WASTE DISPOSAL MANAGEMENT
AND INTELLIGENT LOGISTICS

Application for waste disposal -
Digital services for intelligent monitoring of container levels and logistics route optimization.

SUMMARY

The maintenance-free Z-Node sensors from Zolitron collect vibration data from waste containers. These are analyzed with AI in the Z-Cloud Analytics platform. The levels can be reliably determined in this way. Working closely with codestroyke, an interactive analysis platform was developed to visualize the levels for collection optimization.

CURRENT SITUATION

Recycling and waste collections used to follow fixed plans (routes) or were prompted by customer requests. This causes unnecessary traffic and high logistics costs. Cities suffer from container issues and pollution caused by the traffic. Both should be reduced by intelligent planning of collections and adapted routes for waste vehicles.

PROJECT DESCRIPTION

The aim of the joint project involving Zolitron and codestroyke was to interactively analyze and visualize data about the levels in containers in order to improve efficiency in waste logistics.

REFERENCES

www.zolitron.com
www.codestroyke.com

CONTACT

Christian Walter
Zolitron Technology GmbH
cwalter@zolitron.com

Philipp Mayer
codestroyke UG (haftungsbeschränkt)
pm@codestroyke.com

INDUSTRY 4.0 FEATURES

- Intelligent sensor technology with AI
- Wireless, self-managing communication
- Digital route/logistics optimization
- Analysis platform
- Micro-energy harvesting
- Retrofit hardware

STANDARDIZATION APPROACHES

Data is communicated from the field (the level sensors) to the cloud by means of radio connectivity and transport protocols (MQTT). A standardized decentralized ad-hoc connection using an administration shell and IDS connector could reduce infrastructure costs.

www.zolitron.com
www.codestroyke.com