





An in-depth look at how customers engage with reusable packaging in the U.S.

About the Center for the Circular **Economy at Closed Loop Partners**

The Center for the Circular Economy ("the Center") is the innovation arm of Closed Loop Partners, a leading circular economy-focused investment firm in the U.S. The Center executes research and analytics, unites organizations to tackle complex material challenges and implement systemic change that advances the circular economy.

The Circular Insights Lab ('the Lab'), housed within the Center, conducts quantitative and qualitative research and data analytics through in-market pilots, focus groups, iterative testing and consumer interviews, identifying circular trends, challenges and opportunities.

About the U.S. Plastics Pact

The U.S. Plastics Pact is a solutions-driven consortium, launched as part of the Ellen MacArthur Foundation's global Plastics Pact network. The U.S. Plastics Pact connects diverse public-private stakeholders across the plastics value chain to rethink the way we design, use and reuse plastics, to create a path forward to realize a circular economy for plastic in the United States.

In line with the Ellen MacArthur Foundation's vision of a circular economy for plastics, which unites more than 850+ organizations, the U.S. Plastics Pact brings together businesses, not-for-profit organizations, research institutions, government agencies and other stakeholders to work toward scalable solutions tailored to the unique needs and challenges within the U.S. landscape, through vital knowledge sharing and coordinated action.

About the Reuse Catalyst Program

The U.S. Plastics Pact's Reuse Catalyst is a pillar of the U.S. Pact's broader reuse efforts to accelerate the cross-industry uptake of reusable and refillable packaging in the U.S. Facilitated by the U.S. Plastics Pact and in collaboration with Closed Loop Partners, the Reusable Packaging Association and World Wildlife Fund, the Reuse Catalyst aims to bolster the development of emerging and established reuse and refill innovators, and the broader industry, through shared learnings, expertise, connectivity and amplification.

The program launched with 20 inaugural participants that were chosen based on the environmental, social and economic impact of their reuse solutions as well as their potential for scalability.

REUSE CATALYST PROGRAM FOUNDERS









REUSE CATALYST PARTICIPANTS









































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A Letter From Kate Daly and Emily Tipaldo

A world without disposable packaging is hard to imagine. In 2018 alone, over 28% of all garbage in the U.S. was comprised of packaging, amounting to 82 million tons of material typically thrown out after just a single use. How can we re-envision this linear, take-make-waste system? How can we keep valuable resources in circulation for multiple uses in a more circular economy?

Advancing reusable packaging solutions is one place to start. Unlike single-use packaging, reusable packaging solutions are designed to accomplish a minimum number of trips or rotations, beyond just one use. To achieve the widespread uptake of reusable packaging, customer support is key. As this report explores, if we seamlessly integrate reusable packaging into peoples' daily lives and routines, removing friction or barriers, we can transform reuse from a lofty ideal into an everyday habit.

The potential for reusable packaging solutions to reduce waste has catalyzed tremendous innovation and brought dialogue to a fever pitch. Hundreds of start-ups and corporations are working on making reusable packaging solutions an everyday reality for customers, with applications ranging from closed loop reuse systems for campuses and events, to software supporting reuse-as-a-service and refill models in retail, commercial and industrial settings. Reusable packaging is at a critical juncture of development, but what will it take to get to the point of industry-scale disruption? Making reuse a far-reaching and everyday reality requires customer engagement, continued testing, collaboration across the value chain, investment and supportive policy.

"....IF WE SEAMLESSLY
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Understanding customer motivations, preferences and behaviors is essential in advancing successful reusable packaging systems. That's why Closed Loop Partners' Center for the Circular Economy in partnership with the U.S. Plastics Pact gathered insights, from over 300 customers in the U.S., engaging with 16 different reusable packaging innovators in the Reuse Catalyst program.² Through surveys and interviews with customers already actively engaged in reuse systems, we circumvent the 'intention-action gap,' whereby customers often claim they would partake in more sustainable actions, yet frequently fail to follow through. Collaborating with a demographic of early reuse adopters also gives us valuable insight into how these users are engaging with reuse systems before they reach mass adoption.

We hope this report inspires companies, brands, policymakers and others to consider reusable packaging systems through the lens of the customer and will serve as a source of inspiration to spark conversations as we collectively build a road map towards a more circular economy.





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In this report, we present our learnings on reusable packaging from the perspective of these U.S.-based customers, providing a glimpse into prevailing attitudes and the factors shaping this rapidly evolving landscape.

^{1.} U.S. PIRG Education Fund, "Trash in America," September 28, 2021.

^{2. 99}Bridges, Adrich, Bound, Conscious Container, Drinkfill, GOATOTE, Iterant. co, Muuse, Nude Foods Market, Re:Dish, Reath, Recirclable, RePack, Returnity, TAINR, Walking Lightly

INTRODUCTION



THE CHALLENGE

The Future Is Not Disposable: Rethinking Single-Use Packaging

The United Nations Environment Programme estimates 400 million tons of plastic waste is created globally per year.³ If historic growth and consumption trends continue, global plastic production is forecast to triple to an estimated 1,231 million metric tons by 2060.

Packaging comprises approximately 36 percent of all plastics, including ubiquitous single-use items like many food and beverage containers. Globally, roughly 85 percent of this packaging ends up in landfills or as unregulated waste.⁶

The U.S., like many nations, is currently grappling with the pervasive use and disposal of single-use products and packaging. With billions of such items used daily across the nation, this presents a considerable challenge, as these materials frequently end up in waterways and landfills, leading to adverse environmental impacts.



THE OPPORTUNITY

From Waste to Worth: The Rise of Reusable Packaging

This pressing waste crisis demands urgent action as part of a larger transition beyond our linear, "take-make-waste" economy and towards a sustainable, circular system.

Overcoming this issue will require substantially reducing single-use consumption while bolstering reuse systems by, for example, replacing formats of single-use packaging with reusable packaging systems.

WHAT IS REUSABLE PACKAGING?

Per the U.S. Plastics Pact definition, reusable packaging is packaging which has been designed to accomplish and proves its ability to accomplish a minimum number of trips or rotations (1,2) in a system for reuse (3,4).

- 1. A trip is defined as the transfer of packaging, from filling/loading to emptying/unloading. A rotation is defined as a cycle undergone by reusable packaging from filling/loading to filling/loading (International Organization for Standardization 18603).
- 2. The minimum number of trips or rotations refers to the fact that the 'system for reuse' in place should be proven to work in practice, i.e., that a significant share of the package is actually reused (measured e.g., by an average reuse rate or an average number of use-cycles per package).
- **3.** A system for reuse is defined as established arrangements (organizational, technical or financial) which ensure the possibility of reuse, in closed-loop, open-loop or in a hybrid system (International Organization for Standardization 18603).
- 4. See above for the definition of reuse, which stresses amongst other things the need for the packaging to be refilled or used again for the same purpose for which it was conceived.

For the U.S. Plastic Pact's full definition and further explanatory notes on reusable packaging, please click <u>here</u>.

United Nations Environment Program, "Our planet is choking on plastic."
 United Nations Environment Program, "UNEP/PP/INC.1/7 Plastics Science,"

September 13, 2023

^{5.} United Nations Environment Program, "<u>Our planet is choking on plastic</u>." 6. Ibid.

ABOUT THIS REPORT

Customer Perspectives Toward Reusable Packaging

In February 2023, Closed Loop Partners' Center for the Circular Economy ("the Center"), the U.S. Plastics Pact, the Reusable Packaging Association and World Wildlife Fund (WWF) launched the Reuse Catalyst program. The program aims to support individual reusable and refillable packaging businesses and the broader refill and reuse industry.

This report by the Center aims to provide customer insights within the evolving reuse landscape. Based on surveys, interviews and an analysis of more than 300 early adopter reuse customers across the U.S., the report offers a timely pulse-check on attitudes, motivations and behaviors crucial to scaling reuse systems. With a goal of informing effective reusable packaging strategies, the report highlights key reuse trends and themes, and is balanced with perspectives on barriers to adoption and opportunities to advance uptake within the space. This report is intended as a tool to engage stakeholders across sectors in constructive dialogue and collective action. Moreover, this work marks the starting point of an ongoing initiative to track progress and understand the hearts, minds and habits of customers who are actively engaging with reuse, with a goal of strengthening efforts to make reuse a natural, accessible and environmentally positive choice.

OUR METHODOLOGY

Between March and July 2023, the Center surveyed and interviewed more than 300 early adopter customers who have used the products, packaging or services of the 16 Reuse Catalyst Partners participating in this work.

By embracing reusable packaging ahead of the curve, these early adopters provide unique insights. Understanding what motivates and enables these customers to use reusable packaging innovations is critical intelligence for converting mainstream single-use habits towards a culture of reuse.



DISCLAIMER

This report provides insights gained from customers of select Reuse Catalyst Partners. Their inclusion does not constitute endorsement or promotion of any individual company, product or service. The analysis is meant for research purposes only to educate readers on effective strategies to advance reuse systems. All data is aggregated and anonymized to protect privacy. The report does not endorse or recommend any specific Reuse Catalyst Partner or their offerings. It presents customer perspectives without promoting any particular provider, product or brand.

As a mix of digital survey results and qualitative interviews, the data from our research should be used as an indicator to help drive the reusable packaging industry forward. We do not claim these are definitive answers about real-world behaviors given this study was not an observational study conducted in real-life circumstances.

Our findings highlight the need for additional, complementary and continued studies to advance the understanding and customer sentiment toward reusable packaging. The data from this study can provide guidance to brands, manufacturers, customers, policymakers, municipalities and other stakeholders across the value chain on how to achieve a more circular future for reusable packaging.

WHOSE CUSTOMERS DID WE HEAR FROM?

16 Reusable Packaging **Innovators**

We spoke with the customers of 16 Reuse Catalyst Partners participating in the Reuse Catalyst program, spanning a wide gamut of business typologies and sectors. This included a diversity of solutions such as refill stations that dispense product into reusable containers, brick-and-mortar stores that service products in reusable packaging, reusable packaging providers for food service operators, reusable shipping containers for beauty products, garments and other customer products as well as software and technology companies that track and trace the journey of reusable packaging.



BUSINESS-TO-BUSINESS (B2B)



99Bridges: provides a sustainability software platform called Mosaic that enables full lifecycle tracking and management of reusable products like bags, cups and containers to maximize reuse, recirculation and circularity.



Adrich: provides smart connected label technology to monitor container usage and automatically trigger refills for essential products, enabling brands to deliver refills and reduce single-use packaging.



BOUND: offers a reusable origami inspired mailer that consumers can return through the mail for continued reuse, providing e-commerce with a sustainable packaging alternative to cardboard boxes.



Conscious Container: provides a refillable bottle washing service for the wine industry, collecting, washing and reselling excess wine bottles to enable reuse and refilling.



Iterant: operates a business-to-business marketplace that enables the collection and resale of reused packaging while incentivizing manufacturers to support reuse through royalty payments.



Re:Dish: offers a reusable food-service container program including delivery, collection, professional washing and impact tracking that helps large organizations eliminate single-use waste.



<u>Reath:</u> is a software platform that tracks individual pieces of packaging, collecting health, safety and logistics data. Reath's analytics tell customers how many times their packaging has been reused, the carbon impact and the amount of waste saved, enabling them to optimize their reuse system.



RePack: offers a reusable packaging-as-a-service solution with returnable shipping packages, returns logistics, data tracking and rewards to enable circular reuse and replace single-use packaging in e-commerce deliveries.



Returnity: is a reusable shipping and delivery packaging service for brands and retailers to implement reusable packaging systems that enable circularity through a focus on logistics infrastructure to facilitate continued reuse.

BUSINESS-TO-CONSUMER (B2C)



Drinkfill: offers a subscription service that provides reusable drink bottles and an app to locate public water refill stations, enabling sustainable hydration on-the-go.



Muuse: provides reusable food-service container tracking and logistics services enabled by consumer-facing and operations apps to support circular reuse systems with closed-loop collection and end-of-life management.



Recirclable: provides reusable takeout containers and tracking technology to restaurants, enabling sustainable alternatives to single-use takeout packaging.



GOATOTE: provides turnkey reusable bag services that rewards shoppers for returning their reusable bags that are then cleaned and re-circulated for continued reuse. In addition to retail solutions. they also provide reuse solutions for cities, states, and community organizations.



TAINR: is an automated refill kiosk that streamlines grocery store operations and eliminates waste by enabling self-serve purchasing of dry goods in customizable portions.

BRICK & MORTAR



Nude Foods Market: is a zero-waste grocery store and delivery service that provides local, organic and rescued products in reusable, returnable glass jars to eliminate plastic packaging waste.



Walking Lightly: is a brick-and-mortar refillery looking to expand into zero-waste grocery to help customers eliminate plastic and packaging waste from groceries.

WHAT DID THE DATA TELL US?

Customers Are at the Wheel When It Comes to Driving the Reuse Revolution



What we learned from customers who are actively engaging with reuse systems today:

They are "greenies." More than half (56%) of customers stated that it is extremely important that brands offer reusable products and packaging and more than half (55%) also considered themselves

more than half (55%) also considered themselves extremely concerned about climate change.





Roughly 85% of customers

surveyed plan to return the reusable packaging in question while the remaining 15% would opt to keep it for personal use. Some customers still don't return their reusable packaging back into the system. Most customers knew and understood the need to return their reusable packaging back into the reuse system, but some still planned to keep the reusable packaging at home for personal reuse.

An overwhelming majority of customers surveyed understood that the product/solution they are using is reusable, however

nearly 3% of customers surveyed were unaware that the product/solution in question was reusable.





Nearly half (47%) of the customers surveyed

used the given reusable product/ service in question weekly Bring-your-own reusable packaging culture already has a foothold with key products. Shopping bags, refillable beverage containers (i.e., water bottles) and insulated cups (i.e., travel mugs) were cited as the three most regularly utilized reusable products/solutions by customers.

"Less waste" was overwhelmingly cited by early adopters surveyed as the main benefit of using a reusable product/solution, while the main disadvantage of reusable

products/solutions cited was "less convenience."

Nearly 45% of customers surveyed described the price of the given reusable product/solution in question as "About the same as a single-use alternative."

Customers shopping at package-free grocery stores were even more eco-conscious, with 82% of customers saying that they are extremely concerned about climate change. They also cited "less waste" and "better quality" compared to single-use alternatives as the benefits of shopping at a refillery.



Early adopters

are willing to go out of their way to engage with reuse. They often choose reusable products even when there are more convenient single-use options available.



What we learned from businesses choosing to partner with reuse providers to offer reuse solutions to their customers:

The top reason why businesses chose to use reusable packaging options was to lessen waste.

The top challenge business owners identified their customers had with reuse was the increased expense compared to single-use alternatives.

Over half of the businesses

surveyed noted customer engagement as the largest opportunity for the growth of reusable products/solutions at their company.



KEY INSIGHTS



Barrier to Adoption

Opportunity to Advance

KEY INSIGHT

Customer understanding of every step in a reuse system—from collection to cleaning to redistribution—remains murky.

Education and communication lay the groundwork for successful reuse adoption on a larger scale.

KEY INSIGHT

2

Many customers find too much technology overwhelming.

In building reuse systems that are techenabled on the backend, it's important to reduce technology requirements on the frontend in order to make the system manageable for all customers.

What Are the Barriers and Opportunities to Growing Customer Adoption of Reusable Packaging?

In the following pages, we will dive deeper into the key insights we distilled from our interactions with more than 300 early adopter reuse customers across the U.S. Our analysis weighs the obstacles impeding mainstream acceptance along with prospective inroads for increasing uptake. For each insight, we also share relevant customer learnings from Closed Loop Partners' Center for the Circular Economy's in-market tests and pilots.

KEY INSIGHT

3

Customers don't always return their reusable packaging.

Intentional design choices that balance utility, sustainability and appeal are key for reuse systems to achieve their intended impact.

KEY INSIGHT

4

Customers want more optionality and availability when it comes to reuse options.

Choice helps customers feel empowered and shapes cultural norms around reuse systems.

KEY INSIGHT

5

Customers need support to translate their good intentions into lasting habits.

Reuse solutions must meet customer needs and support turning their intention into habit.

KEY INSIGHT 1

While customer understanding of every step in a reuse system—from collection to cleaning to redistribution—remains murky, education and communication can help lay the groundwork for improving this understanding and enabling successful reuse adoption on a larger scale.

The successful mainstreaming of reusable packaging depends on persistent, strategic education and communication at each touchpoint in the reuse loop. From the moment a customer first purchases a product to when the product is cleaned and returned to shelves, messaging must build holistic awareness.

By consistently explaining the environmental benefits and logistics through various channels—education campaigns, in-store signage, packaging labels, staff talking points—companies can saturate the customer experience with a clear, unified narrative. This consistent storyline fosters familiarity and resonance over time. With a steady drumbeat of coherent messaging and visibility, using and returning reusable packaging can become intuitive to customers.

WHAT WE HEARD FROM CUSTOMERS

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I really don't know the details of the program."

66

I need more instructions on the machine to aid in ease of operation."

Education and continuous communication helps customers understand how reuse functions and makes it an instinctive choice.

WHAT WE HEARD FROM BUSINESS OWNERS

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You have to point it [reuse solutions] out to people. Most people don't even ask about it, but only those that come in regularly and ask."

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I think people will accept this when they know what's available and what options they have. Increased signage, placement of return kiosks, training staff and different deposit stations are integral to this."

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It takes a bit of time and effort with our staff. But it's worth it."

Staff involvement is foundational for increasing engagement with reuse systems.

KEY INSIGHT 1 -

LEARNINGS FROM THE FIELD

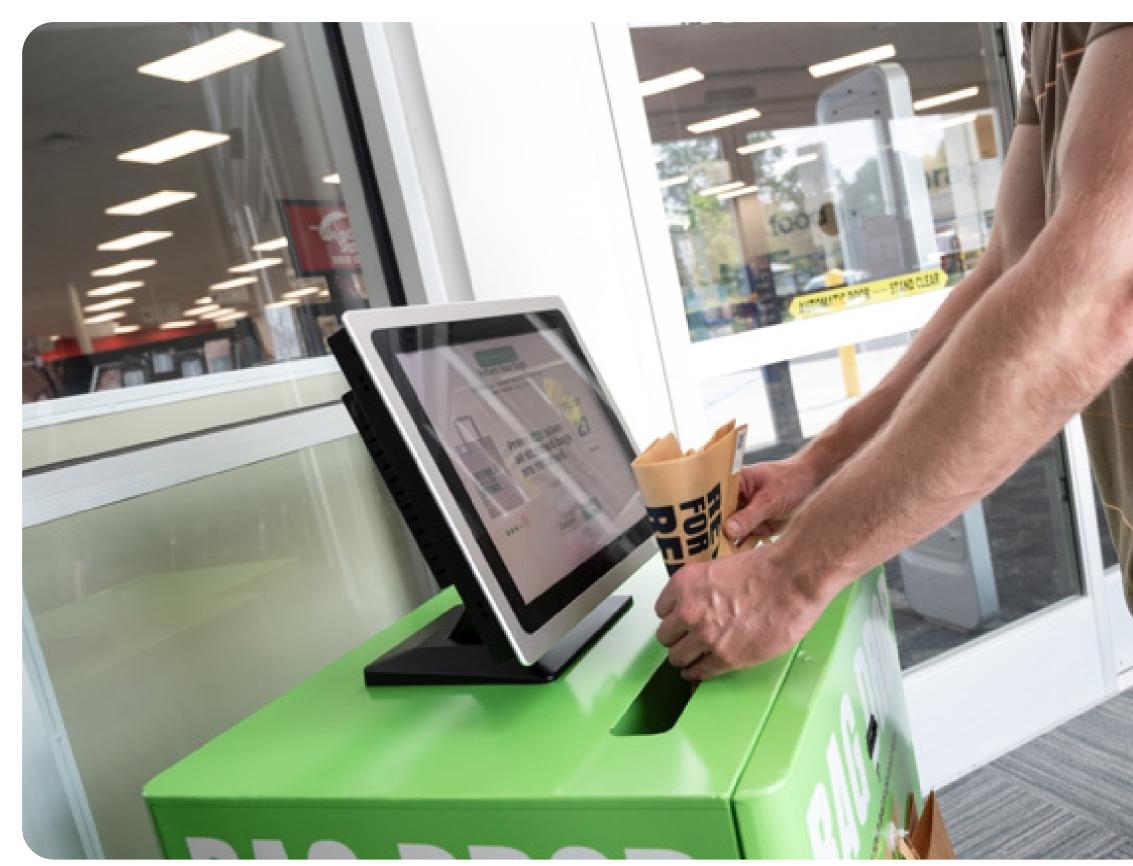
The <u>Beyond the Bag</u> initiative, managed by the Center for the Circular Economy, tested a "returnable bag" service model in 10 CVS Pharmacy and Target stores in New Jersey, evaluating how a service could allow customers to get their goods home in a borrowed bag that they could later return to any participating store.

WHAT WE **LEARNED FROM TALKING TO CUSTOMERS**

"If the employee hadn't explained the offering to me, I would never have known I could return it."

Traditional and self-checkout are high-paced environments where customers prioritize efficiency and saving time. Customers are unlikely to divert their attention to marketing materials or recall promotional signage seen at the front of store—no matter how eye-catching that signage is. Therefore, there need to be other moments and multiple channels leveraged to create education and awareness, including employee interactions. Employees are critical drivers of initial adoption, since they are the ones answering questions, running traditional checkout and supervising self-checkout.

The pilots indicated that employees' answers to questions like "where are the bags?" have an outsized impact on customer behavior. At both traditional and self-checkout, customers tend to accept the bags that employees hand them, without question or push-back.



SOURCE: Nicholas Pizzolato

Calls to Action

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AMPLIFY MESSAGING ACROSS ALL CUSTOMER TOUCHPOINTS

Some customers forgot the details of the reuse program in question, which indicates a need for persistent, multi-channel education and communication. Messaging should saturate the customer journey through in-store prompts such as physical signage and outside of the store through emails and in-app reminders. A diversity of approaches is needed.

2

EQUIP EMPLOYEES TO CHAMPION REUSE

Businesses offering reusable packaging should train staff to promote engagement. Employees educated on reuse initiatives are better positioned to have informative conversations with customers. They can address questions and concerns while positively promoting reusable options. The more informed staff are, the more they can encourage customer participation; and the more consistent the messaging is to customers, the more reuse behavior can be normalized.

3

DISTILL REUSE INTO SIMPLE, MEMORABLE STEPS

Misconceptions around returnability of reusable packaging (e.g., containers being kept at home instead of returned for reuse) risk derailing the system. Communication should present reusable packaging as an easy way to reduce single-use plastic. It should break the process into simple steps like "Buy", "Use" and "Return."

Many customers find too much technology overwhelming, so in building reuse systems that are techenabled on the backend, it's important to reduce technology requirements on the frontend in order to make the system manageable for all customers.

Customer feedback reveals that a truly seamless user experience is key to making reuse second nature.

Our data showed that widespread adoption of reusable packaging models hinges on minimizing customer friction. One current barrier is the perceived inconvenience and extra effort required on the customers' part for tech integration—adding extra steps is a nonstarter.

Technology plays a vital role on the backend. Usage data and impact metrics provide valuable insights needed to optimize reuse operations at scale by painting a fuller picture of evolving behaviors, emerging challenges and tangible progress made.

However, we must be mindful of potential barriers like quick-response (QR) code scanning challenges that may feel overwhelming to some customers or impede successful returns. Some customers cited feeling overwhelmed in the struggle to scan codes and require employee assistance, causing service slowdowns. Reliable, accessible technology integration (i.e., simple, intuitive design and placement of the scanner) that quietly optimizes the reuse system is essential to prevent frustration and abandonment.

WHAT WE HEARD FROM CUSTOMERS

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It's too much to remember to do, and the technology (how much you have to use your phone and credit card) involved is a bit overwhelming."

Technology can be overwhelming for some customers.

WHAT WE HEARD FROM BUSINESS OWNERS

44

A lot of older people don't know how to scan a QR code and give up on it, so they require someone to help them and on a busy night we don't have the time to do that."

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A major challenge is scan failures which is a hardware question."

With technology comes troubleshooting, which can cause service slowdowns.

64

It provides the key metrics needed for us to understand our impact and we can see how this would extend to helping run scaled operations."

- 6

Our customers are very data-driven and interested in digging into the metrics so it's helpful to gather technological measurements."

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Tech-integrated reuse tracking solutions move away from ancient, paper-based system and we can more readily track our impact, cost-saving and time-saving." When tech-enabled solutions are deployed, the data gathered can help businesses measure impact.

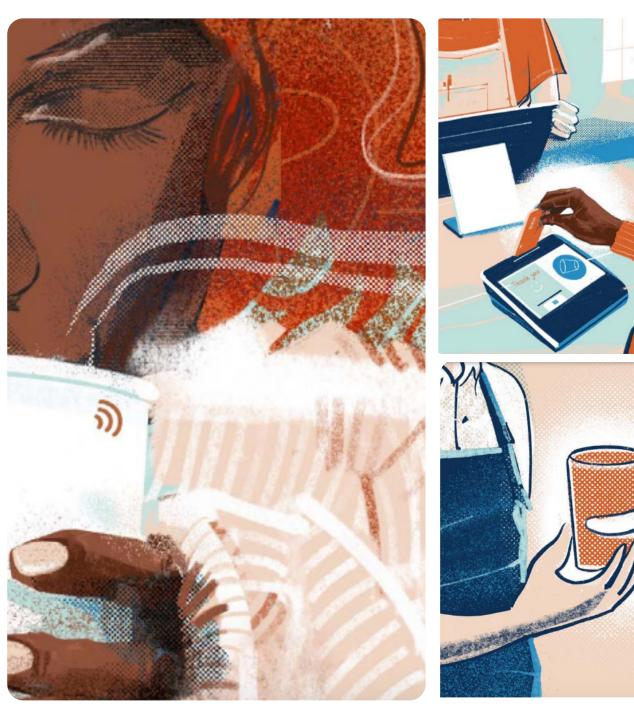
LEARNINGS FROM THE FIELD

In 2020, the Center's <u>NextGen Consortium</u> conducted an in-field study during a four-week period of trialling reusable cups with local cafes and restaurants in San Francisco and Palo Alto. Much of the focus of the study was to learn how these solutions perform in open markets and how they can be improved in order to be deployable at scale with Consortium partners.

WHAT WE
LEARNED FROM
TALKING TO
CUSTOMERS

"I have no idea how it [the technology] works or how I'm supposed to use it. Do I tap this link?"

A major learning from this study was that most customers had minimal appetite for technological complexity during the sign-up process. Customers strongly favored a streamlined, straightforward enrollment flow, with minimal technological hurdles to cross. Introducing more than two extra steps into the sign up process quickly becomes burdensome for customers, revealing a clear preference for "tech minimalism." To drive adoption, the enrollment process must remain simple, intuitive and quick for customers.



SOURCE: <u>Bringing Reusable Systems to Life</u> report

Calls to Action

7

AVOID ADDING EXTRA STEPS OR COMPLEXITY TO THE PURCHASING PROCESS

Simplicity and seamlessness are key to driving reusable packaging model adoption. Extra steps or complexity in the purchase process are major deterrents. Reuse programs need to integrate smoothly into customers' daily routines, with minimal friction. Offering multiple intuitive enrollment options, including app-less and streamlined point-of-sale (POS) integrations, can dramatically reduce barriers to entry.

2

ENABLE SEAMLESS CUSTOMER EXPERIENCES ON THE FRONTEND WHILE LEVERAGING BACKEND ANALYTICS FOR BUSINESSES

Technology is a divisive subject between B2B customers and B2C customers in that the former find it useful for tracking impact and enhancing operational efficiencies while the latter may find it to be a hindrance to their workflow. Successful tech-integrated solutions will provide businesses the backend tracking they need while providing customers a straightforward, hassle-free experience on the frontend.

Customers don't always return their reusable packaging, so intentional design choices that balance utility, sustainability and appeal are key for reuse systems to achieve their intended impact.

Effective design requires solving for both the physical product and its surrounding ecosystem. Reusable packaging should be crafted with intention, prioritizing durability, visual appeal, ergonomics and inclusion. When paired with a frictionless user experience, thoughtful design enables sustainable practices to become collective norms. Well-designed reusable packaging artfully blends utility, appeal and ease of use.

For reusable packaging to maximize usability, it needs durable yet lightweight construction to enable easy transport and storage. Material choices can hinder accessibility as more premium materials come with higher costs.

It's important to note that overly desirable aesthetics may hinder reuse participation. If reusable packaging is too appealing, customers may opt to keep them, defeating the purpose. Some packaging is iconic, implying a certain value that customers want to retain. Reuse innovators must walk this line in their design process.

Packaging standardization is also critical to drive operational and cost efficiencies and support customer education. For example, most people know a soda can is recyclable no matter how it's decorated. This type of standardization of formats and materials for reusable packaging would help accelerate the learning curve for customers.

WHAT WE HEARD FROM CUSTOMERS

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I plan on returning packaging unless I can get use out of it at home."

Customers misunderstand why returns are essential to a well-functioning reuse system.

WHAT WE HEARD FROM BUSINESS OWNERS

66

Beautiful, collectable reusable cups are a challenge."

66

The obvious enemy seems to be plastic bags, but the real enemy is the overconsumption of single-use bags-regardless of material type. We don't want to encourage people to move away from single-use bags to single-use bags made from plants or reusable materials or paper. "

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One of the big challenges is loss of the containers... although we have one of the highest return rates, we still lose a significant amount of containers, which defeats the purpose of reuse."

64

We are having an issue with people not returning silverware due to people taking them home, resulting in an additional fee on our end."

Aesthetically appealing reusable packaging is at risk of becoming collectables.

LEARNINGS FROM THE FIELD

In Northern California, from August to October 2021, the Beyond the Bag initiative, managed by the Center, undertook first-of-a-kind joint retailer pilots. Beyond the Bag Challenge winners ChicoBag, Fill it Forward, GOATOTE and 99Bridges piloted their reusable bag solutions and/or technologies across nine stores of the Consortium's Founding Partners—CVS Health, Target and Walmart—in Northern California (Palo Alto, East Palo Alto, Mountain View, Redwood City & Santa Clara). The in-market pilots were an essential step to test and improve solutions, incorporate customer and retailer feedback and explore pathways to scale.

WHAT WE
LEARNED FROM
TALKING TO
CUSTOMERS

"I want a cool looking bag because it needs to be something that I will want to carry with me."

"My favorite bags probably have more to do with the graphic design on them than anything else."

While we found that most shoppers may be looking for financial rewards as motivation, for those not motivated by financial rewards or environmental impact, emotional connection to a product can be a reason to reuse because it elevates the desire to be seen reusing a product. However, innovators must also navigate the balance of creating a product that is too "cool," meaning that customers don't want to return it, instead keeping it as a "souvenir," which brings challenges for incentivizing reuse within a "borrowing" system.

Reusable service innovators should balance the need for an appealing brand and visual identity with the risk of creating souvenirs that don't get reused or returned to the system.



SOURCE: Kelsey Floyd

Calls to Action

1

CREATE CONSISTENT DESIGN NORMS THAT STRIKE A BALANCE BETWEEN AESTHETIC APPEAL AND UTILITARIAN DESIGN

Standardized packaging that meets needs for delivery protection, transport efficiency and user adoption could accelerate reusable packaging proliferation. Reusable packaging providers can cooperate to establish universal design guidelines, ensuring that overly coveted reusable packaging does not undermine participation in reuse systems by customers keeping, rather than returning it.

2

STRATEGIC MATERIAL SELECTION IS VITAL TO DESIGN OF REUSABLE PACKAGING

Materials cannot be an afterthought; rather they help set the constraints to balance user experience with logistics while enabling circular resource flows. Factors like material weight, strength, insulation properties and recyclability must all be considered. Finding the right balance requires intentionality. Beyond functionality, visual and tactile elements impact customer perception and willingness to embrace reusable packaging. Standardized design norms could help in establishing vetted material guidance.

Customers want more optionality and availability when it comes to reuse options, since choice helps customers feel empowered and shapes cultural norms around reuse systems.

The widespread adoption of reusable packaging fundamentally requires giving customers flexibility and options at every step. Success depends on ensuring participants don't feel restricted or limited in their choices of products due to the limited options of reusable packaging formats. Having a diversity of choice ensures customers don't see reusable packaging as inherently restricting or forcing change.

Additionally, providing ample convenience through retailer partnerships, geographic reach and abundant pickup/dropoff points is key to making reuse feel instinctive over time. Having reusable packaging embedded across diverse shops, restaurants and brands allows customers to rely on it in more aspects of daily life. Sufficient physical availability in terms of retail touchpoints and return spots further reduces friction. The goal is for reusable packaging to seamlessly integrate into habits and routines with minimal conscious effort required.

When positioned as an empowering option that easily blends into daily rituals, reusable packaging becomes an obvious, easy decision rather than an imposed change. Success requires tapping into customers' willingness to create positive impact while removing every potential barrier that could hinder commitment.

WHAT WE HEARD FROM CUSTOMERS

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Less variety of choice of products."

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This needs to be everywhere!"

66

Expansion to all viable stores is a must."

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Challenge of this reusable product is its lack of availability."

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I was THRILLED when the place where I get a lot of takeout food from started using these reusable containers. I wish all takeout places had this option or the option to bring my own container."

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It's less convenient because not as many stores have what I want available."

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This should be a national program."

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Not in enough [reuse options in] stores in the USA. This has to be adopted by all stores as it is the way of the future."

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They just don't have anything I want to drink [in order to use the system]."

66

Availability of options is a challenge for me...meaning not a lot of places where you can find these solutions and not a lot of products [offered] in this model."

Customers feel availability and access to reuse is lacking.

WHAT WE HEARD FROM BUSINESS OWNERS

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They [Customers] don't necessarily want to be locked in to purchasing the same brand over and over again as they like choices."

66

One challenge is that we have to make compromises based on available inventory." Flexible inventory underscores the need for creative, collaborative solutions.

LEARNINGS FROM THE FIELD

In October 2023, Closed Loop Partners' venture capital arm, Closed Loop Ventures Group (CLVG) invested in Algramo, a Chilean based startup solving economic and environmental issues through its vending machines that dispense staple products, like household cleaners and grains "by the gram" to customers. Not only does it reduce single-use packaging waste, but it also allows families to buy what they can afford—they can get the exact quantity of products they need at bulk prices no matter how small the amount.



WHAT WE
LEARNED FROM
TALKING TO
CUSTOMERS

"Mas opciones de detergente hipoalergéncio para nuestris econiños." > "More hypoallergenic detergent options for our eco-children."

"Por favor agregue]
dispensadores de bebidas
también para los golosos que
toman gaseosas" > "[Please
add] beverage dispensers
also for those with a sweet
tooth who drink soda."

"Ojalá puedan vender muchos productos a granel en un future cercano (arroz, azúcar, porotos, lentejas, alimentos para mascotas, shampoo, bàlsamo jabón)!" > "I hope they can sell many products in bulk in the near future (rice, sugar, beans, lentils, pet food, shampoo, soap balm)!"

"Necesitamos fideos, arroz, legumbres, en ese formato!" >

"We need noodles, rice, legumes, in this format!"

"[Por favor agregue] shampoo y bálsamo." > "[Please add] shampoo and conditioner."

"Le idea es bueno, eso sí le agregaría agua mineral con y sin gas, no todo elm undo consume bebidas." > "The idea is good, I would add mineral water with and without gas, not everyone consumes those drinks."









SOURCE: Algramo Website

Calls to Action

7

BEING "LOCKED IN" TO LIMITED OPTIONS IS A BARRIER TO PARTICIPATION

Customers want the ability to choose from a variety of products, brands and retailers when opting for reusable packaging. Through collaborative innovation, businesses, brands and retailers can fulfill unique customer needs at scale by giving customers the freedom to choose reusables wherever and however works best for them.

2

UBIQUITY AND FLEXIBILITY IN ACCESS ARE CRITICAL

Solutions should focus on maximizing availability and access by expanding presence across diverse retail locations, brands and product categories. At the same time, they must integrate seamlessly into existing customer lifestyles, giving people the option to pickup or dropoff reusable containers within their current routines.

KEY INSIGHT 5

Customers need support to translate their good intentions into lasting habits, so reuse solutions must meet customer needs and support turning their intention into habit.

Customer sentiment reveals a growing desire to make more sustainable choices and reduce environmental impact. People feel positively about reusable packaging as an impactful way to shrink their carbon footprint and "do the right thing." Interactions with early adopters reflected that there is genuine interest in adopting habits that benefit society at large. Reuse models tap into these altruistic values, enabling customers to align actions with ideals. The rise of environmental consciousness, especially among younger demographics, demonstrates hearts and minds moving in the right direction.

However, ideals alone cannot drive full participation in reuse systems. Despite benevolent intentions, change remains difficult when it requires significant lifestyle adaptations or sacrifices. Though many customers want to have positive impact, resistance emerges when reuse feels burdensome or disruptive to existing habits and budgets. For instance, some felt reusable bulk shopping was cost prohibitive compared to conventional options. Others noted how forgetting or losing reusable containers defeated sustainability aims.

While people want to reduce waste in theory, ingrained behaviors persist. To achieve mass participation, reuse solutions must align environmental benefit with personal convenience and affordability. Customers need flexibility to integrate reusable packaging into routines on their own terms. Success requires meeting them where they are instead of demanding full transformation.

WHAT WE HEARD FROM CUSTOMERS

44

I feel good doing it."

66

I'm very thankful to have a zero-waste store in my community!"

66

I would love to shop more often but have found some items to be cost prohibitive."

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Please make more stuff available in bulk without jars (bring own containers / bags). The cost is beginning to add up."

Reuse makes customers feel good, but costs can be prohibitive.

66

It's hard for me to calculate the price of each item before I get to the checkout. So there are some items that I realize at checkout are more expensive than I was expecting to spend."

WHAT WE HEARD FROM BUSINESS OWNERS

66

More impactful than using a traditional recycling bin."

66

I love the idea of actually doing something to shrink my carbon footprint."

64

Upcycling is important."

66

It's a solution to a recycling problem, one which benefits all parties."

Business-owners recognize the environmental value of reuse.

We are a drop off location and our customers absolutely love that their [packaging] is getting reused instead of recycled!"

KEY INSIGHT 5 —

LEARNINGS FROM THE FIELD

From May through July 2023, the Beyond the Bag initiative, managed by the Center, supported the testing of multiple bag reduction strategies simultaneously across two different cities, Tucson, Arizona and Denver, Colorado, to encourage customers to leave the store without a bag if not needed for their purchase, or bring their own bags to stores to reduce single-use plastic bag waste. The following strategies were tested in, near and outside of different types of stores:

Signs: Testing sign designs, language and placement in and out of store to encourage customers to go without a bag and/or bring their own bag.

Prompts: Asking customers, "do you need a bag?" at checkout.

Media amplification: Leveraging out-of-store communication tactics to prepare customers to bring their own bag.

The pilots revealed that while many customers have good intentions around sustainable habits like reusing bags, translating those intentions into lasting change requires active support. People want to do the right thing and feel good about choices that reduce waste, but habits only stick when reinforced through nudges and communications strategies. By bringing brands together to implement small reminders and incentives, we aimed to drive a cultural shift—supporting customers to turn initial interest into durable new norms. Our efforts underscored that lasting change starts with individual choices, but systemic support is key to making those choices into habits that benefit us all.

WHAT WE
LEARNED FROM
TALKING TO
CUSTOMERS

"They have signs out in front of their store and also at the cart corrals in the parking lot. Don't forget, your reusable bag or bring your bag or, that kind of thing...and I really do appreciate that because it's that little reminder, it's like let's use a little bit less plastic...So I think that that made a positive impression on me."

"I noticed they have a big sign in the parking lot that's like 'Did you remember your reusable bag?' There's one thing that a store is doing to encourage people. It's actually good, I appreciate it."

"I was glad he asked [if I needed a bag]."

"When [I] saw the sign, [I] went back to [my] car and got [my] bag."



SOURCE: Nicholas Pizzolato

Calls to Action

5

REUSE SOLUTIONS MUST SUPPORT CUSTOMERS WHERE THEY ARE IN THEIR REUSE JOURNEY

Customers feel positively about reusable packaging as an impactful way to reduce waste, shrink their carbon footprint and "do the right thing" for the environment. However, resistance emerges when reuse feels burdensome or disruptive to existing habits, convenience and budgets. Reuse solutions must meet customers where they are and integrate into their daily lives. Systemic support is key to making those choices into habits that benefit us all.

2

KEEP THE MISSION FOCUSED ON INSPIRING PARTICIPATION, NOT PERFECTION

The key is to make reusable packaging solutions feel attainable and empowering to people, not demanding or shaming. Though some people care about sustainability, they may feel overwhelmed by the perceived trade-offs required to live a perfectly zero-waste lifestyle. The priority should be optimizing for affordability, accessibility and seamless integration into existing lifestyles.

Circling Back: The Road Ahead for Reusable Packaging

This report offers valuable insights into early adopter experiences with reusable packaging in the U.S. However, scaling these systems to mainstream audiences remains complex, with many open questions. Transitioning from entrenched single-use models requires continued cross-sector collaboration to make reuse seamless and effortless for all customers—beyond just the early adopters. It is essential that customers participate in the full reuse system, which includes returning the reusable packaging. Considering the relative infancy of at-scale reusable packaging models, uncertainties and hindrances persist that must be assuaged before wider adoption.

Key questions remain unresolved: How can businesses streamline reusing to become more convenient, effortless and accessible? What communication and engagement strategies can improve clarity, awareness and understanding of reusable packaging benefits, tools and resources? As communities aim to reduce waste, there is often a tendency to expect immediate perfection when new sustainability measures are implemented. However, framing reuse initiatives through this perfectionist lens can inadvertently hamper progress. When launching reusable packaging programs, taking an iterative, improvement-focused approach is crucial.

Key stakeholders from policymakers to brands can apply insights from this report to nurture a culture in the U.S. that embraces circularity and reuse. Partnerships and innovation focused on the customer experience are vital to responsible expansion. Through collaboration across the value chain of reusable packaging—from customer to retailers to employees—these processes can become the convenient norm. But much work and collaboration remains to make this vision a reality.

Get in Touch:

For feedback, input or ways to get involved in the Center's reuse work, please get in touch **here**.





We would like to thank all partners and stakeholders that have contributed to this work by supplying data, guidance and validating assumptions.

In particular, we would like to extend our gratitude to the U.S Plastics Pact, the 16 Reuse Catalyst Partners who participated in this work (99Bridges, Adrich, Bound, Conscious Container, Drinkfill, GOATOTE, Iterant.co, Muuse, Nude Foods Market, Re:Dish, Reath, Recirclable, RePack, Returnity, TAINR, Walking Lightly) and their respective customers. Their generosity in sharing their perspectives and experiences has allowed us to paint a vivid portrait of reuse in the U.S. We hope that this report serves as a platform for these voices, amplifying their insights to drive the reuse revolution forward.

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