

Business value

Enhanced Sustainability

Increased Recycling Efficiency

Reduction in manual sorting labor, leading to cost savings and more accurate waste categorization

Contribution to Circular Economy

Promoting the circular economy through waste reduction, reuse, and recycling

Decision framework

The waste management image classifier, executives make strategic decisions during the planning phase, mid-level management oversees operational decisions throughout implementation, and IT teams handle ongoing technical decisions. The primary unit of analysis is the individual waste item being classified. Interventions are applied based on system performance metrics to refine the model and processes, ensuring continuous improvement in waste sorting accuracy and system efficiency.

Data-analytic problem

