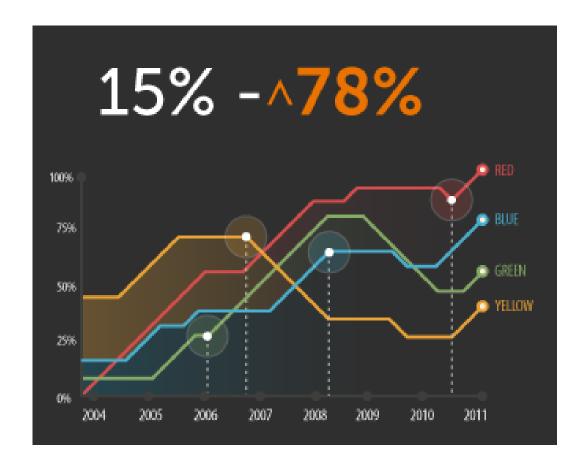
# OAXAR SERVICES Think Geospatial Solutions



## Presenter

Kennedy Kandia, GIS Solutions Engineer, Oakar Services Limited.

Email: kkandia@osl.co.ke



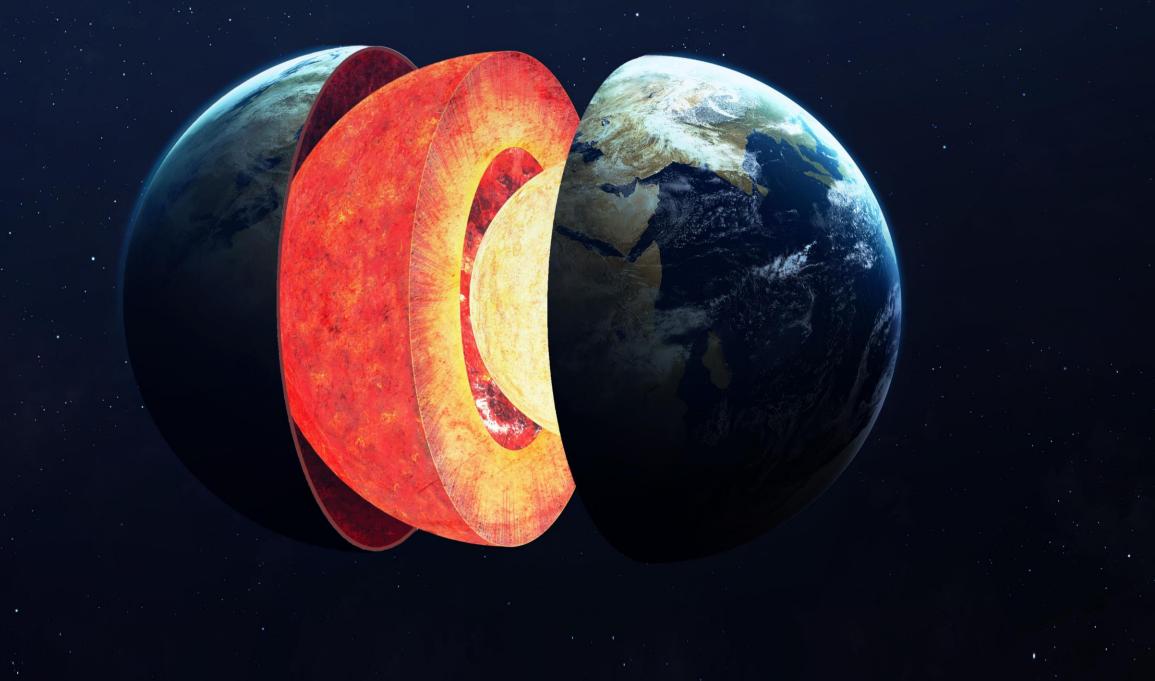


## **Outline**

- Overview of GIS
- Overview Crowdsourcing
- Overview Mobile Alert
- Mobile Alert Architecture and workflow
- Benefits of Crowdsourcing
- Customer References







## Overview of GIS

- GIS continues to evolve and increasingly plays a larger role in the digital transformation of society.
- The maturity of GIS helps users do their work better and helps organizations understand and communicate in many new ways.
- It breaks down organizational barriers and facilitates new forms of collaboration around shared geographic information.
- In recent years, web GIS has gained traction. And so has crowdsourcing.
- Be it urban planning, transportation, healthcare, natural resource management or utilities, GIS is enabling the community to find answers to the most pressing issues.



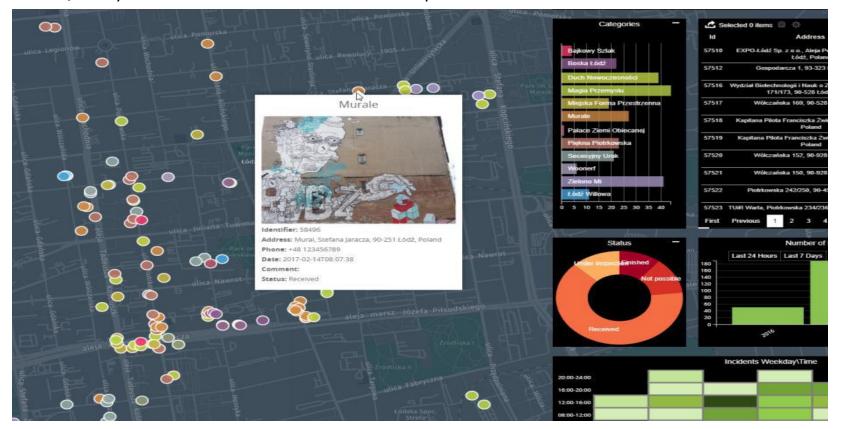
## Why Crowdsourcing

- Crowdsourcing involves obtaining work, information, or opinions from a large group of people who submit their data via the Internet, social media, and smartphone apps.
- Every organization needs to gather and manage data, especially location-based data which can be represented visually on a map.
- For Smart Cities and online communities collaboration and citizen engagement are critical components
- With significant growth in mobile technology and availability of smartphones, crowdsourcing has become the new norm.
- The global crowdsourcing market size is expect to grow from US\$ 1.3 B in 2019 to US\$ 2B by 2024.
- With many problems cities are facing around the world, crowdsourcing tools have proved to be an ideal solution for organizations that wish to promote more efficient community governance i.e. enhance service delivery.
- We are excited to present a crowdsourcing solution (Mobile Alert) for governments, organizations, and cities whose aim is to enhance citizen engagement through e-participation.



## Overview - Mobile Alert

- Mobile Alert is a cloud solution that allows institutions and organization to collect, visualize and act on location data from a large number of people in an easy and effective manner. i.e. concept of crowdsourcing.
- Through Mobile Alert, Citizens easily and anonymously submit information about a phenomenon, include photos and comments using a Mobile Application.
- The org. will the visualize, analyze and determine action for the reported incidences.

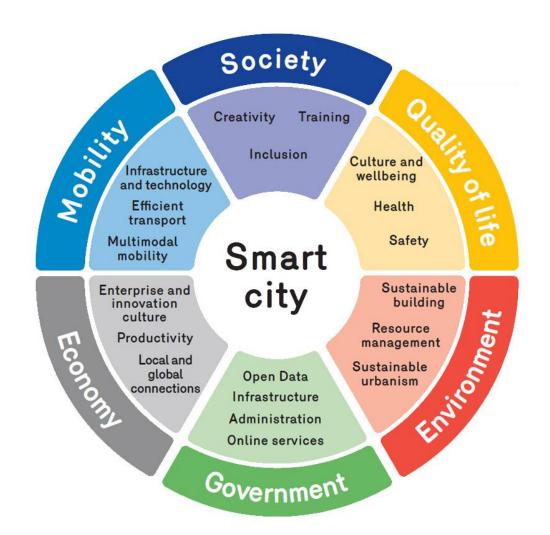




## **Smart Cities, Smart Nations**

- Collaboration
- Sustainability
- Innovation
- Integration
- Participation
- Simplification

https://smartcity.brussels/

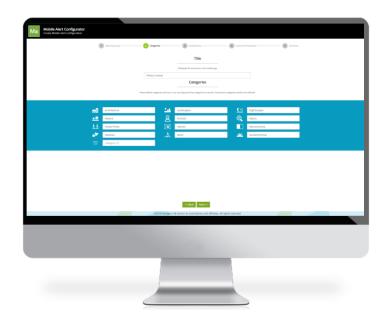




# **Mobile Alert Components**

- Out-of-the-box crowdsource application
- Cloud-based, monthly subscription solution
- Customizable area of service and reporting categories

#### **Mobile Alert Configurator**



#### **Mobile Alert Viewer**

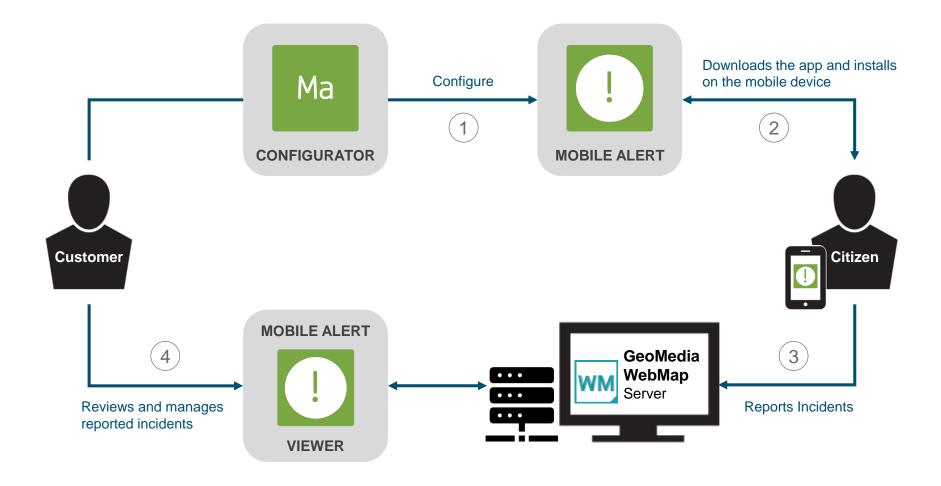


#### **Mobile Alert App**





### **Mobile Alert Workflow**



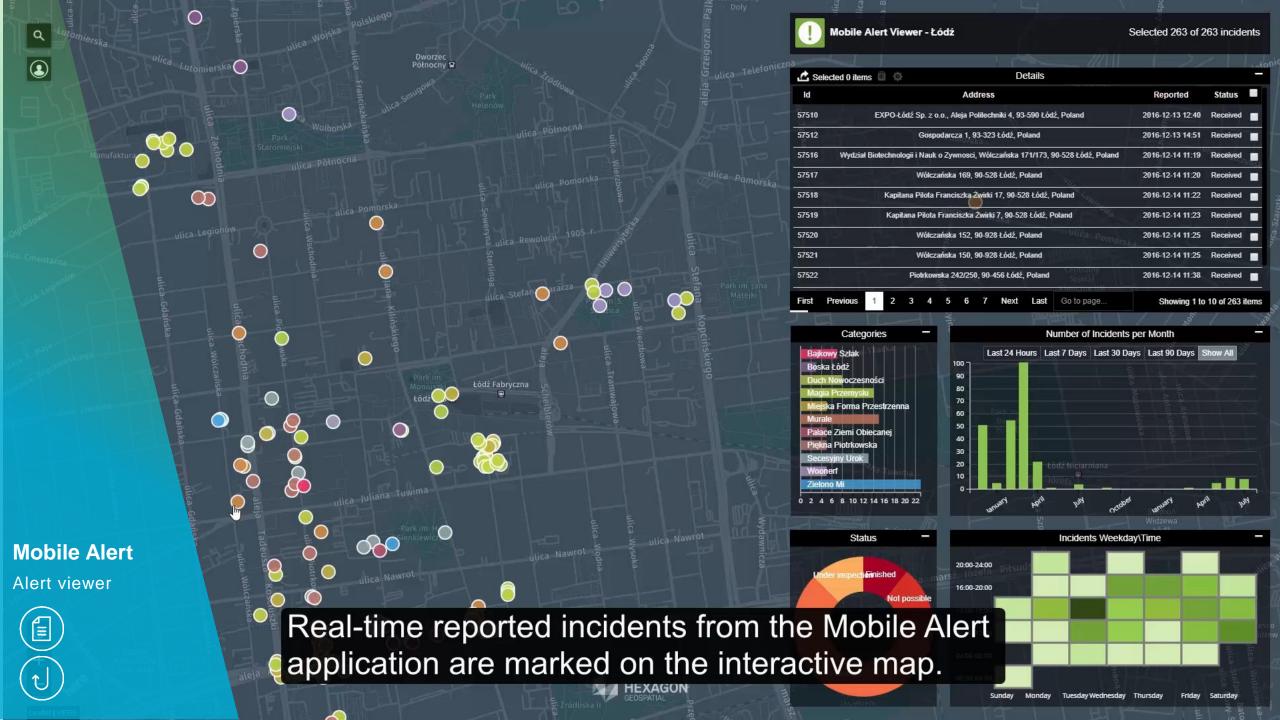




#### **Features**

- ■Photo capture use device camera
- Opt-in functionality provide contacts to subscribing authority
- GPS positioning use devise GPS to get position of point
- Embedded reverse geocoding get nearest street address
- Basemap positioning use base map to position event/incident
- Authority selection select subscribed authority
- Event categories select category of event/incident
- Comment field provide comment (optional)





## **Benefits of Crowdsourcing**

- Crowdsourcing brings together societies around a common project or cause
- Efficient way of solving time-intensive problems where conducting a survey will be costly and time consuming
- Deeper engagement by communities, who resonate and build loyalty to governmental agencies and institutions.
- Cost savings
- Fast data collection speed
- Everyone benefits from collaboration due to more effective communication, more efficient delivery of services and faster response time in the process of reporting and solving issues between organizations, cities and the public.

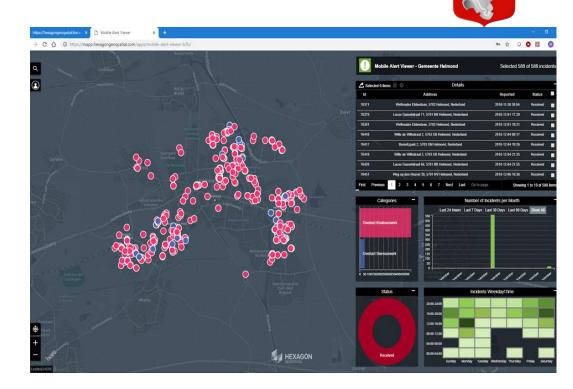


# **Customer References**



# Helmond, The Netherlands – Monitoring Fireworks

- The mayor of Helmond in The Netherlands was having difficulties managing the reporting of citizens using fireworks after hours.
- Mobile Alert was enlisted to allow crowdsourced reporting while keeping public safety officers focused on more vital issues.
- A Facebook campaign was created over the Christmas and New Year's holidays to inform the community about the app and the ability to help local officers address the problem.
- The campaign worked with over 588 incidents reported of unlawful firework usage during the specified duration. These occurrences could then be addressed in an organized fashion without using a significant amount of law enforcement and emergency call center resources.





## Piaseczno, Poland

**F** 

- OMNIGEA's mission is to develop, propagate, and use spatial information and geoinformation techniques to build an information society, which it does throughout its operating area of Poland.
- Mobile Alert was used to open the bottlenecks hindering the flow of information from residents to City Hall, as well as inside the city's governing office between departments and leading decision makers.
- Categories focused included;
  - Potholes
  - Graffiti
  - Litter
  - Illegal parking
  - Poisonous smoke emitting from chimneys caused by burning garbage





## FloodWatch (UK)

- Powered by Ambiental's FloodWatch® engine, this innovative flood forecasting system provides location-specific flood predictions and alert dissemination for up to seven days ahead
- Nearly real-time flood forecasting and its influence on infrastructure.
- Mobile Alert can be used by citizens and field staff to report issues to operators. For instance, the current flood's impact can be pieced together from sources like Twitter feeds and visualized on the map.
- More accurate flood prediction guides city leaders and agencies to deploy the right resources and response teams to affected areas and evacuate citizens with ample notice.





# Thank You

www.osl.co.ke

