



Redam



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Company introduction



“
A huge multi-national
corporation deploying
global strategies
RXOWORLD
\$2,941,334,427,450
”

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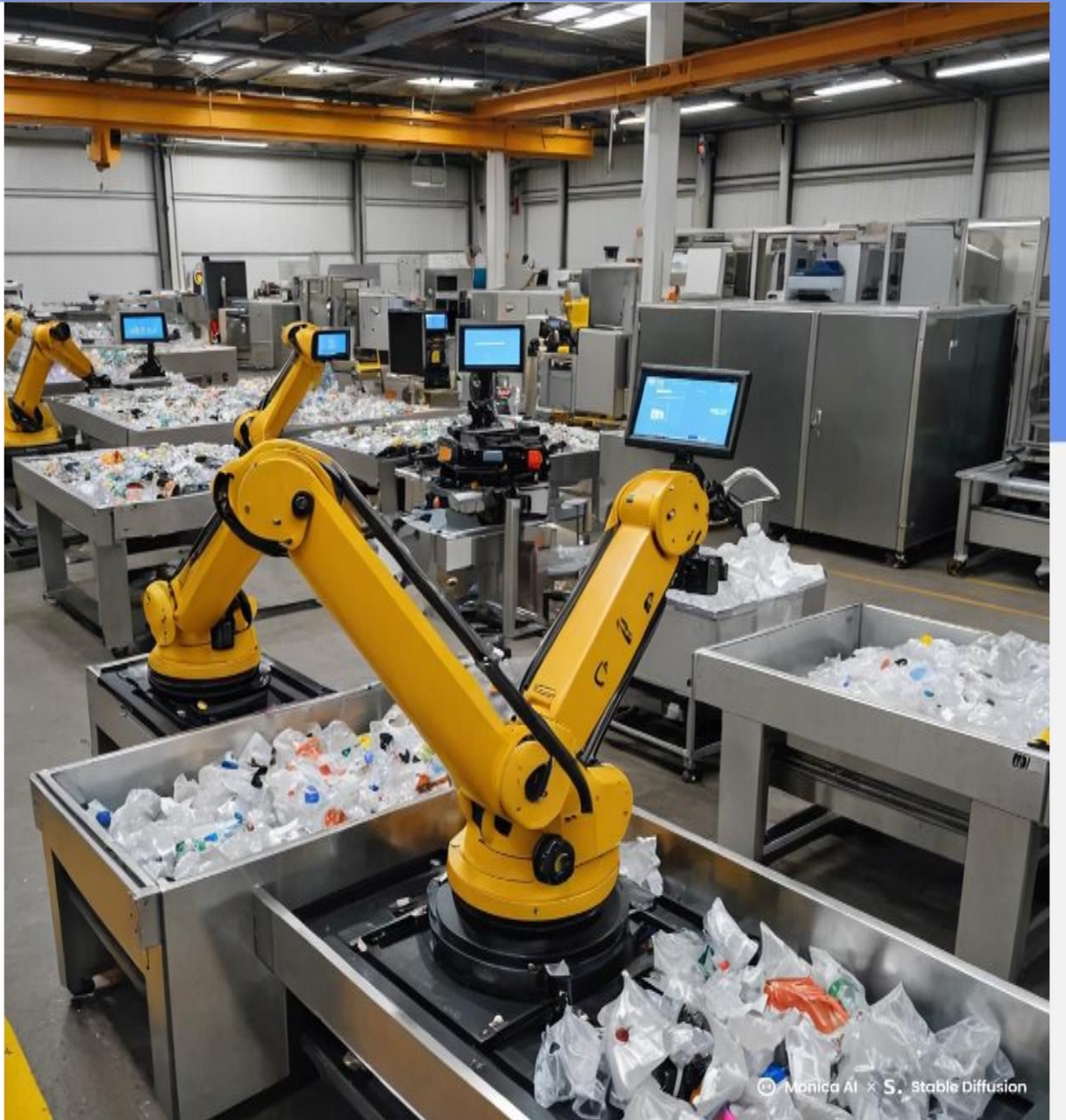
Company Vision: A huge multi-national
corporation deploying global strategies

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Project introduction

ReDam, a portmanteau of "Recycle" and the Korean word "damda" (meaning "to contain" or "to put into"), is an automated system designed to accurately and efficiently process recyclable resources by detecting and sorting waste using artificial intelligence.

Following the COVID-19 pandemic, the increase in contactless consumption has led to a growing volume of household waste and recyclable refuse, a trend that continues to escalate each year. ReDam offers a solution by classifying waste to increase recycling rates, thereby reducing the amount of waste sent to landfills and incinerators.



Technology introduction



Image recognition

Learning images of various recyclables

AI analytics

Real-time analysis of material and shape

Robot motion

Executing accurate waste separation

Using AI trained on thousands of images, an AI robot arm automatically sorts in real-time.

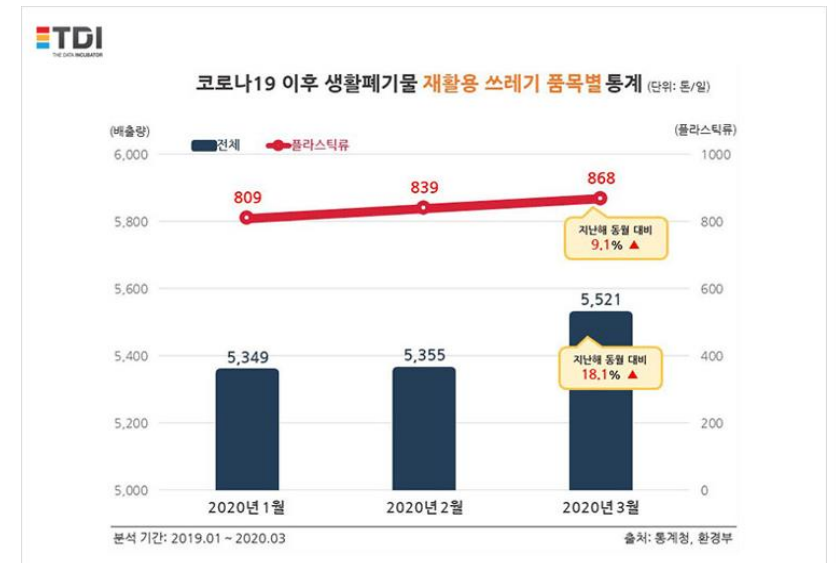


ReDam



A deep learning-trained robot arm identifies and sorts recycled plastics, glass bottles, and cans by material

Following the increase in non-face-to-face consumption since COVID-19, the use of household waste for recycling is steadily growing. There's an urgent need for solutions to address the ever-increasing waste problem each year



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Main features

Main features



AI Machine Learning Robot Arm

An AI machine learning robot arm, trained on diverse recycling images, can assist with sorting recyclable waste, leading to faster operations and reduced labor costs. Each specialized robot arm performs individual sorting for materials like plastics, glass, and cans.

Indoor Safety Management

Robot arms prioritize the handling of waste items that pose fire and personal injury risks, such as used batteries and butane gas canisters. The robot arm checks for residual gas inside these items, punctures them to vent the gas, and then re-sorts them.



Main features



Plastic classification

Detailed classification by material



Dangerous goods handling

Safe protocol operation

Glass classification

Separated by color



Can/Metal classification

Magnetic identification and classification



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Expected effect

Technical Advantages and Effects

AI recycling systems significantly improve operational speed and accuracy.

They lead to reduced labor costs and a higher recycling rate.



Improved recycling separation speed

More than 3 times faster than conventional manual work

Increased accuracy

Classified as performance with accuracy of 97% or higher cost reduction

Cost reduction

Reduce labor costs by more than 30%

PLASTIC



Thank you

