necessary information

We provide different approaches for different roles

Citizen: Submits the needed request in an easy and fast way,
receives alerts on the request processing status,
checks the measures taken as the request is answered.

1. Citizen creates a request: **STT** technology converts citizen's **speech into text**, the **geolocation** is automatically extracted or recognized in the text. Later, the text is also undergoes the **keywords** analysis.

2. Citizen can **add image or video** (live photo or selection from gallery), the quality of which is being corrected by the system.

3. Relevant **tags** are extracted upon **image analysis**, request's category suggestion is provided.
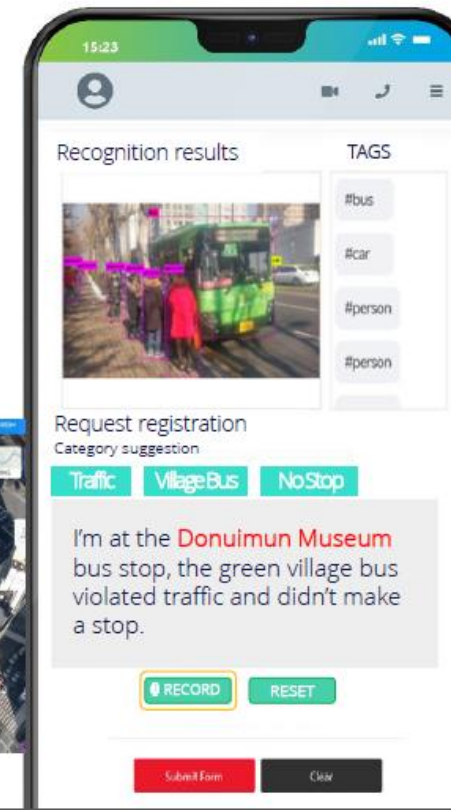
Smartphone AI request submission

Technologies for smarter, faster and convenient on-site reporting
only using your smartphone

Solution for **instant and automated feedback** instead of manual input of all necessary information

We provide different approaches for different roles

Processing officer: checks the number of requests on the map, filters cases with needed parameters, processes and answers request in an effective and timely manner and receives citizen's feedback
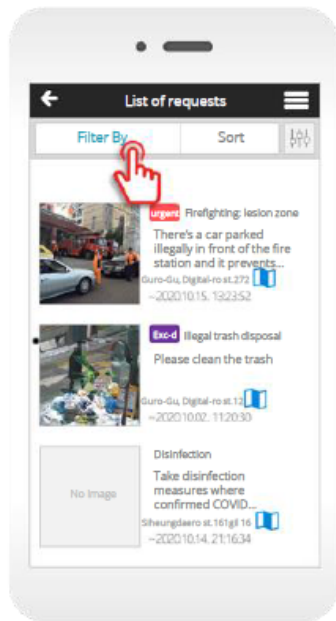
1. **Officer** checks the requests number through the **visualized information** on the map, and filters needed cases (e.g., depending on the distance, processing deadline, request gravity, etc.)

2. The platform is **integrated** with other services in use for even more effective and smooth workflow.

3. The officer may use **system's suggestions** on the relevant to the request information (e.g., legislation) and **template answers** for efficient and accelerated request processing.
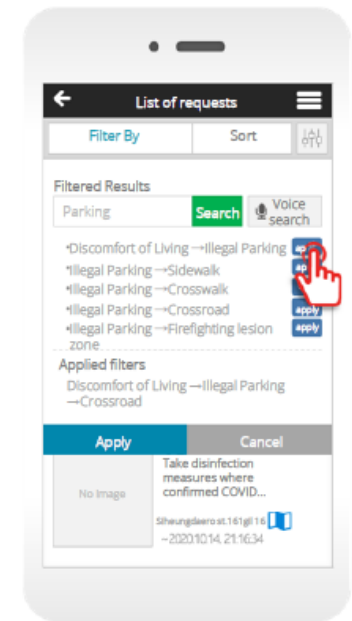
INTERNATIONAL PROJECTS

CASE STUDY 1
Uganda KCCA
Feasibility Study

June, 2019

WeGO project tendering
SRPOST wins the contract
for 2019 WeGO FS for KCCA,
Uganda

May, 2019

2nd visitation
Second official visitation to
Kampala, works on the pilot
project, field trips and gathering
data

May, 2019

Kampala – WeGO
KCCA submitted their
Smart Parking proposal for
the 2019 WeGO Smart
Sustainable City Feasibility
Study funding program.

September, 2019

FS project start, 1st visit
First official business trip to
Uganda, gathering of relevant
data related to parking in
Kampala Capital City

January, 2020

3rd visitation, FS project end
Final works on the pilot project, reporting event on
project results, meetings with involved
stakeholders

CASE STUDY 2
Kazakhstan Nur-Sultan City
R&D Project

July, 2020

SMTECH application
Application for funded R&D program together with Astana Innovations

December, 2020

Official start
Sharing official letters with the Akim (Mayor) of the Nur-Sultan city, project discussions with international participants

Ongoing project

September, 2019

Initial visit
Visit to the Nur-Sultan city for the ceremony of signing MOU between SRPOST, Nur-Sultan City Municipality and Astana Innovations

October, 2020

Grant recipients
SRPOST has won the SMTECH grant for developing a Big Data-based Air Quality Monitoring Health Platform for Nur-Sultan City

May, 2021

Receiving data
Receiving an essential data access & information for the platform development

Smart solutions that **POWER UP** municipalities

SRPOST

Contact our International Project Management Team for more information
Ms. Angelina Khodotova
lina@srpost.co.kr

Yovin Andrian

Enterprise Solution Manager at Qlue, Indonesia

Qlue

Building A Smart City Through Innovative Solutions Ecosystem

Yovin Andrian

Enterprise Solutions Manager
Qlue Smart City

About Qlue

Qlue is a **comprehensive smart city ecosystem company** which is based on AI (Artificial Intelligence) and IoT (Internet of Things) technology innovations. Various Qlue solutions help decision makers in making more effective and efficient business decision.

We create a platform that **connect government and its citizens**, and visualize the data gathered from our various technology implementations.

Vision
Accelerating positive changes worldwide

WEGO Solution Partner and Portfolio Member

International Recognition

Silver Award on Open and Inclusive City
4th WeGo Award 2020

ASEAN Best IoT Startup
ASEAN Rice Bowl Awards 2020

Best Mobile Government Service
World Government Summit 2019, Dubai

Top 50 Global Startup 2020
Xtreme Tech Challenge 2020

Startup of the Year 2019
Jumpstart Magazine (Hongkong)

Overview

Founded : Feb 2016

Headquarter : Indonesia

Website : qlue.ai

Industry : Smart City, AI & IoT

qlue

- 🔴 Partners
- ⚪ Establishment & Partners

© Vemaps.com

How Qlue Enables A Smart City Ecosystem

qlue

Identify » Analysis » Respond

| Information Source | » | Information Collection | » | Data Analysis | » | Response Assignment |

Citizen — Report → 😊 qlueapp

City Officer — Report → qluework

— Report → qlue dashboard

qluevision — Report →

CCTV **IoT Sensors** — Detect → qluethermal

qluesense

City Command Center

qluework

Assignment →

Field Officer
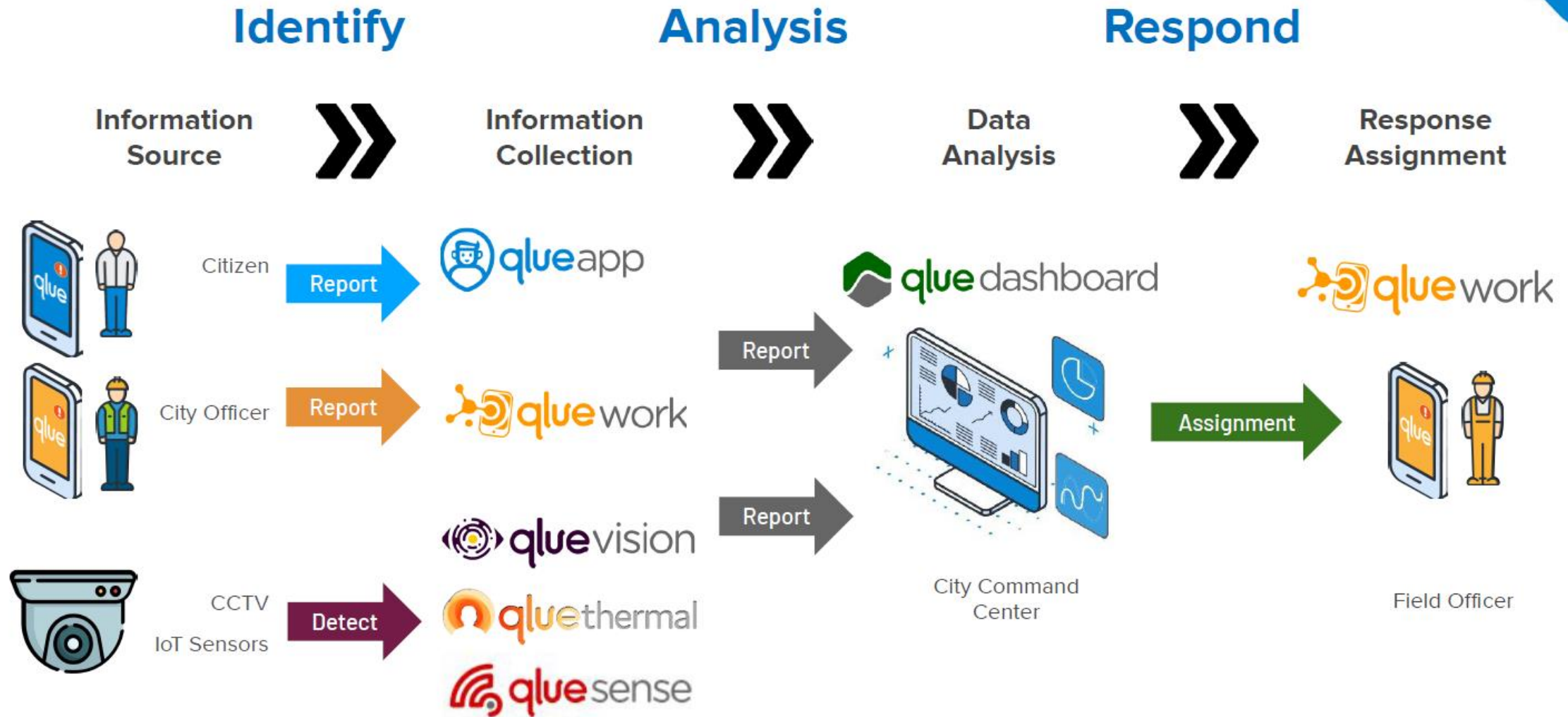
A Glimpse of Our Solution for Smart City

qlue dashboard

Integrated City Monitoring Dashboard

> Video surveillance tools to **identify, search and analyse information.**

> Provide **insights on officers' KPI.**

> GIS visualization tools that **overlays tasks and field officers location.**

> **Ticketing Management System**

A Glimpse of Our Solution for Smart City

qlue

qlueapp

Application to connect Citizen with Government
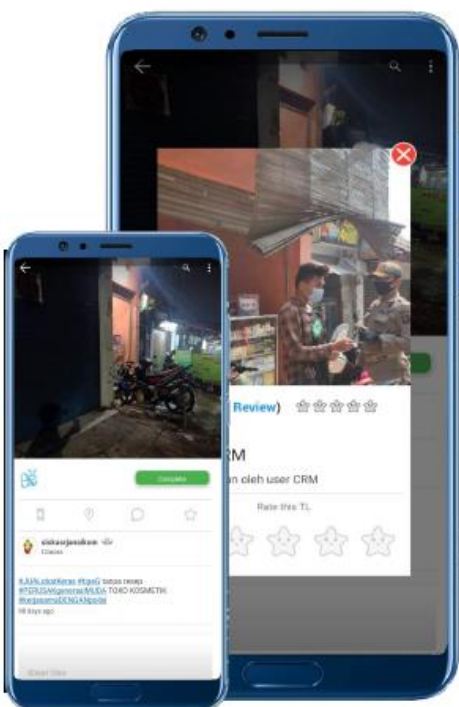
- **CITIZEN ENGAGEMENT**

- **REAL-TIME MONITORING BY CITIZEN**

  Create task / report. Minimising paperwork by digitising field reporting system

- **MULTIPLE CATEGORY TO BE SHARED**

- **TAGGED BY GEOLOCATION**

  Receive Tasks from CCTV or internal reporters based on location and job description

qluework

Application for Government to response any report in their city.
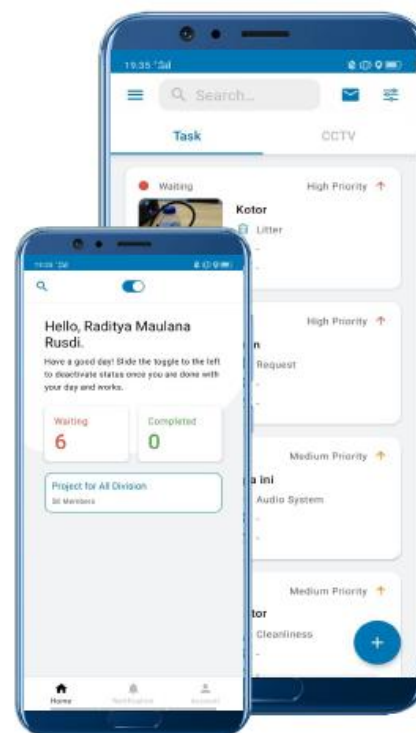
- **LIVE TRACKING**

- **TASK MANAGEMENT**

  Create task / report. Minimising paperwork by digitising field reporting system

- **MULTIPLE TYPES OF REPORTS**

- **AUTO TASK ASSIGNED FROM AI & IOT**

  Receive Tasks from CCTV or internal reporters based on location and job description

- **OFFICER MANAGEMENT**

  Work status to make sure KPI is always achieved by finishing all tasks

A Glimpse of Our Solution for Smart City

Facial Recognition

People and Crowd Counting

Vehicle Classification (Traffic Monitoring)

Thermal and Mask Detection

Benefit of Using Our Smart City Solution

35-55%
Reduce The Operational Cost
Technology can help City Government to cut down inefficient operational cost by reducing the frequency of routine field monitoring.

300%
Improving Performance
Accountability for one's responsibilities and duties can be assessed in real-time and transparently

1000x
Faster Response Time
The process of sending information automatically from CCTV or city officer to the field officer's mobile application device.

Collaboration with Jakarta (Indonesia) for Smart City
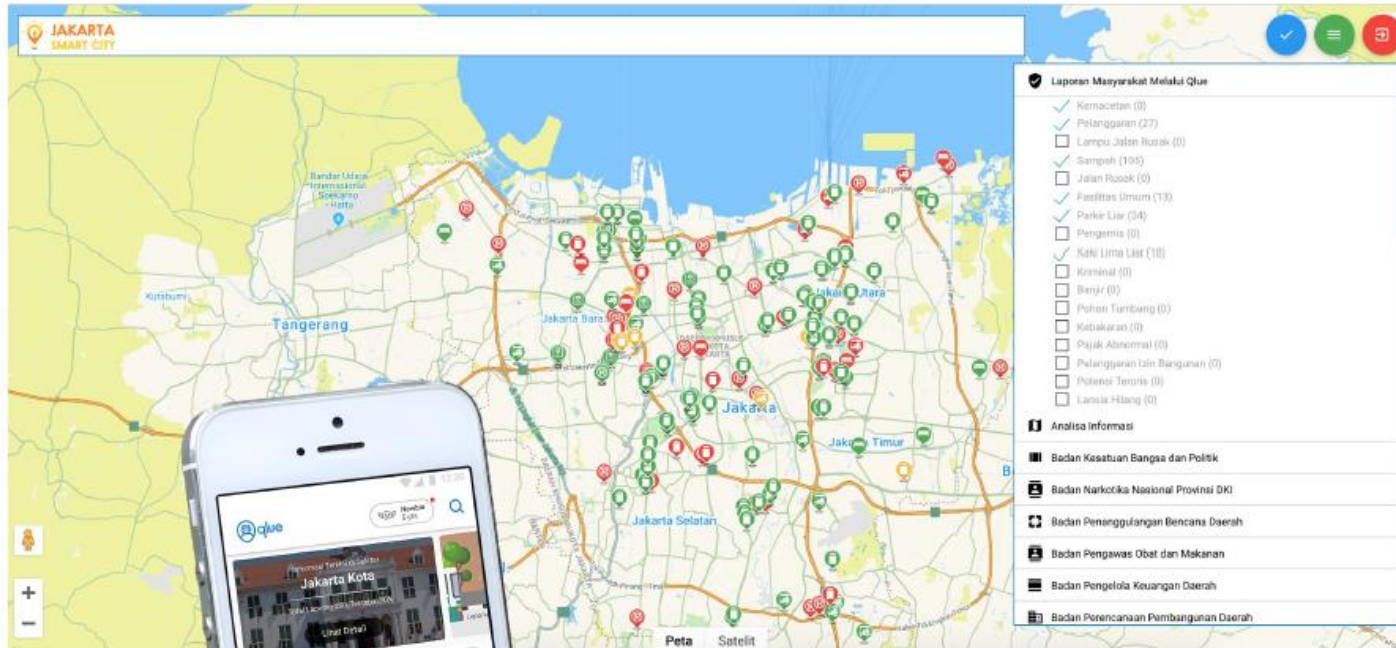
- Qlue is a primary partner for Jakarta Smart City to monitor problems and dispatch job in order to increase efficiency and effectiveness of problem handling by using our command center dashboard and apps.
- In collaboration with ITDP, to re-build pedestrian and bicycle path for tourism facilities
- significant improvement to the capital city such as **reducing 8000 flood-spots to 450, 72% reduction for extortion, 49% increase of citizen's trust towards government** and more.

Qlue is available in over

30 smart cities
in Indonesia and worldwide.

Silver Award on Open and Inclusive City
4th WeGo Award 2020

Smart Law Enforcement Collaborators
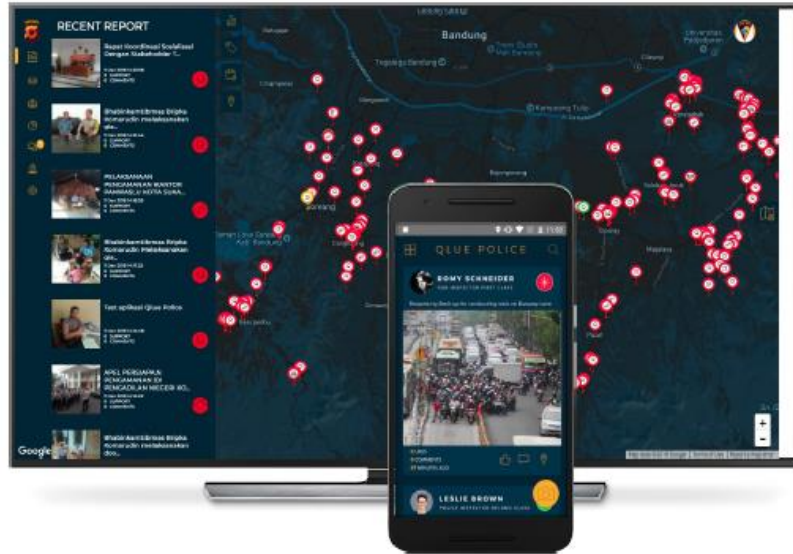
We empower the Indonesian national police force with a mobile workforce system that allows coordination via app and dashboard seamlessly. Working with multiple stakeholders to strengthen an overall solution for safety and security, Qlue leads the solution in Asian Games 2018 for mobile workforce, dashboard and video analytic using CCTV. The Asian Games 2018 is arguably the biggest event of the year and our participation only proof of our capability to deliver successfully on exceptional events like it. Qlue is now available in 17 Police districts.

Smart Disaster Recovery

Pasca Banjir Bandang, Kota Bima Pulih Hingga 90 Persen

Giras Pasopati, CNN Indonesia | Rabu, 11/01/2017 07:08 WIB

Bagikan :

THE PRESIDENT POST   HOME   PRESIDEN   CSR   INDUSTRI   PROPERTI   PARIWISATA   PENDI

Aplikasi Qlue Ambil Peran dalam Pembersihan Lumpur dan Sampah Kota Bima Pasca Bencana Banjir

January 13, 2017

👁 671   💬 0

Share on Facebook   Tweet on Twitter

Jakarta, 11 Januari 2017 – Kota Bima sedang menjalank
perpanjangan masa tanggap darurat, pasca bencana banj
(21/12/2016) dan Jumat (23/12/2016). Badan Nasional P
(BNPB) konsisten menangani dan mengawasi proses pemb
sampah kota tersebut, salah satunya dengan mengganden
sebagai aplikasi pelaporan dan pemetaan kerusakan kota y
banjir. Dengan kerjasama ini, warga Bima bisa berpartisipa
pemulihan kotanya dengan cara melaporkan kerusakan dise
aplikasi Qlue, untuk kemudian ditindaklanjuti oleh petugas d

Qlue was first to collaborate with Indonesia's National Disaster Agency (BNPB) in the end of 2016, helping recover Bima city that was wiped out due to massive flood. By leveraging public participation reporting broken infrastructures, missing citizens, garbage piles and others -- and working with NGOs, communities to send supplies and rebuild houses, **Bima city were able to recover 90% of its city in only 3 weeks and build their way back as tourism destination.**

Portfolio

Subscribe to Qlue Cloud-Based Technology

(1) Visit qlue.ai and register your profile

(2) Select your package or customize according the needs

(3) Proceed to the payment

(4) Login to your dashboard

(5) Setup your CCTV with Our AI

(6) Everything is set and You're ready to go!

Natalia Mykhaylova

CEO of WeavAir, Canada/South Korea

WeavAir

75% HVACs

Energy waste
Expensive maintenance
Virus, bacteria & air pollution

Hidden costs of air ventilation problems

Flood of COVID-19-related lawsuits expected to hit courts

HVAC Systems Should Be Checked Before Buildings Reopen, Due to COVID-19

As occupants start returning to commercial spaces, equipment should be serviced and tested
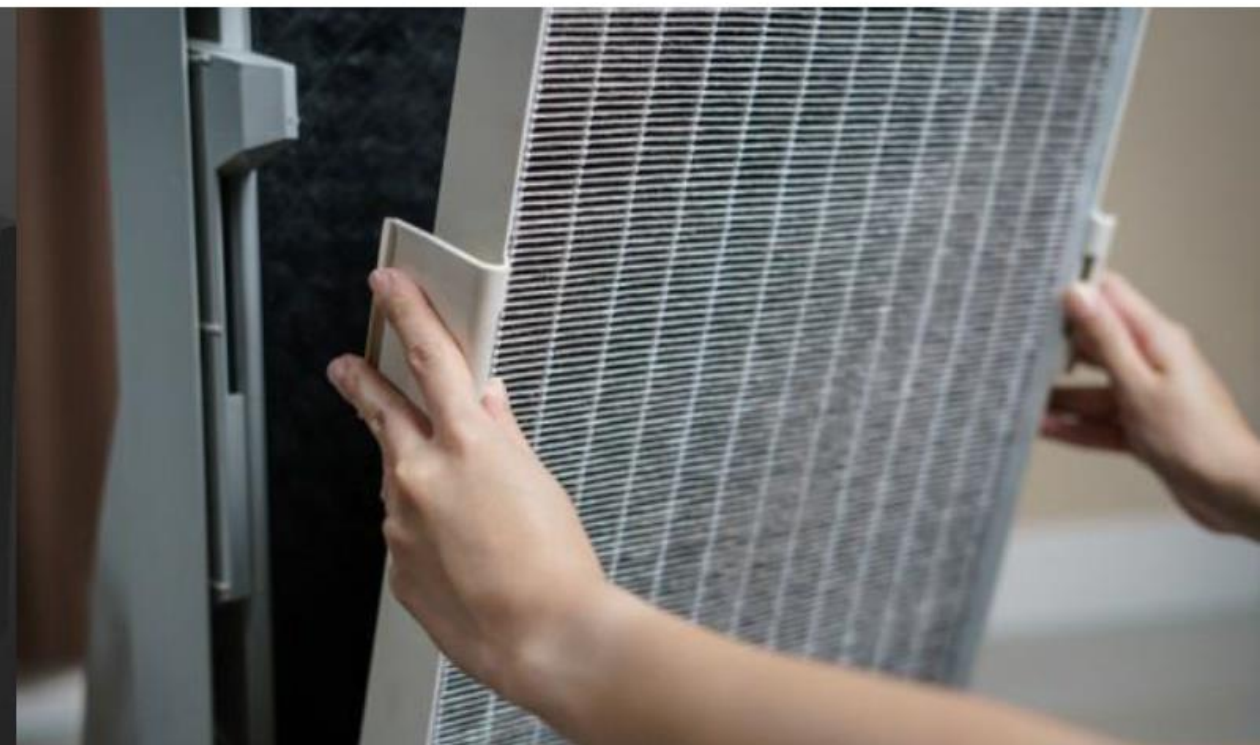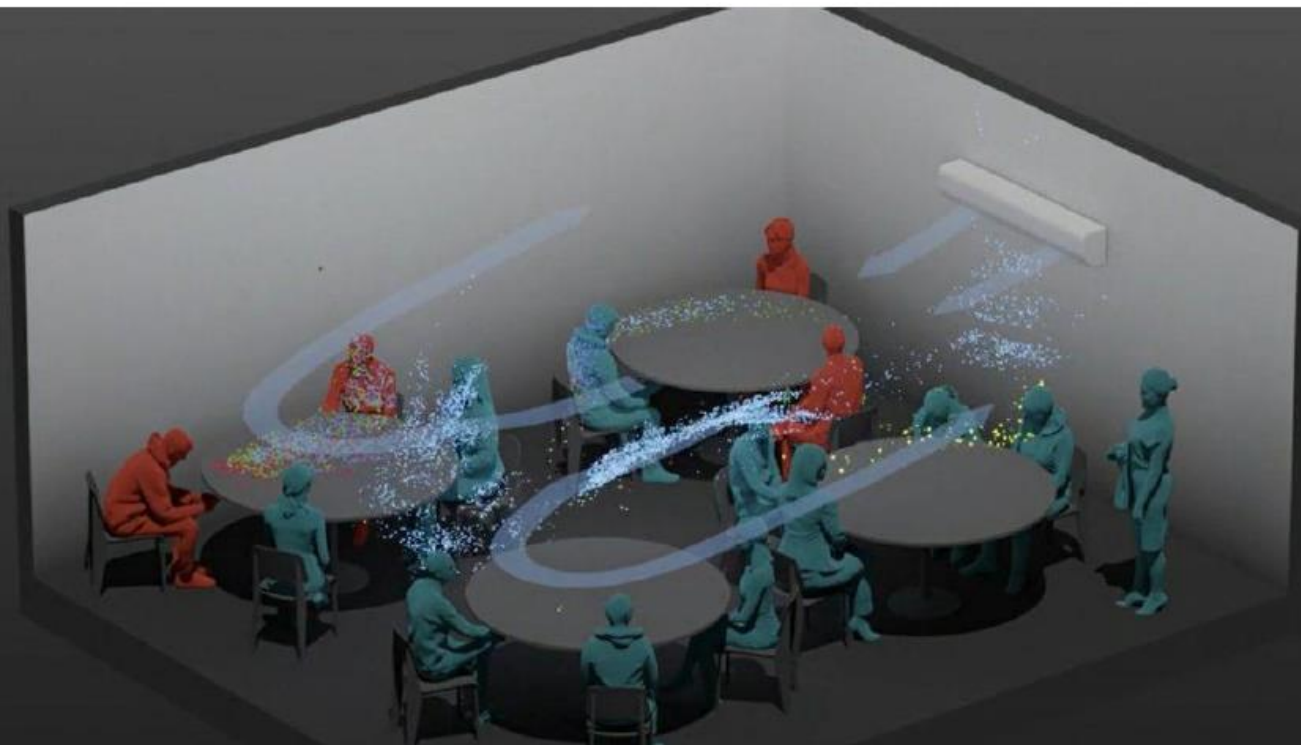
We need more resilient systems

💲 Expensive

🕐 Time consuming

🔍 Not predictive

We need more holistic design
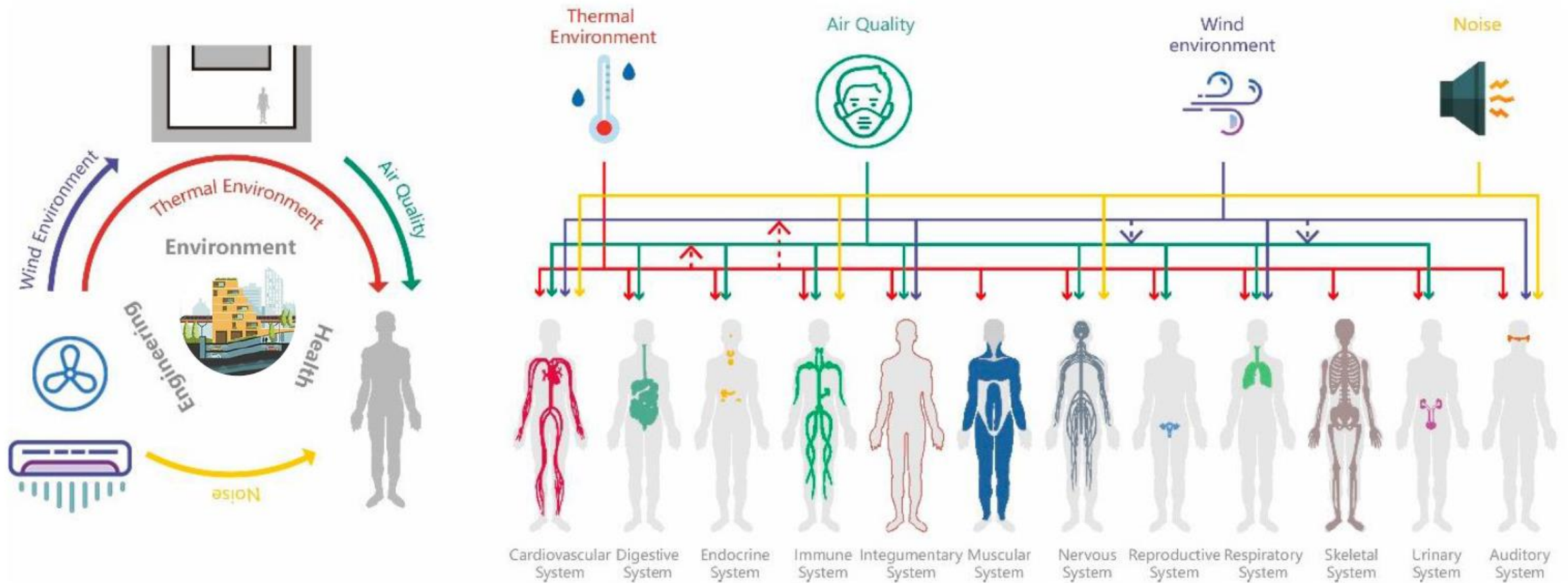
WEAVAIR

End-to-end high accuracy monitoring software & IoT solution to improve safety, reduce maintenance costs

Save energy

Reduce air system failures

Improve air quality

6

WeavAir: making city data actionable

Safer, sustainable, more cost-efficient

Software + IoT diagnosis

Diagnose energy use, pollution hazards, thermal comfort

Cost & energy savings

Save costs, achieve new standard & establish trust

Revenue & reputation

Increase revenue & employee productivity

ROI ~6 months | 10x ROI after 18months

WeavAir for Transport & Buildings

Transport
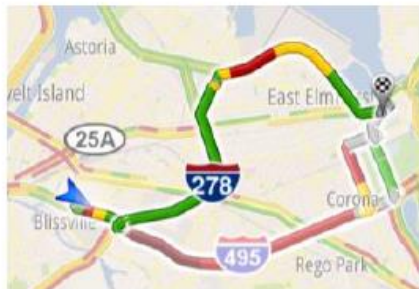
Safety

Reduce infection risks, smoking, fire detection inside public transport

Maintenance & sustainability

Prevent mechanical failures & improve energy efficiency

Wellbeing

Reduce exposure to air pollution through better city routes

Buildings
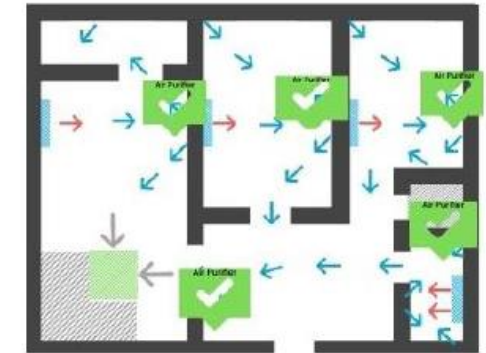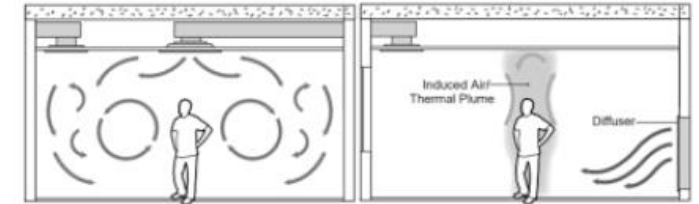
WeavAir end-to-end solution

Real-time decision support

Sensors & AI software

Automation & services

Sensors for high accuracy remote alerts
Predictive software for fast decisions

Predictive maintenance automations
Personalized filtration subscription
Energy efficiency & ESG reporting

3 proprietary technologies

WEAVAIR

WeavSense IP
Advanced sensors
20 metrics, 95% accuracy

People

People counts, status

Air quality

HVAC
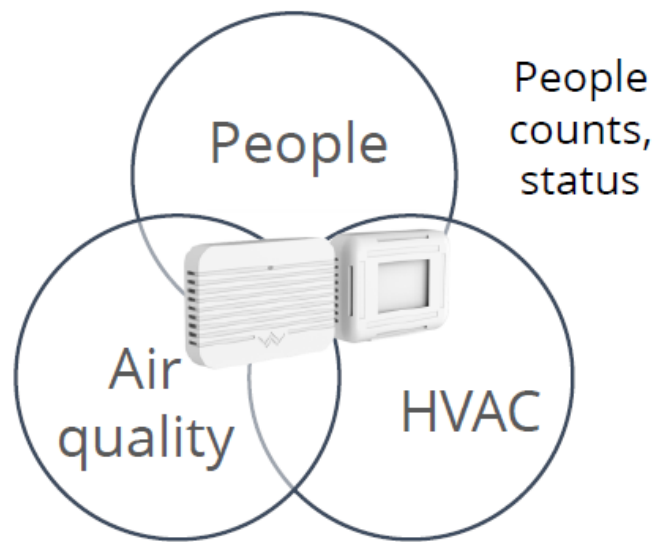
CO, CO_2, NOx, O_3, tVOCs, Formaldehyde, Benzene, Solvents, Odors, Smoke, $PM_{1,2.5,10}$

Pressure, Airflow, Temperature, Humidity, Noise, Light

WeavDetect IP
AI software to enable
200x faster decisions
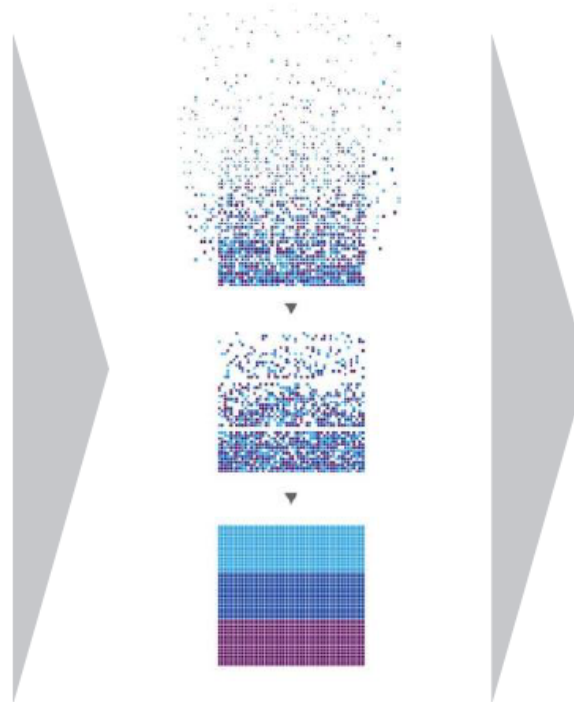
WeavControl IP
20-60% energy savings
30% air quality improvement
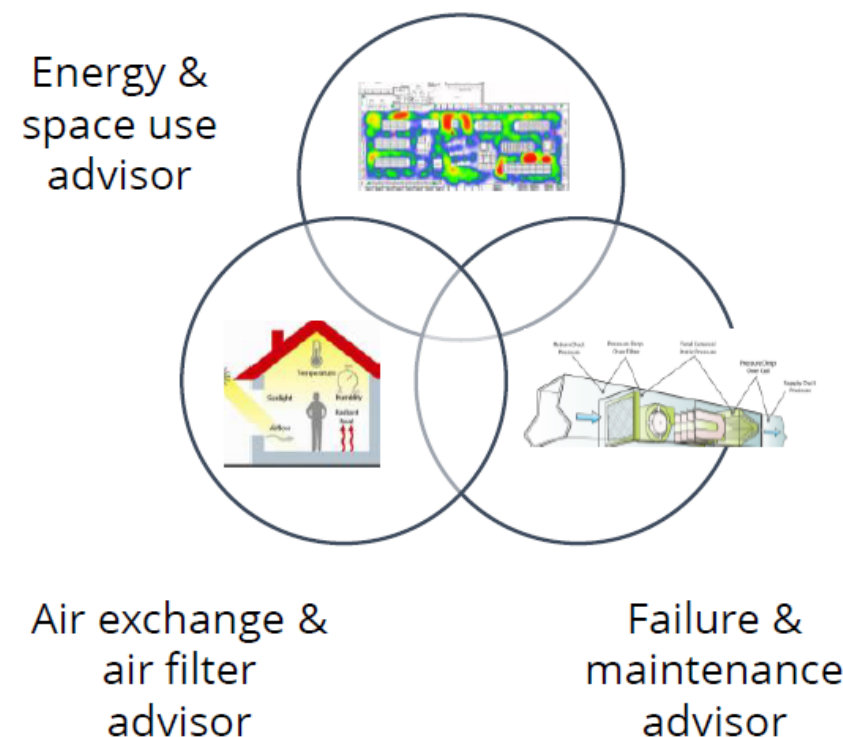
Energy & space use advisor

Air exchange & air filter advisor

Failure & maintenance advisor

Fast to install, integrate & maintain

WEAVAIR

10 min to install
Low maintenance

4G connection works
anywhere
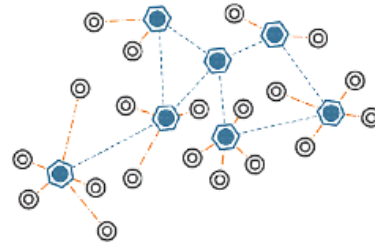
IPTV, security,
messaging integration

Integration with ventilation system not required
Wireless connectivity & battery provided

Value proposition to infra. managers

Reduce costs
ROI ~ 10x /project / year

30%+ energy savings
Reduced air conditioning failures
Reduce risks (hazards, COVID risks)

Increase revenue
ROI ~ 20x / project / year

Increase frequency & duration
of bookings & leases 15%+
Reducing downtime 20%+

Building resilient cities

Phase 1:
Resilient buildings

Phase 2:
Resilient transportation

Phase 3:
Resilient cities

Hotels, attractions, F&B

Transportation fleets, hubs & airports

New standard & certification system

Track record
Projects in South Korea, Singapore, Philippines, Spain, Germany, UK, US

Team

Partners

Customer pipeline

Partners

20 awards across 3 continents

Sample case studies

Organization	Pilot length	Impact
Public transit system	1 month	20%-time savings, 30% improved AQ Extended to station "Best in Innovation Award"
Hotel	1 month	30% time saving High accuracy detection of smoking in quarantine hotels Detection of air quality & air exchange problems
Mixed use building operator	3 months	Proactive maintenance 30% cost savings 20% improved AQ Utility incentives + awards

WeavAir case study

Accurate real-time multi-sensor data
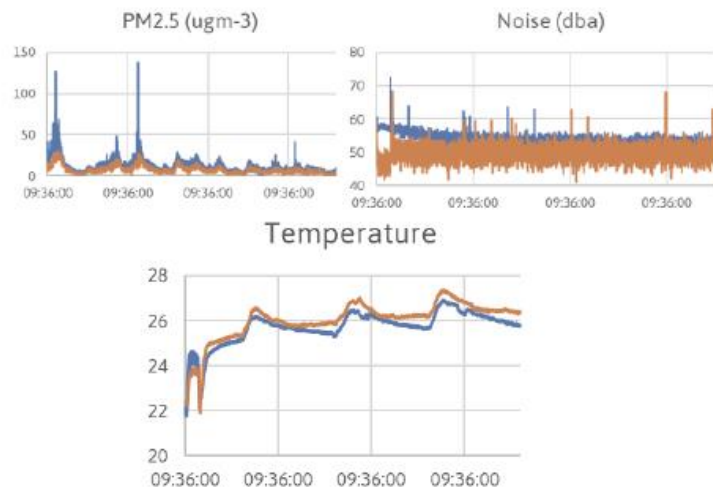
Insights & smart advisory system
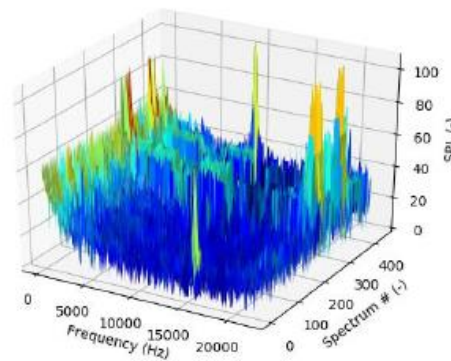
Reduced maintenance cost & improved guest experience via API & dashboard
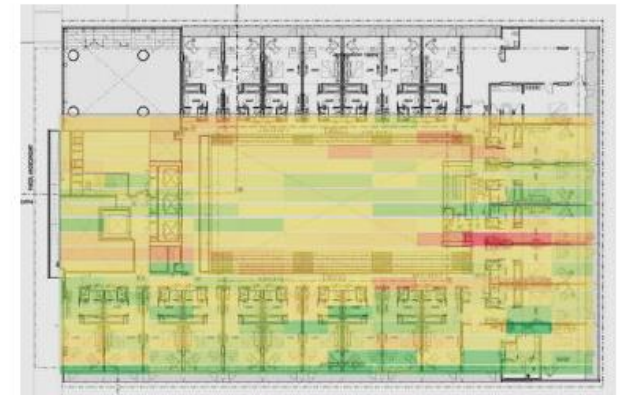
Join us

Looking for partners & collaborators

New virus & bacteria sensor testing

Early access & help design better solution

System integration & control systems

Reduced operation costs & new revenue sources

Consortium for adaptive infrastructure

WEAVAIR CERTIFIED

Help create new standard

20

WEAVAIR

Because every breath counts

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Discussion

Q&A

NADIA FARADILA BINTI JALAWI

Senior Assistant Director of Engineering (Electrical) at City Council of Seberang Perai

BERNARD EWAH

Founder of Digizens Collaborative, Deputy Director of National Information Technology Development Agency, Nigeria

ANGELINA KHODOTOVA

Assistant Manager for International Projects at SRPOST Inc.

YOVIN ANDRIAN

Enterprise Solution Manager at Qlue

NATALIA MYKHAYLOVA

CEO of WeavAir

WeGo
World Smart Sustainable Cities Organization
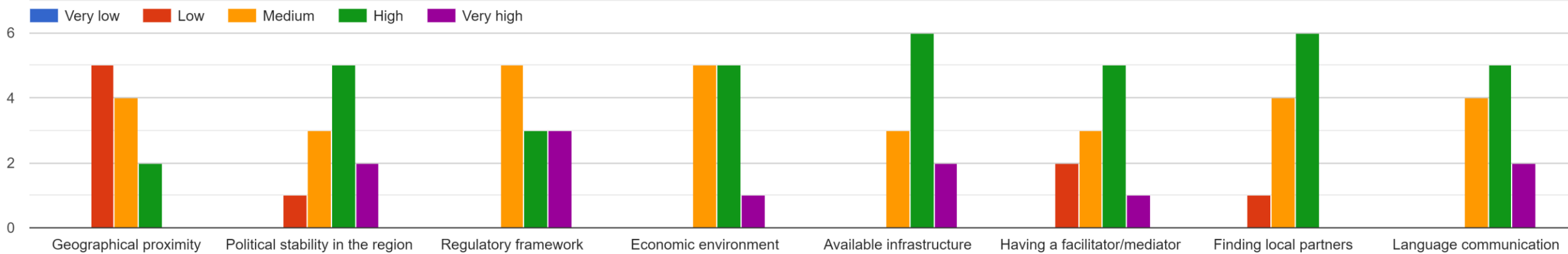
Discussion. Q&A

Q1. What are the most important factors to consider when engaging in international smart city projects (for cities/corporations)?

Q2. How can cities and corporations utilize better the WeGO platforms to achieve their smart city goals?

Q3. What feedback and recommendations do you have for WeGO to improve the Smart City Driver platform?

WeGO
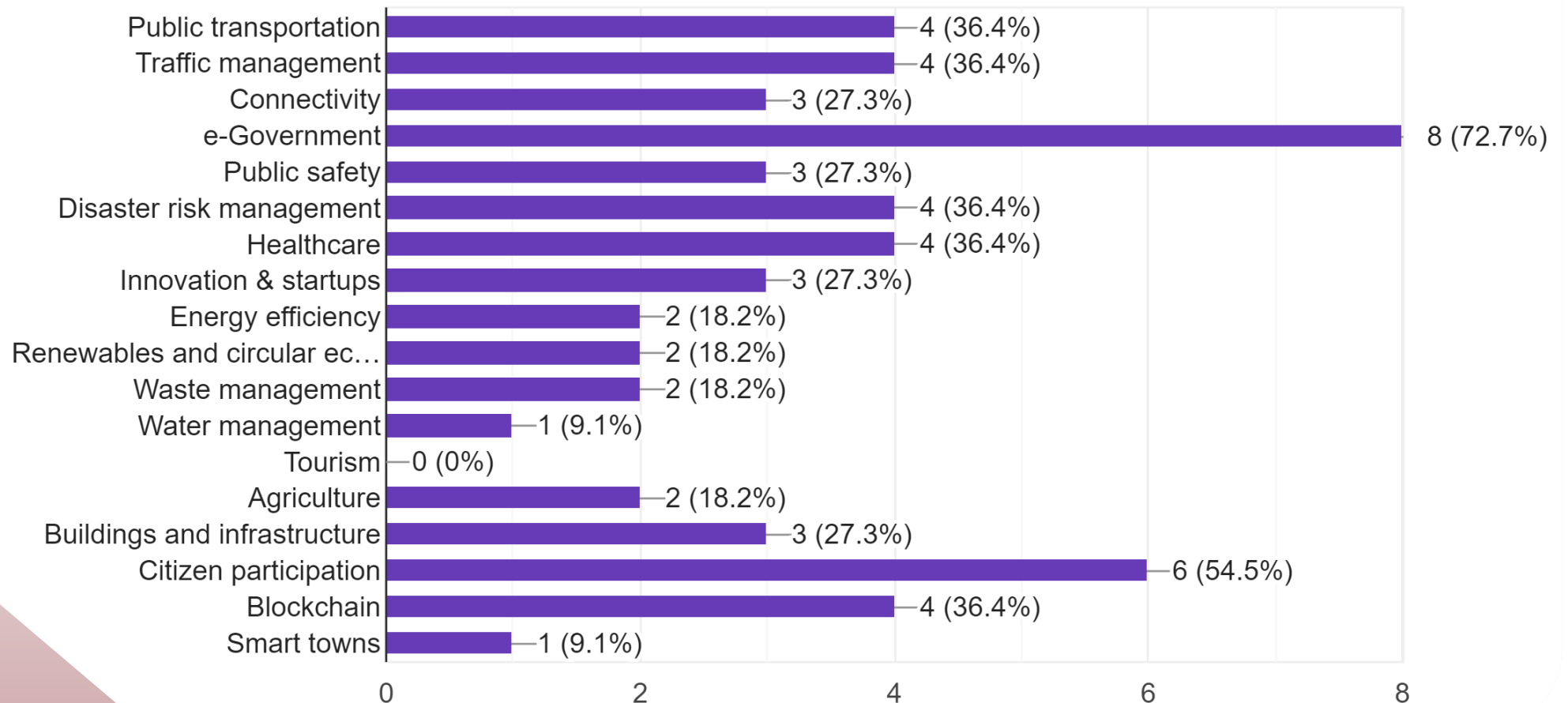World Smart Sustainable Cities Organization

Discussion. Q&A

9. How important are the following factors for your company when looking for international business projects?
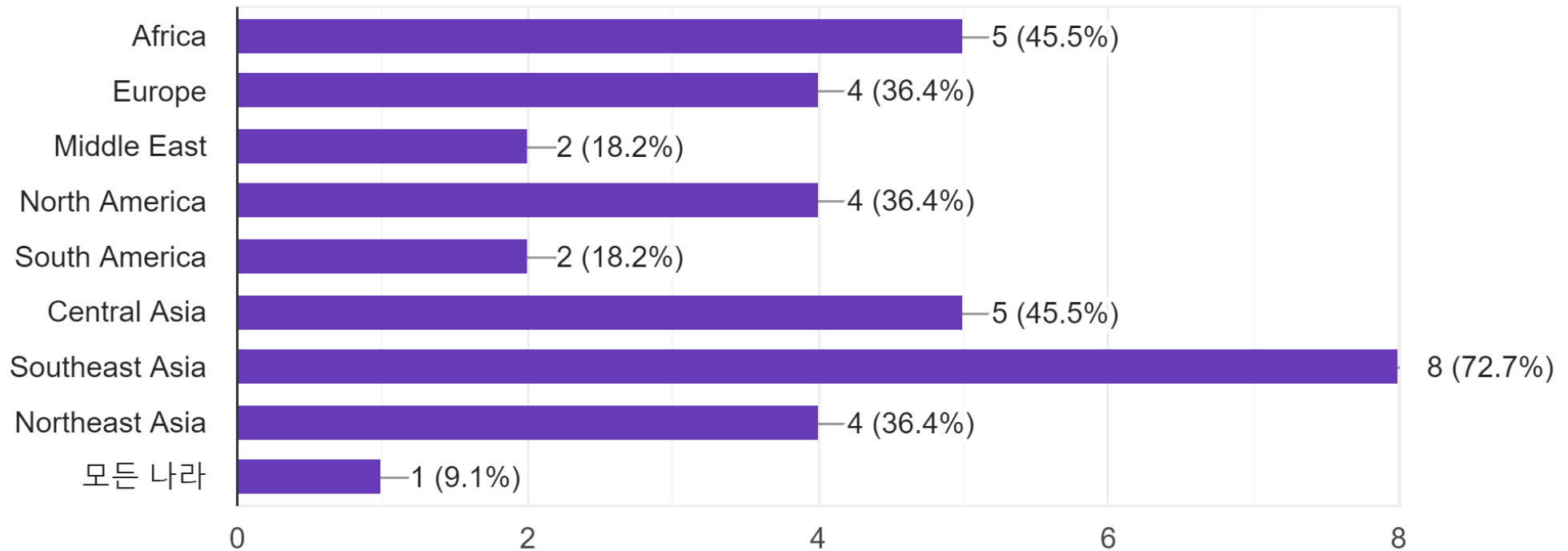
Upcoming

Events

- Africa Smart Cities Network (AfSCN) Seminar, Jun 29

- 2nd WeGO-ASCN Mayoral Conference, Q3/4, 2021

- WeGO 5th General Assembly, Oct 2021

For the most updated version of our activities, please visit the webpage at https://we-gov.org/activities.

Thank you.

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🐦 **/WeGovOrg**

▶️ **/WeGO Secretariat**

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