

The fifth process line

Turning data into operational decisions.

Artificial intelligence in waste management and treatment

David Redondo Pérez

Head of Innovation & AI · Valoriza

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Information also moves through the plant

Waste moves through physical stages. Data helps us understand what happens between them.

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The fifth line is a concept: connecting what we measure with the decisions people make.

AI travels on the truck

TrisTrash

Computer vision applied to waste collection helps detect dumped waste and overflowing bins.

Its value lies in turning an observation into useful information to help teams prioritise service needs.

A signal needs context

01

Observe

An isolated reading describes a state.

02

Interpret

Relating it to the process helps explain what is happening.

03

Decide

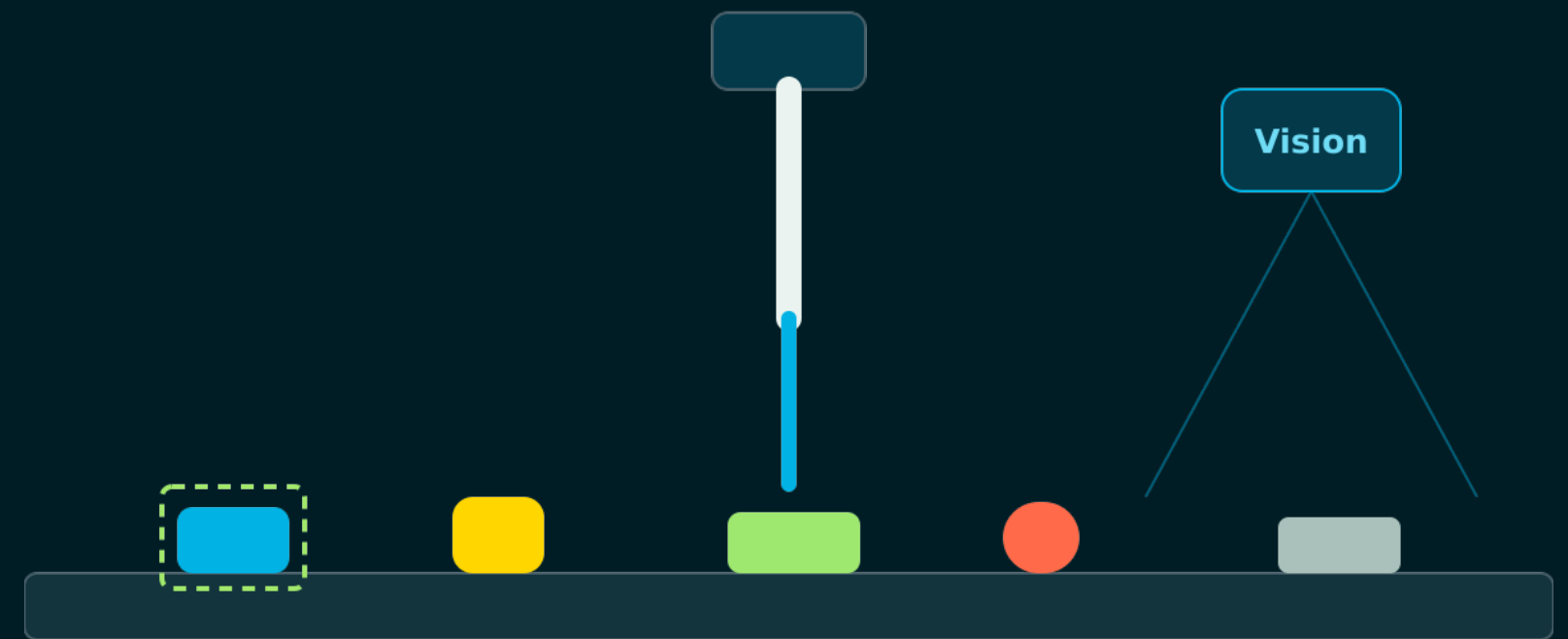
The team checks the information and determines the appropriate action.

Conceptual example. No actual plant data or operating procedures are shown.

Recognising an object makes sorting possible

Computer vision identifies and locates objects. Robotics can then help separate them.

Performance is assessed through material recovery, purity and system availability.



Coordinated vision and picking

[Explore Recycleye technology and videos](#)

Illustrative diagram. Recycleye is an external technology reference, not a Valoriza installation.

People give automation its purpose

Operational experience helps teams assess whether an answer is useful and fits the process.

Human oversight, training and safety remain essential to the use of AI.

Technology should help people make better decisions.

What if a plant could work in the dark?

Less exposure.
More supervised autonomy.

Computer vision may require local lighting. Human oversight, maintenance and safety remain essential.

A future scenario. AI-generated concept image. This is not an actual installation.



Which decision in your plant would improve with better data?

Start with a specific operational need and an outcome that can be checked.

Thank you for joining the conversation about the future of our sector.

David Redondo Pérez

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valorizasm.com