

12:45 pm Pacific Time
October 2, 2024

Track B

Concurrent PM

How Technology & Data are Changing the Landscape of Zero Waste

Speakers:

Jessica Gonzalez

Meredith Danberg-Ficarelli

Valentina Rappa

Moderator: Jamie Kaminski

Hosted by:



Day 1 • Zero Waste Businesses & Institutions

**12:45 pm Pacific Time
October 2, 2024**

Track B



Jamie Kaminski

President

**HSR Zero Waste
(Moderator)**

**How Technology and Data are Changing
the Landscape of Zero Waste**



National Zero Waste Conference 2024

Day 1 • Zero Waste Businesses & Institutions

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Jessica Gonzalez

Founder & CEO

Happen Ventures

**How Technology and Data are Changing
the Landscape of Zero Waste**



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Meredith Danberg-Ficarelli

**WA+TS (Waste Administration +
Tracking Software)**

Happen Ventures

**How Technology and Data are Changing
the Landscape of Zero Waste**



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Valentina Rappa

**Sr. Sustainability Manager,
Circular Economy**

Rheaply

**How Technology and Data are Changing
the Landscape of Zero Waste**



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**HAPPEN[®]
VENTURES**

A wooden crate filled with fresh produce including bread, tomatoes, cheese, and eggs.

Data+Tech **ZEROWASTE**

Social Impact + Sustainability + Savings

ABOUT US

Award winning Happen Ventures bridges the gap between conscious companies and communities by **diverting reusable products wrongly going to waste.**

A solution for businesses **to reduce waste while generating savings** and tax benefits for donating merchandise to people in need **and or creating upcycling opportunities.**

We thrive offer **a more sustainable and cost-effective alternative to recycling, incineration or landfilling.** We are **a solutions company that relies on tech and data to bridge that gap..**

As seen on:



Forbes Inc.



waste
now today

BEST

WORST



HAPPEN VENTURES
IS HERE

EPA
WASTE
MANAGEMENT
HIERARCHY

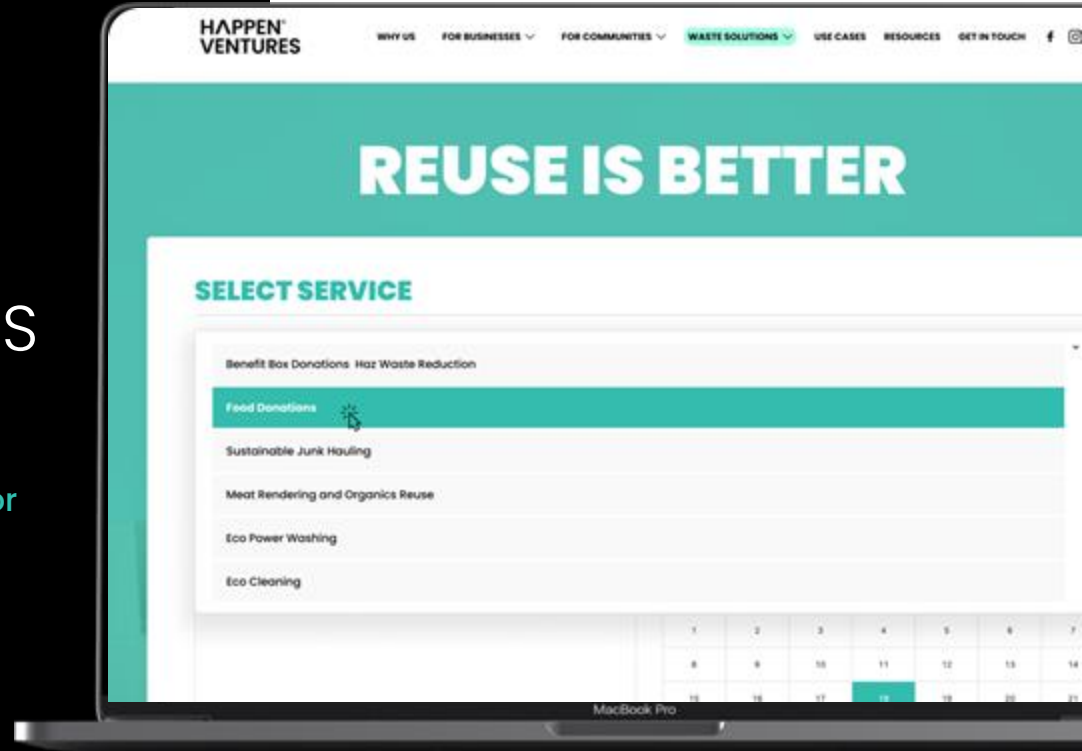


WOMEN
OWNED




ALL IN ONE SUSTAINABLE SERVICES FOR BUSINESSES

Tech can help streamline services once piecemealed and provide national solutions for thousands of locations.



Most Business have similar waste issues

A solution for one can be a solution for most.



Benefit Box
Donations
Haz Waste
Reduction

A photograph of a cardboard box filled with various household items, including bottles and containers, representing a benefit box for donations and hazardous waste reduction.



Food Donations

A photograph of a cardboard box filled with fresh produce, including apples, oranges, and bananas, representing food donations.



**Sustainable
Junk Hauling**

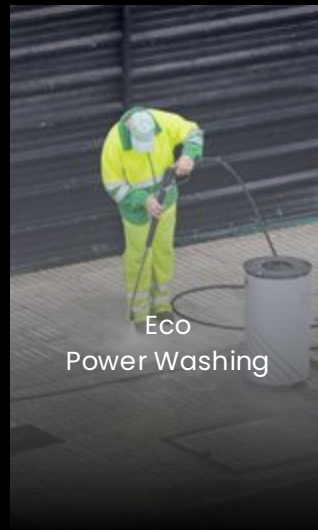


A photograph of a man in a high-visibility vest working in a warehouse or storage area, representing sustainable junk hauling. A white cursor icon is overlaid on the bottom right of the image.



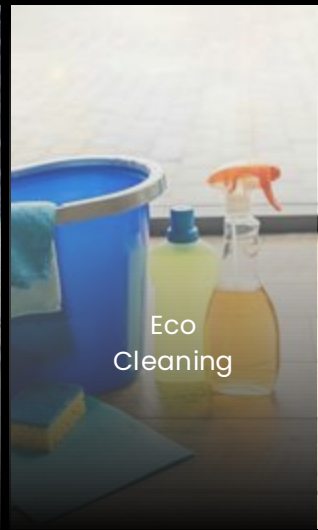
**Meat Rendering and
Organics Reuse**

A photograph of a green bucket filled with various food scraps, including vegetables and meat, representing meat rendering and organics reuse.



**Eco
Power Washing**

A photograph of a person in a high-visibility suit using a power washer to clean a concrete surface, representing eco power washing.



**Eco
Cleaning**

A photograph of cleaning supplies, including a blue bucket, a spray bottle, and a sponge, representing eco cleaning.

DDDDDDATA

Happen Ventures uses data / tech to create matches for items to be reused either sold, donated or recycling taking into account the material, the condition, the volume and the location. This allows us to get items to closer end of life streams saying on CO2 emissions and cost. Data also allows us to show diversion metrics which measure the success of a program.



WITH DATA AT YOUR DISPOSAL **in one place**

HAPPEN[®]
VENTURES

- Impact/ Diversion Reports
- Pickup Calendar
- Pick up Details
- Organizations Donated To
- Donation Pictures
- Donation Documentations
- Weights
- CO2 Impact



SMALL CHANGE, **BIG BENEFITS**

UNSELLABLE ITEMS



Returns



Expiring or Expired Items



Slow Moving



Slightly Damaged



Open products



Electronics



Hazardous Materials



Bulky items



Cardboard, Paper, Plastics



**Set Apart
For Reuse**



**Reduce
Waste**



**Lower
Bill**



**Boost
Brand Image**



**Throw It
Away**



**Pay For
Disposal**



**Risk Fines For
Hazmat**



**Exposed To
Bad Press**



RESCUED COOLERS: 60% COST SAVINGS AT WALGREENS

Happen Ventures rescued Walgreens' coolers from costly recycling, diverting them to food banks and achieving a 60% cost savings

Walgreens



THE SINGLE SHOE

Through our matching program, we diverted surplus shoes from a retailer to a local nonprofit, preventing landfill waste and benefiting the community.

Burlington



SODIUM STEARATE SOLUTION

Turning Waste into Rebates" Summary: "By identifying an upcycle opportunity, we provided our waste management partner's customer with a rebate on truckloads of sodium stearate, turning what was once considered waste into a valuable resource.



HOTEL LINENS FIND NEW PURPOSE AT RECOVERY CENTER

A luxury hotel in Banff donated nearly-new towels and linens to a recovery center in Calgary, transforming potential waste into essential comfort for its residents.



UNSOLD HOLIDAY ITEMS CREATE JOY FOR A FAMILY

Unsold holiday items from a store were donated to a family, bringing festive cheer and unforgettable memories to their home for the first time.

Burlington



TURNING MEDICAL WASTE INTO LIFESAVING CARE

"Transforming expired IV bags into crucial medical resources, we provide essential treatment for animals in shelters, minimizing waste and maximizing impact."

 **Stericycle**[®]

RESCUING POCKI STICKS

A Fresh Approach to Food Bank Distribution
Summary: "Instead of sending newly expired Pocki sticks to the landfill, we swiftly deliver them to food banks for distribution, at a fraction of the cost of disposal"

TURNING WINDMILL SCRAPS INTO POOL LINING: A SUSTAINABLE SOLUTION

"Repurposing carbon scraps from windmill manufacturing as pool lining offers a cost-effective and environmentally friendly alternative to landfill disposal."



PREVENTING FOOD WASTE: TRANSFORMING MISSED PICKUPS INTO MEANINGFUL DONATIONS

By optimizing pickup schedules, we helped our retail partner divert surplus food from landfills, ensuring it reaches those in need through timely donations."

REPURPOSED FIXTURES AID UNDERSERVED COMMUNITIES

Usable fixtures from an unused batch were donated to a nonprofit, enhancing living conditions for less fortunate communities instead of being discarded in a landfill.



RECOVERED GOWNS ENHANCE NIGERIAN HEALTHCARE

Gowns that were nearly discarded were donated to women's hospitals and the Association of Doctors in Lagos, providing essential support and improving patient care.



TRANSFORMING BEAUTY FOR A SECOND CHANCE

Rescuing beauty products just past expiration, we redirect them to women in jail second chance programs, offering new hope and opportunities while reducing waste.



LET'S
WORK
DONATION
TOGETHER

HAPPEN[®]
VENTURES

We make things happen.

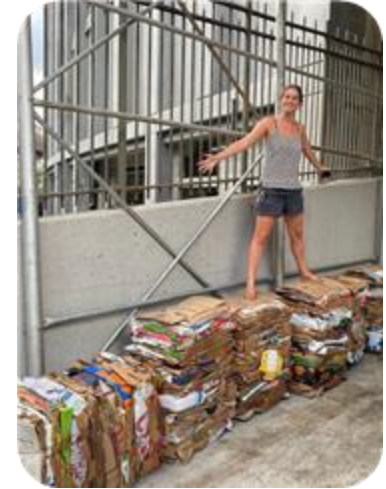


National Zero Waste Conference 2024

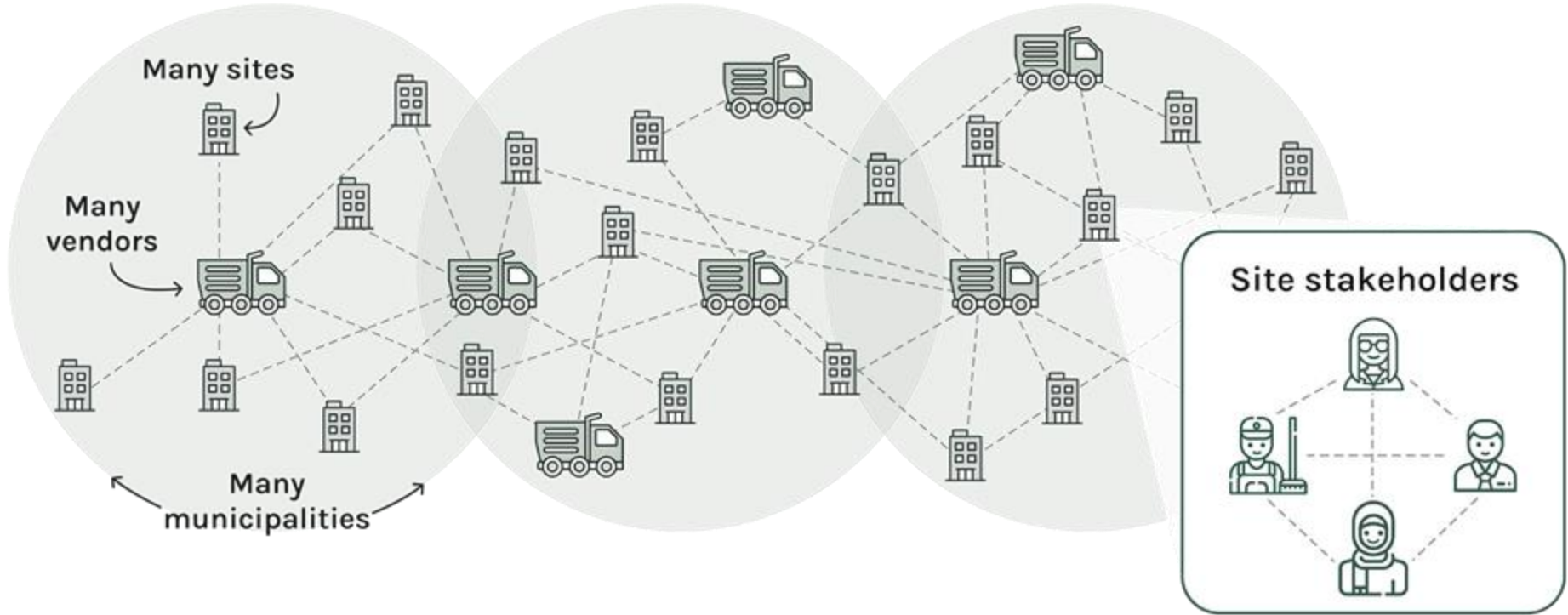
Tech + Data are Changing the
Landscape of Zero Waste

Meredith Danberg-Ficarelli
Co-Founder + CEO

We are business waste reduction experts



Waste operations for multi-site entities is complicated



WATS delivers waste optimization guidance to sustainability teams

Save money

Divert + reduce waste

Automated, site-specific waste management plans

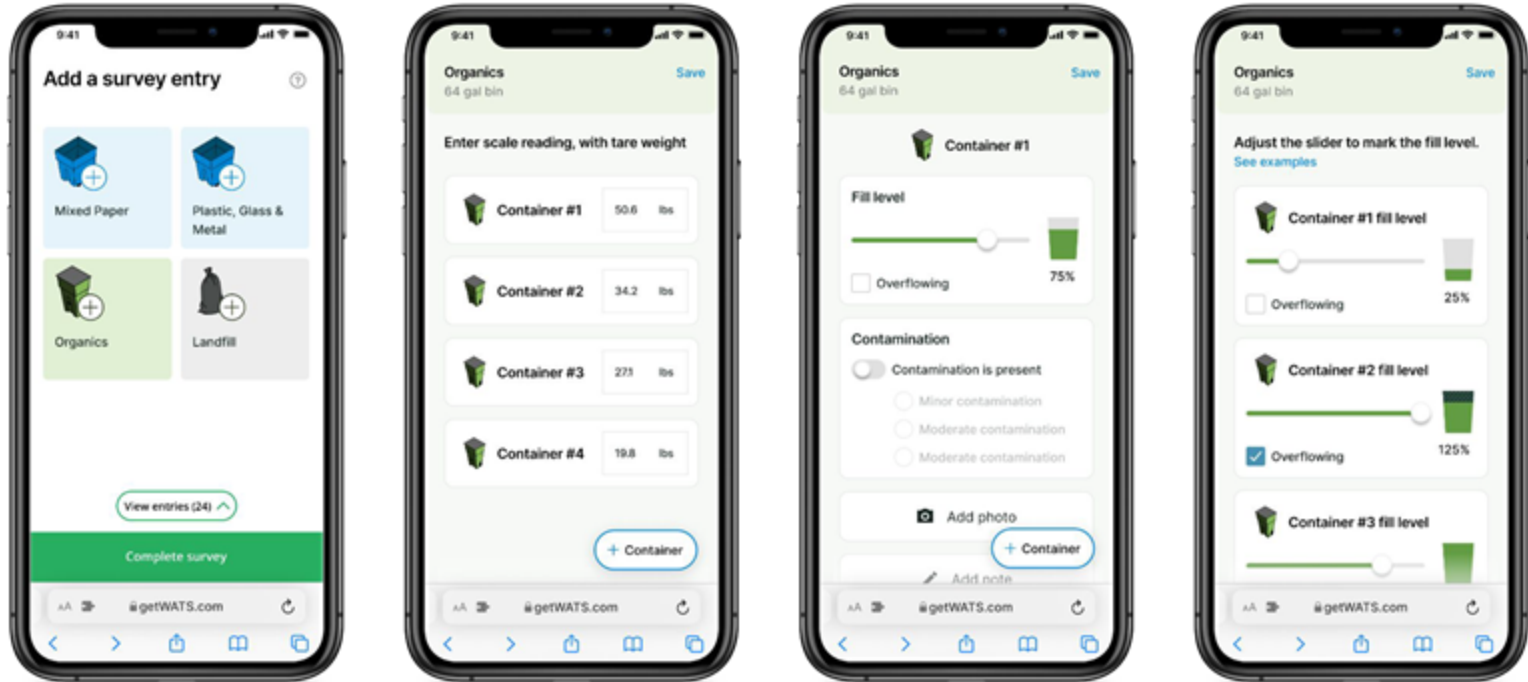
WATS 765 Lexington Ave ·

Waste Management Plan Copy Link

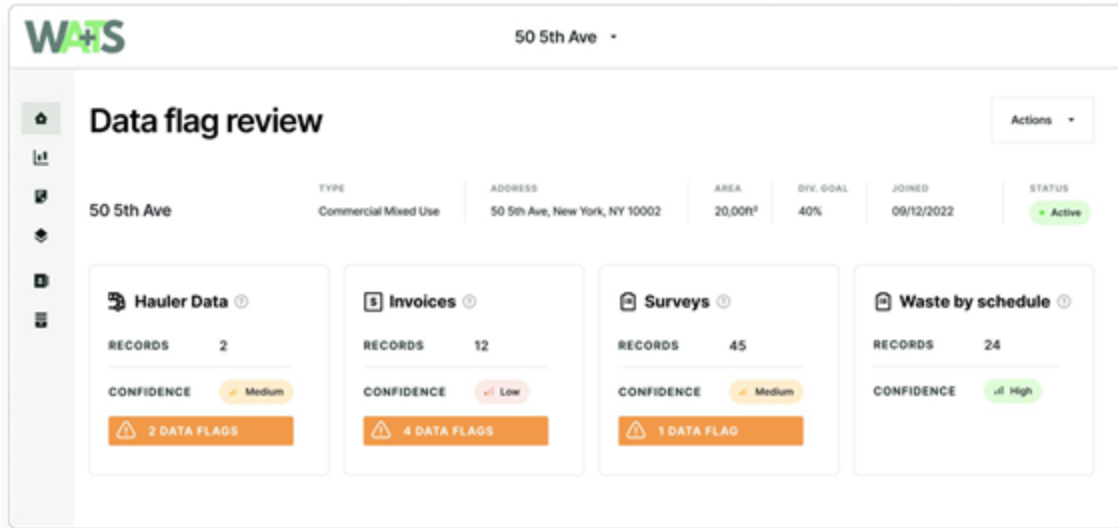
WASTE STREAM	VENDOR	FREQUENCY	SCHEDULE	CONTAINER
Organics	Blue Earth Compost	Weekly	M 8:00 PM T W 8:00 PM T F 8:00 PM S S	Toter 64 gallon
Recycling	ABC Hauling	Weekly	M T W T F S S	Rear End Loader 4 yard
Food Donation	Rescuing Leftover Cuisine	Weekly	M T W T F S S	Tray
E-waste	[4-] 4th Bin	Quarterly	M T W T F S S Last Tuesday of the quarter	Tilt Truck 1 yard
Landfill Waste	ABC Hauling	Weekly	M T W T F S S	Rear End Loader 2 yard
Construction Materials	Cooper Tan Recycling	On Call		Rear End Loader 2 yard

Digitize +
Organize:
Waste Streams
Vendors
Collection
Schedules
Infrastructure

Waste data collection made easy



Improve data quality and confidence in waste data



Recent success story:

40% → 72%

Data confidence improvement in 6 months

Case Studies

WATS CASE STUDY

Saving time for a quick serve restaurant with 400+ locations

Case Study #1



About the Client

- 90 vendors
- Hundreds of jurisdictions
- 8 states

Their Challenges

- Invoices in different formats
- 2400+ PDF invoices/year
- 50 hours spent/month on manual data entry

WATS aggregates all data sources and delivers insights



WATS RESULTS



90 vendor invoices from 400+ sites standardized



Simplified data and automated bookkeeping



Centralized data to reveal cost trends

Case Study #1



70%

time savings



WATS CASE STUDY

Identifying cost savings for a property owner / manager in NYC

Case Study #2



About the Client

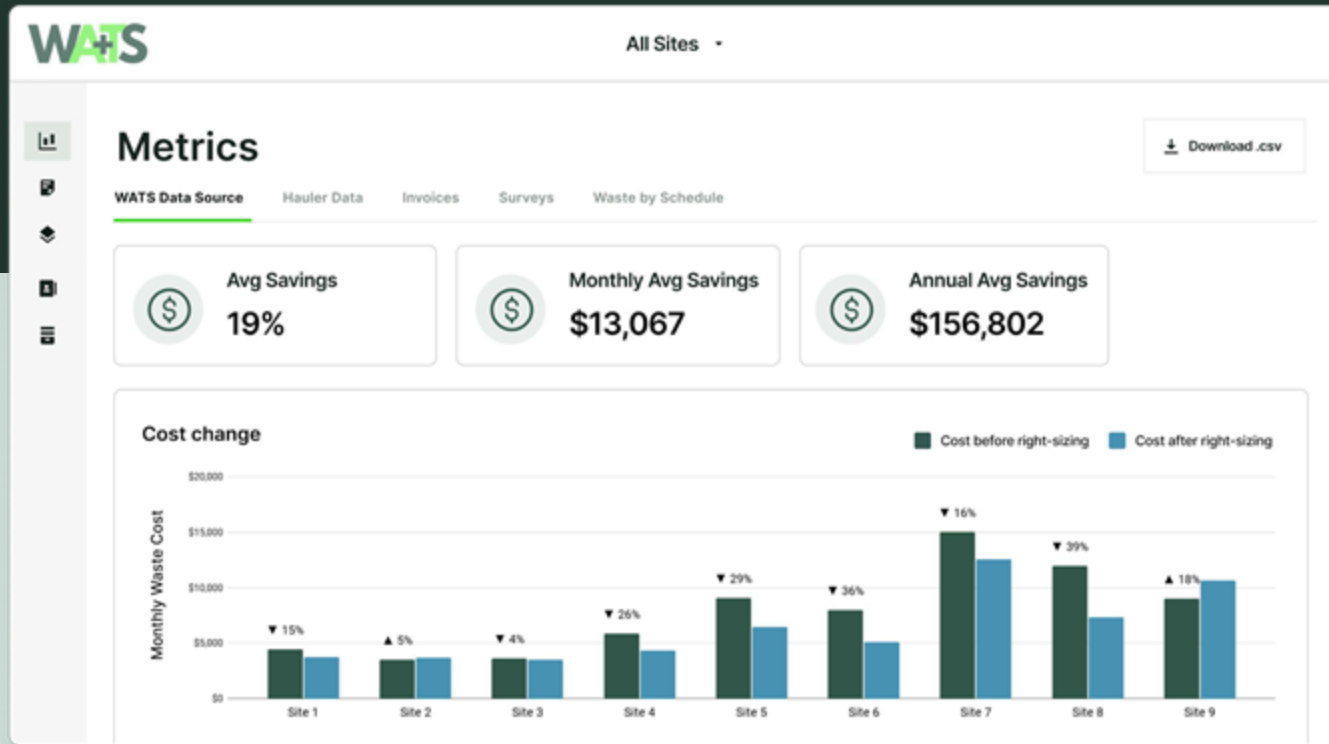
- 15M ft² of property
- Commercial + residential
- Driven by sustainability

Their Challenges

- Post-COVID occupancy low, but hauling was back to Pre-COVID prices
- Property owner did not understand the true price they should be paying for their waste collection given COVID price and occupancy fluctuations

WATS identified 19% potential cost savings

Case Study #2



WATS RESULTS



\$150k across the portfolio for the year across 9 sites



***Future recommendation:*
Right-size quarterly based on 12 month trailing average**



Now, WATS is automatically analyzing cost trends

Case Study #2

19%

cost savings

WATS CASE STUDY

Improving operational compliance for an NYC airport

Case Study #3



About the Client

- 40 concessions
- Multiple stakeholder groups
- Large waste volumes

Their Challenges

- Low transparency into waste ops
- No tools
- No real-time data digitization
- Small team, few resources

WATS RESULTS



Organize + engage with stakeholders

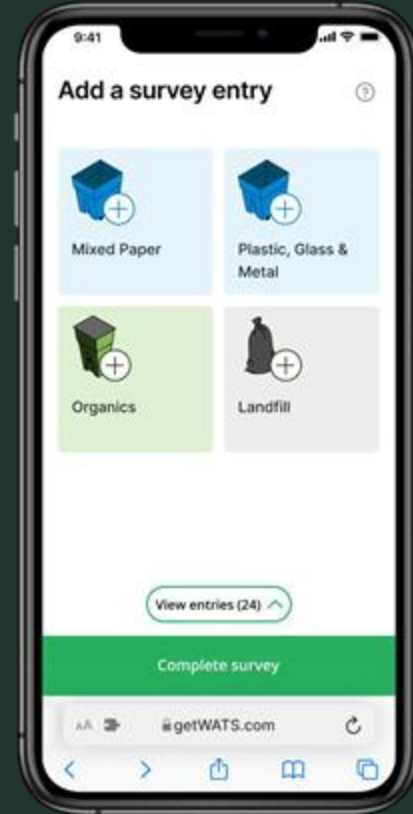


Streamline waste operations



Targeted retraining to drive increased diversion

Case Study #3



Coming soon: automated recommendations engine

The screenshot displays the WATS dashboard interface. At the top left is the WATS logo. Below it is a sidebar with navigation icons. The main content area is titled "Recommended Actions" and is divided into two sections: "Recommended For You" and "Quick Wins".

Recommended For You

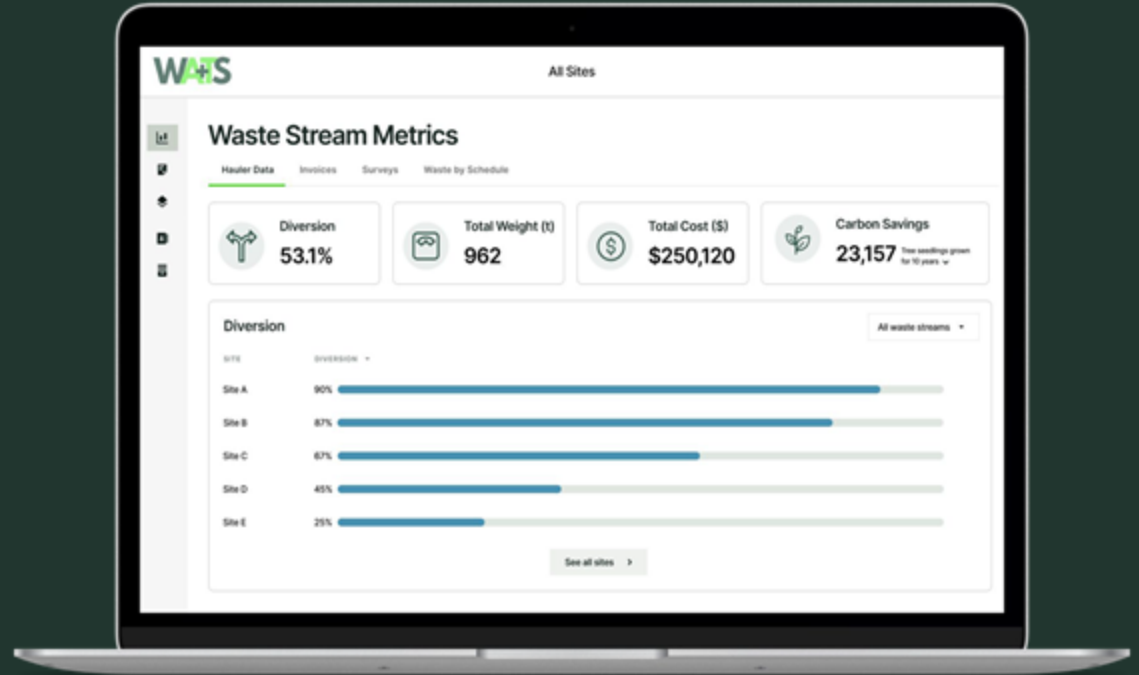
- REDUCTION: Optimize waste collection**
Medium difficulty, 19t CO2e, +7% improvement. Cost: 2.1k USD. Resources: 4.5k USD. 4 people.
- DIVERSION: Launch an organics program**
Medium difficulty, 37t CO2e, +13% improvement. Cost: 2.1k USD. Resources: 4.5k USD. 4 people.
- EDUCATION: Switch to reusables**
Easy difficulty, 14t CO2e, +5% improvement. Cost: 1.5k USD. Resources: 0.8k USD. 4 people.

Quick Wins

- INFRASTRUCTURE: Execute WATS Resource Module 1**
Easy difficulty, 0t CO2e. Represented by a trash can icon.
- EDUCATION: Update waste signage at all points of disposal**
Easy difficulty, 10t CO2e, +4% improvement. Represented by a graduation cap icon.
- DIVERSION: Implement an office supply donation program**
Easy difficulty, 10t CO2e, +4% improvement. Represented by a recycling icon.

Thank you!

meredith@getWATS.com



Rheaply



Panel

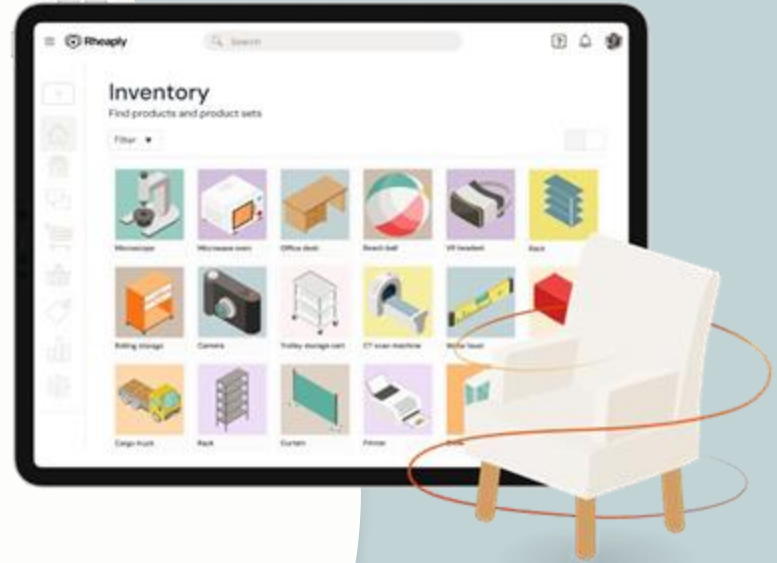
Unlocking reuse potential throughout the product life cycle



Valentina Rappa

Senior Sustainability

Manager, Circular Economy



Our mission

Build a community where every workplace
resource finds its next, best use



Workplace resources represent *a lot of embodied carbon*



45 kg CO₂e
2x its weight



70 kg CO₂e
3x its weight



30 kg CO₂e
2x its weight



150 kg CO₂e
100x its weight

PROBLEM

Each year, companies are burdened with two expensive problems...

\$193 billion

is spent on storing assets

\$450 million

spent on landfill tipping fees



**19
Years**

Illinois' rapidly declining landfill capacity

And these problems create a lot of waste ...

**17 billion
lbs**

of office assets go to the landfills

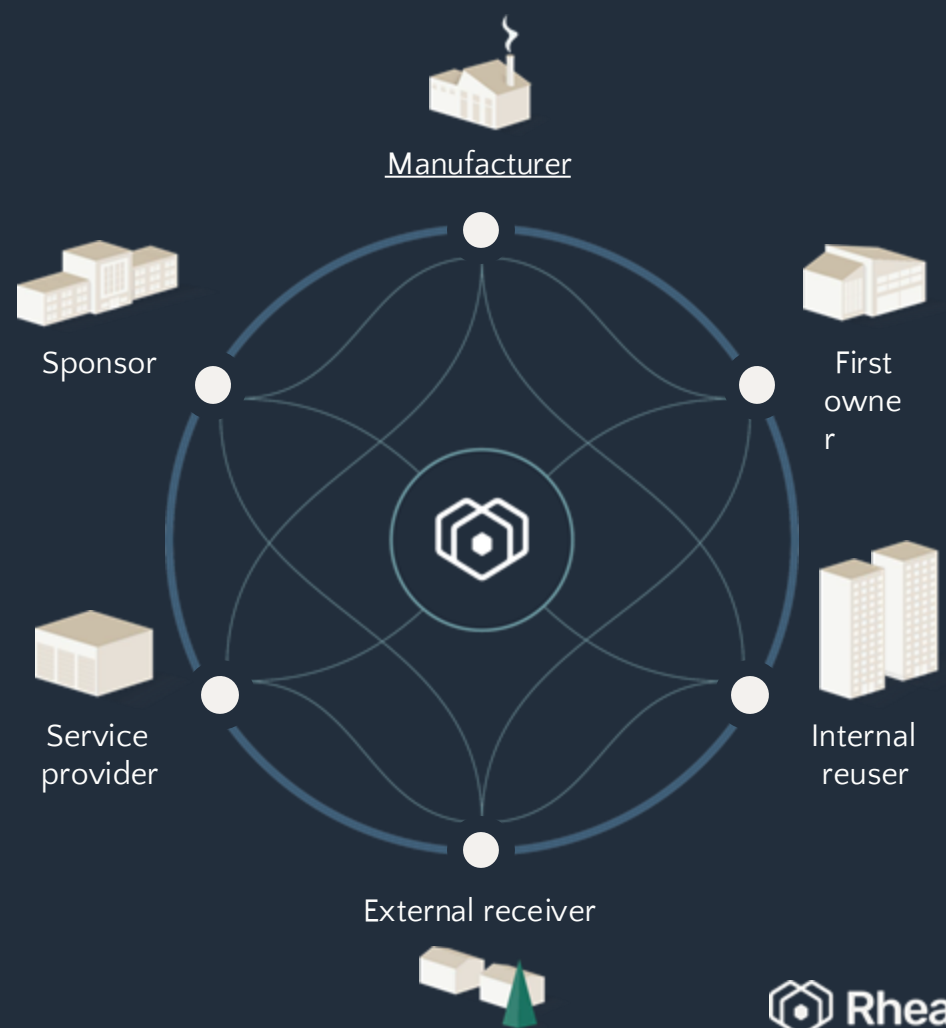
80%

of furniture and equipment end up in the landfill



How Rheaply unlocks the circular economy

Rheaply enables a circular life for an asset with visibility, traceability, and high reuse potential.



Real-time data to inform next, best use

Know what you have

Digitally track and manage what matters to you about your inventory.



- ✓ Save money
- ✓ Improve efficiency

(Re)use what you have

Source from your own inventory and share resources across your organization.



- ✓ Make smarter purchases
- ✓ Boost collaboration

Sell or donate the rest

Extend the life of your assets with donation matchmaking via Rheaply's network of 3,000+ partners.



- ✓ Increase sustainability
- ✓ Expand your network

Rheaply
Platform

Sustainability reporting

Rheaply's platform and services both come with access to our reporting and lifecycle analysis database from our partners at WAP Sustainability Consulting

Embodied carbon reporting partners:



community
impact



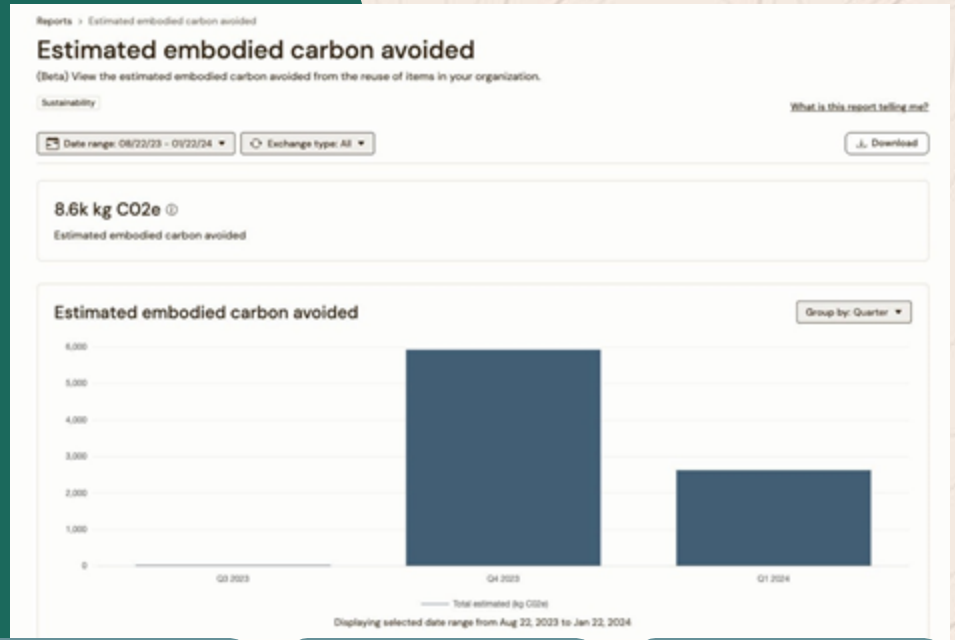
weight recaptured
and diverted
from landfill



estimated
embodied
carbon avoided



value
captured
through reuse



Circular City Initiatives

North Central Texas Reuse Marketplace - Launched on 9/19



Michigan Materials Marketplace - Re-launched on 9/10



Reuse Marketplace Introduction

The Reuse Marketplace is intended to give local businesses and organizations the ability to connect and keep things in circulation instead of throwing them away

Utilizing Rheaply's marketplace software, all organizations now have a way to list surplus items on the platform and donate or sell to other businesses in the region, effectively keeping them out of landfill.



NCTCOG is a regional solid waste planning agency for North Central Texas, betting on a circularity

- Supports a Resource Conservation Council in North Texas
- Provides local governments with technical assistance
- Applied recent grant funding to launch Rheaply and advance materials management programs in North Central Texas
- Maintain “Regional Solid Waste Plan” with Rheaply technology at the core



Workplace resource and building material circularity for capital projects and refreshes

Reuse of furniture, fixtures, and building materials for campus capital design projects and refreshes at a major tech company

In just 17 months Rheaply enabled...

\$1.4
million
Spend avoided

55,000 lbs
Weight diverted

\$372,018
Value donated to
SoLa Impact





[Read about the UAB partnership](#)

Lab reuse with UAB's Green Lab and Environmental Health & Safety

Circulate Internal enables more than 2,000 principal investigators to list laboratory materials.

In just 4 months we saw...

\$262,011

Total value

4500 lbs

Weight diverted

\$113,774

Value recaptured



“Rheapply will not only allow us to achieve our sustainability goals but will also maximize how our research dollars are spent by saving researchers a significant amount of their funding.”

Digitized inventory leads to Democratized demand



Warehouse managers, Facilities managers, Plant managers

Hi, Alexandra Admin
What would you like to do today?




- Manage your items
- Add a product
- Analyze reports
- Scan to edit
- Build saved searches
- Manage users
- Import CSV

Inventory

Find products and product sets

Search [] Location [] Category [] More filters []

Most items available []

Title	Asset tag	Available []	
 Standing Workstation	DIG-FIS-DESK-71	1000 / 1060	...
 Table Lamp	ACC5-LIT-TBL-1	990 / 1000	...
 Herman Miller Aeron Chair	SGAT-CHI-DESK-2	98 / 1000	...



Workspace Designers, Plant managers, Donation partners, small/medium business

Rheaply

Search []

Welcome back, Kiley! 🌟

Buying / Receiving: 1 offer accepted

Rheaply's impact: 277.3 lbs, \$5.9k, 573 kg

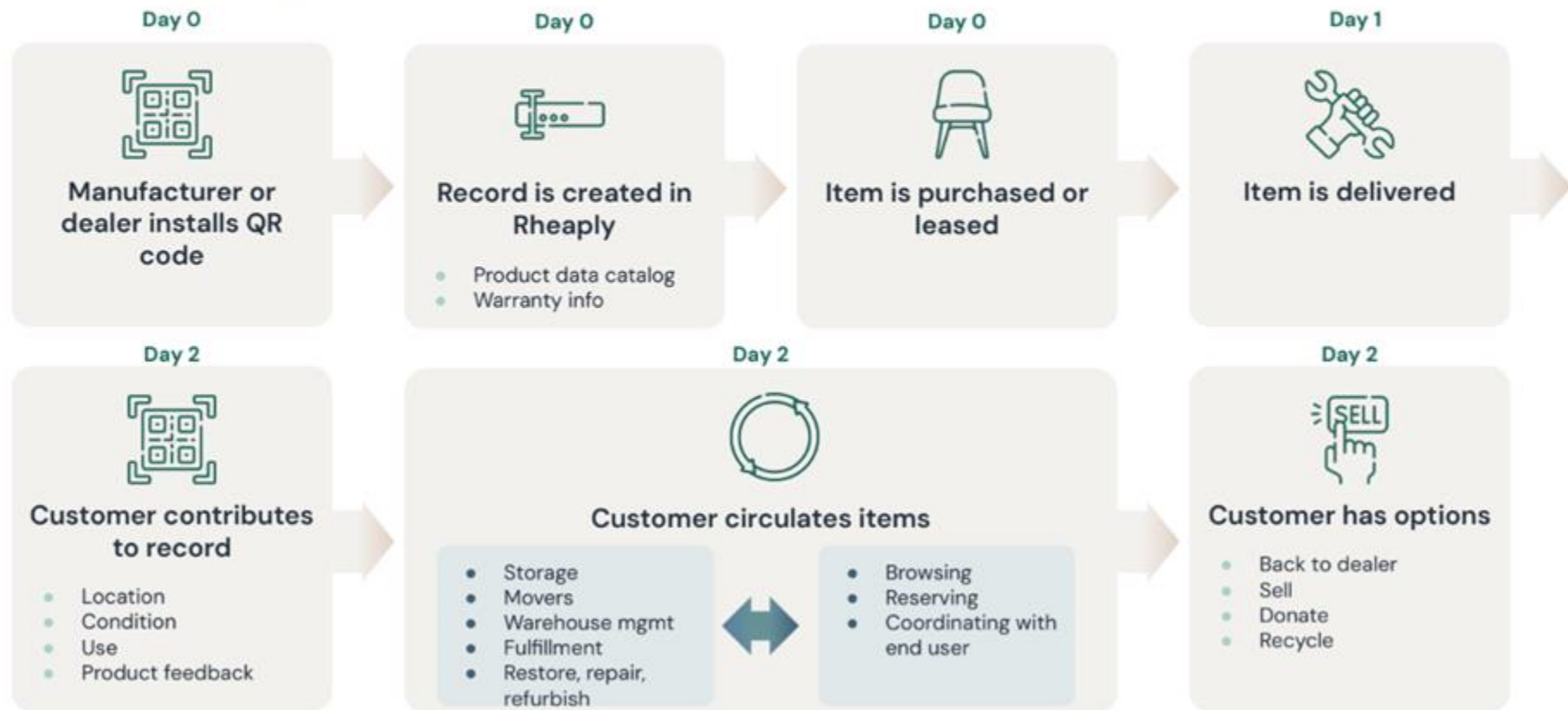
Explore categories

- Workspace
- IT Equipment
- Art & Media

New in your interests

1 Offers listed

Creating digital twins for products can unlock downstream value



Interested in connecting with our team?

Schedule a product
demo



<https://rheapply.com/enterprise/>

Chat with me about
your circularity goals



go.rheapply.com/valentina

Connect at
upcoming events

1. [CoreNet](#)
2. [Greenbuild mindful MATERIALS Pavilion](#)
3. [IFMA World Workplace](#)

Thank you!



Valentina Rappa

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<https://www.linkedin.com/in/valentina-rappa/> <https://rheapply.com/>