AI4 WASTE

FOSTERING AWARENESS AND INNOVATION IN ADULT EDUCATION

2023-2-PT01-KA210-ADU-000184346

TOOLKIT

Case Study #8 of application of artificial intelligence to the urban waste management sector in Europe

This publication was developed by the ERASMUS+ project consortium the Erasmus + project AI4Waste: Fostering Awareness and Innovation in Adult Education with the number 2023-2-PT01-KA210-ADU-000184346 coordinated by LIPOR – Associação de Municípios para a Gestão Sustentável de Resíduos do Grande Porto, Portugal.
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Authors
Sucesso Criativos Lda, Portugal

Contributors
LIPOR – Associação para a Gestão Sustentável de Resíduos do Grande Porto, Portugal

Darica Belediyesi

Consell Comarcal del Vallès Occidental

Contact: https://ai4waste.eu
This publication is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International

Co-funded by the European Union

AI4 WASTE
FOSTERING AWARENESS AND INNOVATION IN ADULT EDUCATION
2023-2-PT01-KA210-ADU-000184346

Index

SUMMARY 4

Case Study: Greyparrot (United Kingdom) – AI-Powered Waste Recognition and Sorting 5

How Greyparrot's Solutions Works 5

Benefits of Greyparrot's Solutions 5

Co-funded by the European Union

SUMMARY

Case Study #8 of application of artificial intelligence to the urban waste management sector in Europe – Greyparrot (United Kindgom).



Co-funded by the European Union

greyparrot

Case Study: Greyparrot (United Kingdom) – AI-Powered Waste Recognition and Sorting

Greyparrot, a UK-based company, is pioneering the use of Artificial Intelligence (AI) and computer vision to transform the waste management sector, particularly in waste sorting and recycling. Focuses on developing advanced AI systems that automate and optimize the sorting of waste materials, leading to higher recycling rates and reduced contamination. Aims to tackle one of the biggest challenges in the circular economy: improving the efficiency and effectiveness of waste sorting at recycling facilities.

How Greyparrot's Solutions Works

- **AI-Powered Waste Recognition**: Greyparrot uses AI and computer vision technology to identify and classify different types of waste materials on conveyor belts in recycling facilities. The AI system is trained on large datasets of waste images, enabling it to recognize various waste categories. The key components of the system include Cameras and sensors installed along waste sorting lines; AI algorithms that analyze these images to detect and classify waste materials based on their visual characteristics; The system then automatically sortsthe materials.
- **Real-Time Analytics and Insights**: The Greyparrot system provides real-time data and analytics to waste management operators, helping them gain insights into the composition and quality of the waste streams.
- **Scalability and Flexibility**: Greyparrot's AI system is designed to be highly scalable and can be integrated into existing recycling facilities without significant disruption. The solution is compatible with various waste management processes.

Benefits of Greyparrot's Solutions

- Increased Recycling Rates; Cost Reduction; Environmental Impact; Data-Driven Decision Making

Co-funded by
the European Union