

Plastics | SA

Circular City Labs Textbook

A digital guide to building a sustainable circular economy through reusable plastics, innovation, and inclusive collaboration in South Africa.



Circular City Labs
Testing Reusable Packaging Systems in Cities



Implemented by



Introduction

This digital textbook contains consolidated training materials, based on the Accelerator programme training sessions that formed part of the *Circular City Labs: 'Testing Reusable Packaging Systems'* project.

The purpose of this textbook is to capture and consolidate lessons learned through the project's implementation to reach a wider audience along the circular economy value chain.





Project Background

The *Circular City Labs: ‘Testing Reusable Packaging Systems’* project was commissioned by the *German Federal Ministry for Economic Cooperation and Development (BMZ)* and funded through the *BMZ Initiative for Climate and Environmental Protection (IKU)*.

The project aimed to reduce greenhouse gas emissions through waste prevention, test reusable packaging systems, and strengthen women’s participation in local circular economies.

Implemented by *GIZ* in partnership with *Plastics SA*, the project selected *Gcwalisa* as its pilot partner. In addition, three other businesses from the proposal pool were invited to join an accelerator programme designed to build their capacity in circular economy practices, reuse systems, and gender inclusion.



Piloting Partner

Gcwalisa, a grocery outlet in Alexandra township, Johannesburg, operates on a weigh-and-pay model that enables customers to buy only what they need, helping to reduce the ‘poverty tax’ often faced by low-income households unable to buy in bulk.

During the pilot phase, **Gcwalisa** introduced reusable plastic packaging fitted with QR barcodes to track return cycles, replacing single-use packaging and promoting circular economy practices. The initiative also created jobs for 4 women through reuse ambassadors who engaged customers and raised awareness; two of the women were retained after the pilot.

With an average return rate of 35%, the project demonstrated strong community participation and delivered both environmental and socio-economic benefits, successfully meeting its intended objectives.

www.gcwalisa.com



Accelerator Programme

The **ACEN** study on scaling packaging reuse models in South Africa highlighted key challenges faced by reuse initiatives, including limited access to financing, difficulties in adapting supply chains for reuse, and the absence of clear health and safety standards.

Recommended interventions included collaborative learning, innovative funding mechanisms, stronger supply chain partnerships, and the development of operating standards for reuse models.

In response, the accelerator programme, implemented by **GIZ** and **Plastics SA**, was designed to address these barriers by providing targeted training and mentorship to selected businesses such as **Gcwalisa**, **Shix Mineral Ice**, **Reusify**, and **Smartfill**, strengthening their capacity to implement and scale circular packaging solutions across South Africa.

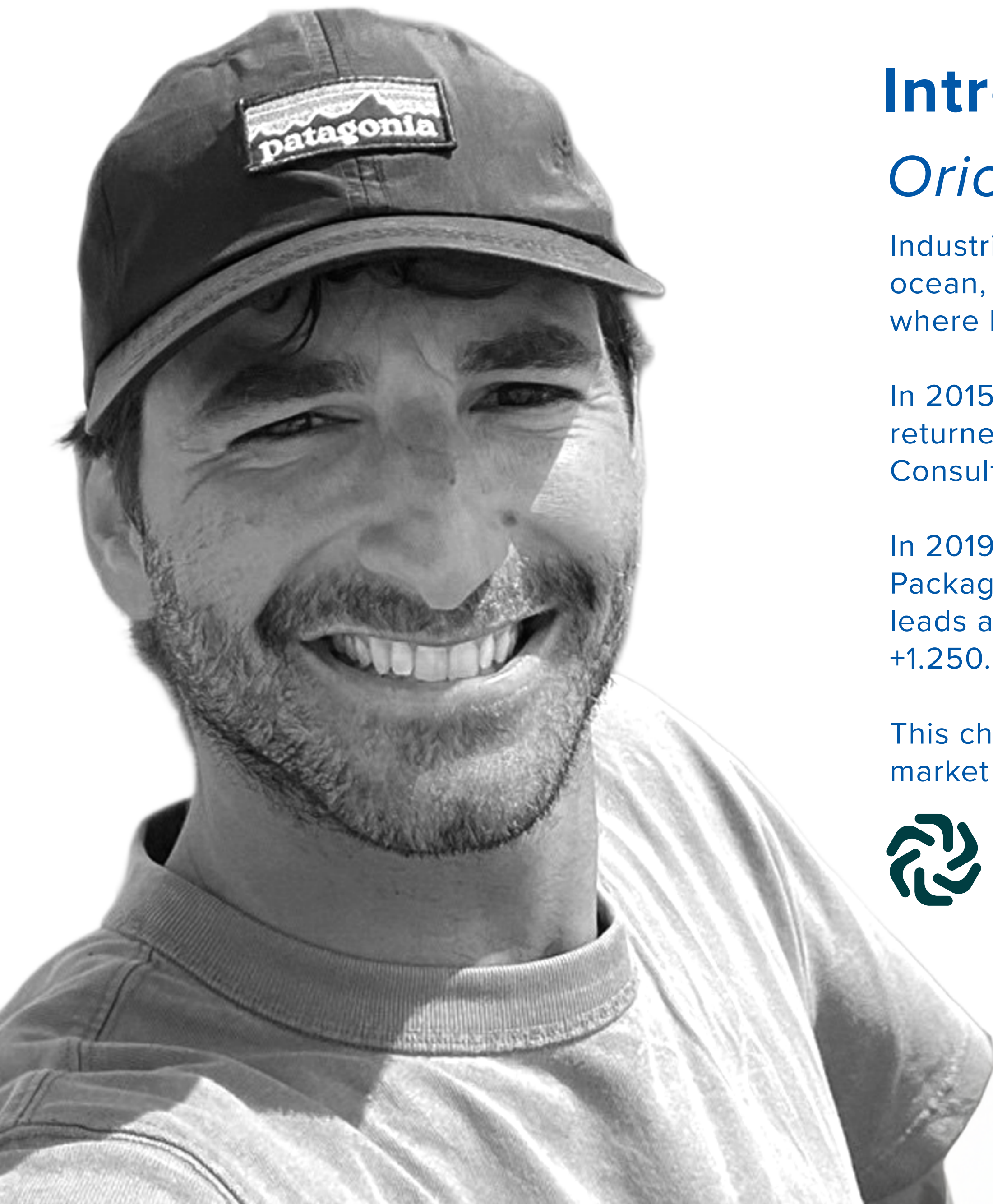
Read more about the [ACEN](#) study.



Reference: Barnes, K. and Gihring, K. (2025). Scaling reuse-refill in South Africa: Learnings from local experience. African Circular Economy Network (ACEN) for Circular City Labs South Africa, GIZ, and Plastics SA.

Chapter 4

Marketing reuse solutions



Introduction

Oriol Segarra

Industrial engineer, passionate about the outdoors and the ocean, Oriol's passion led him to work for The Ocean Cleanup, where he discovered the circular economy.

In 2015 he travelled through Asia and Oceania and in 2017, returned to Barcelona to work in Circular Economy as a Consultant.

In 2019 he founded Bumerang, the first Digital Reusable Packaging System for takeaway food and drinks. As CEO, Oriol leads a team of seven, serving 250+ clients in Spain and with +1.250.000 single use items prevented from going to the Ocean.

This chapter is about the learnings, strategies and tactics used to market and sell Bumerang over the past 5 years.

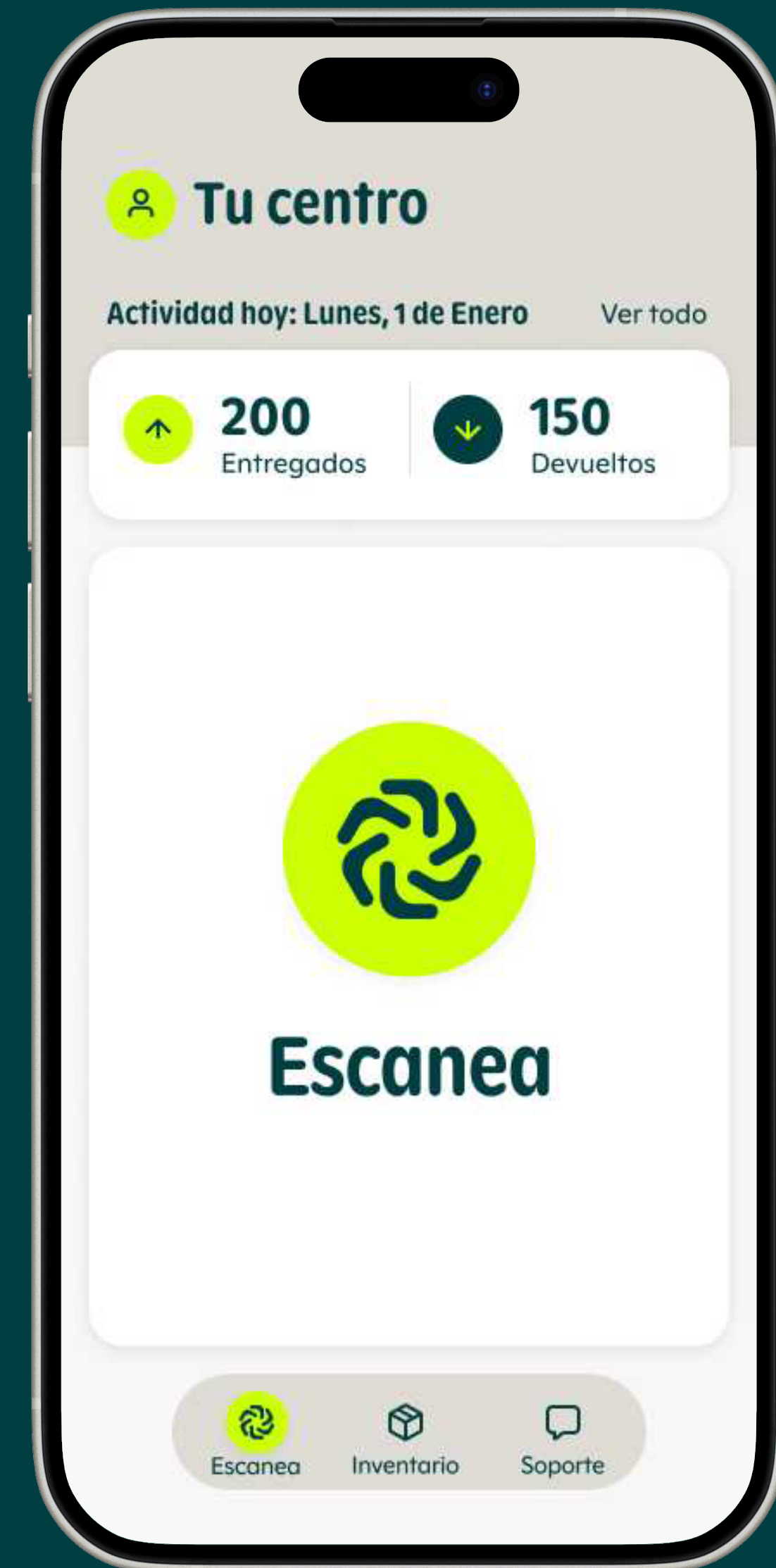


Marketing Reuse

Oriol Segarra - CEO & Founder

Bumerang

Intro to Bumerang



A global Problem

3.000 cups

single-use items are thrown away in Spain in just one minute.

60,75 Millions

kg of waste per year is generated in Europe from takeaway food.

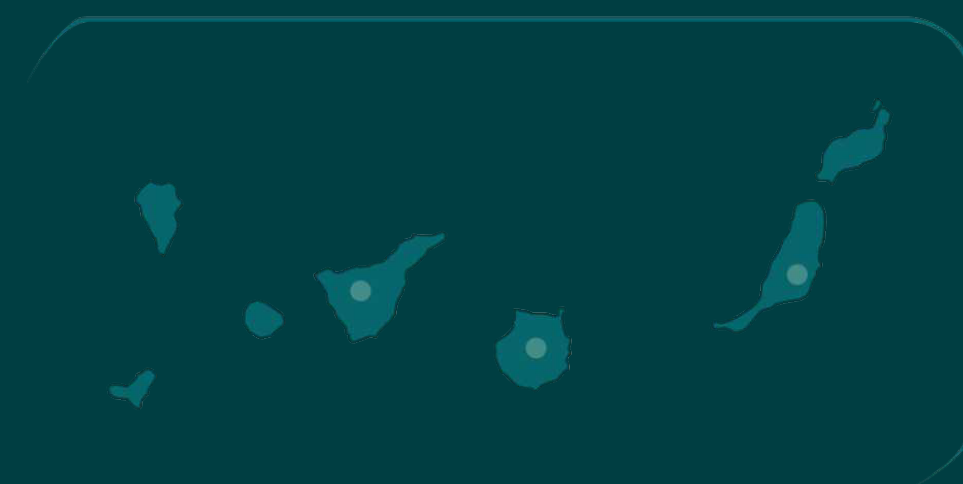


**Bumerang makes new
circular ways of
consumption possible.**

**+250 clients.
+30 tonnes of waste
avoided.**



Since 2020, we have created technology and services that help thousands of people daily to consume without creating waste.



**Líderes en colectividades
de España**

Services

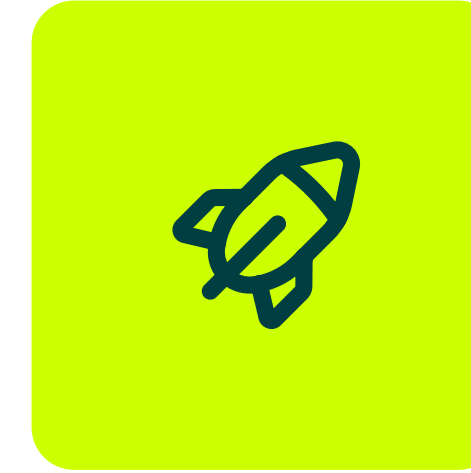


Bumerang Smart

The container reuse system for communities and HoReCa 360°.

It allows you to order, manage, and return containers easily.

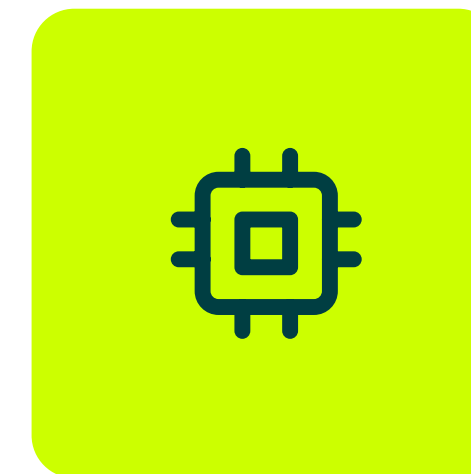
Thanks to the Tap service, you can also manage containers without needing to ask your users to download the app.



Quick and easy
operation



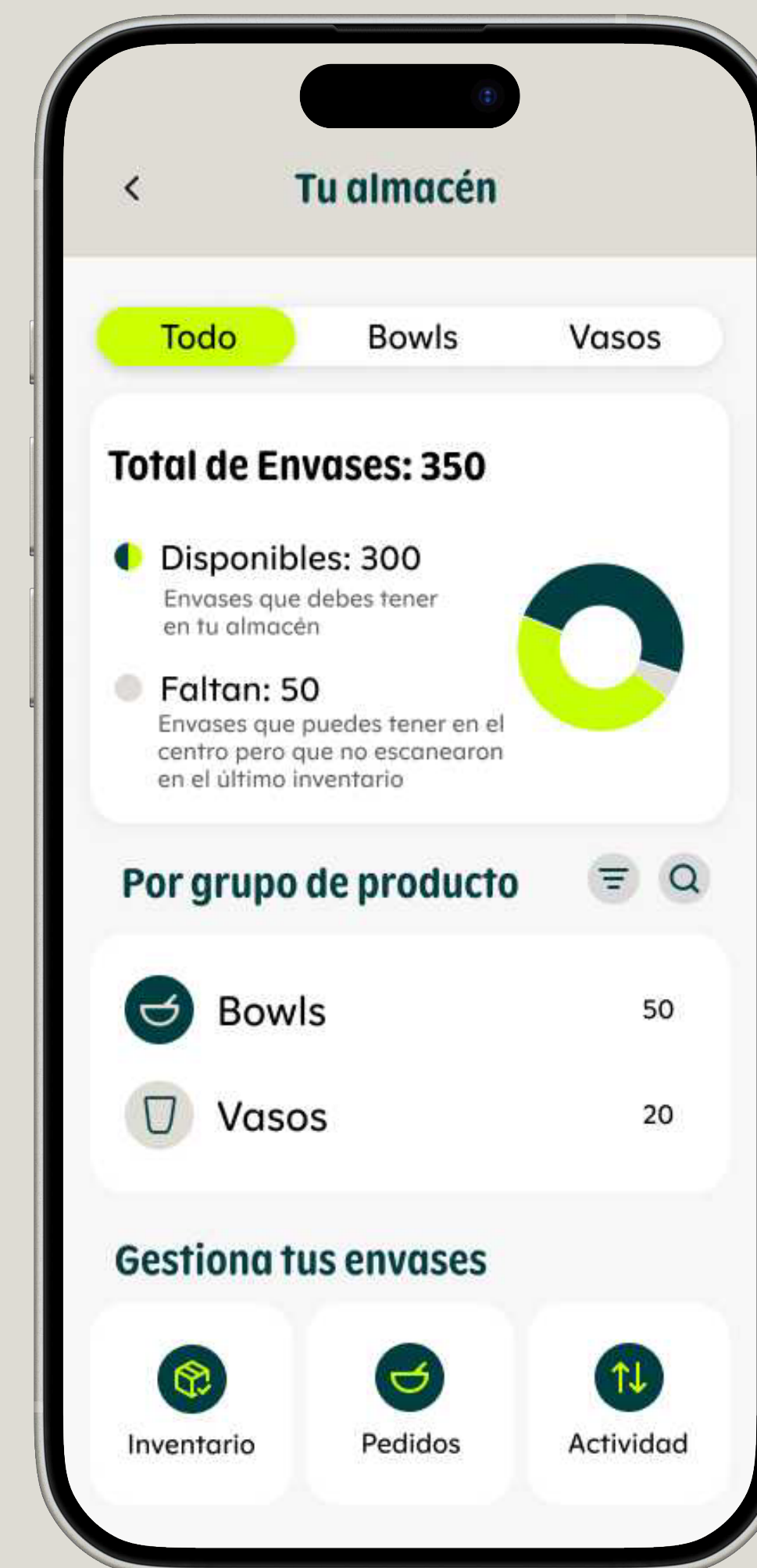
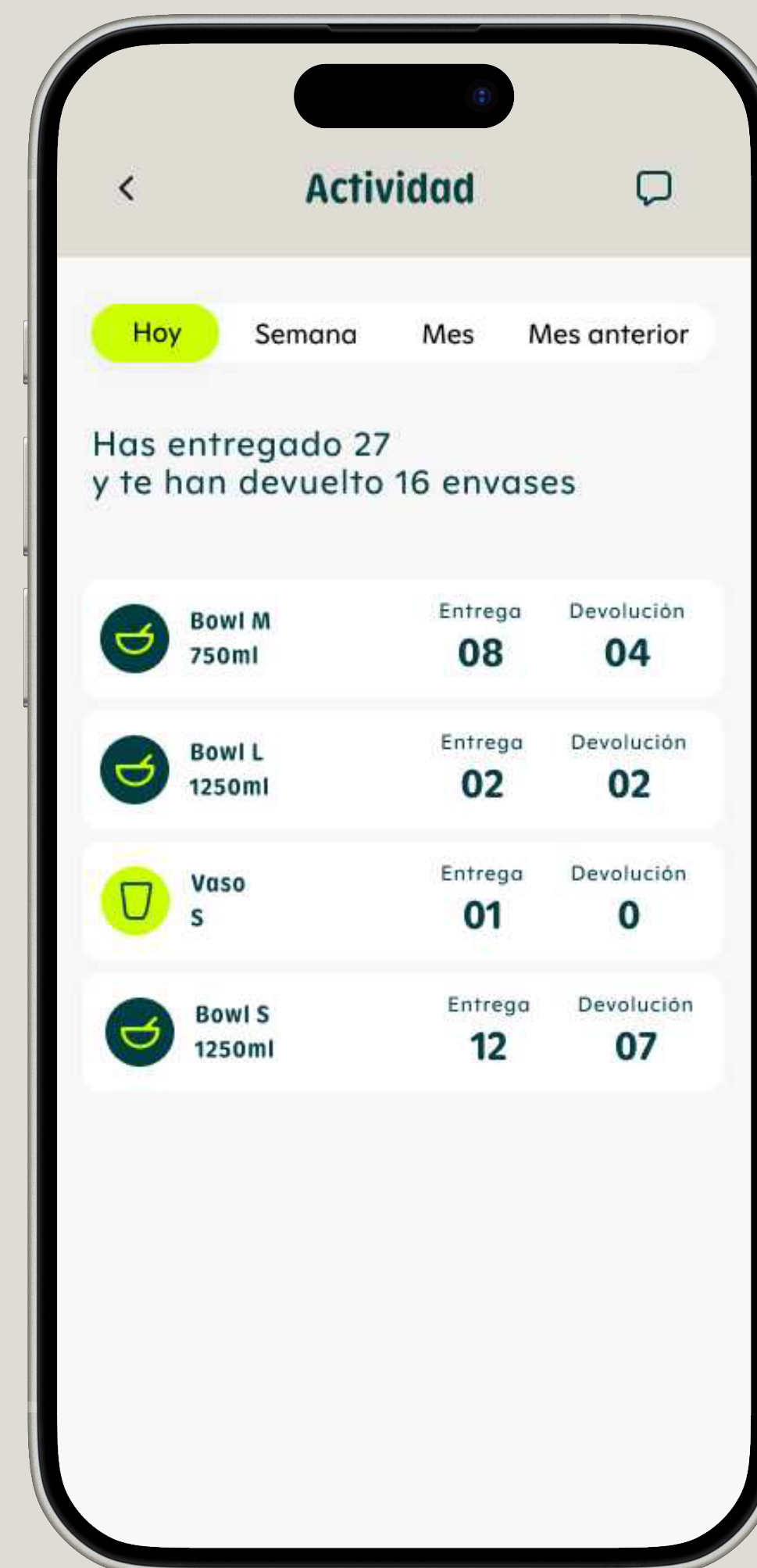
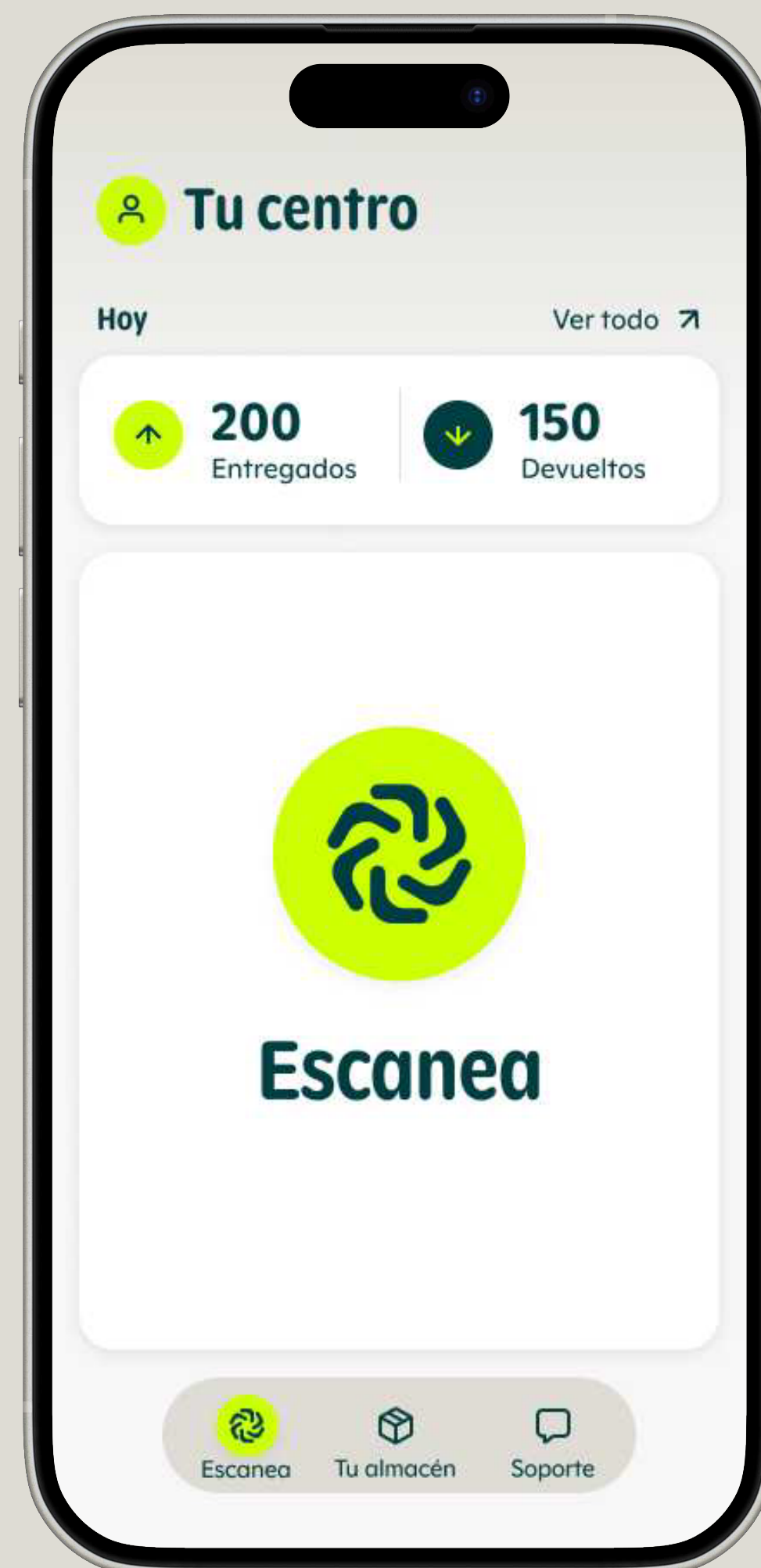
Impact metrics
and reports



Technology

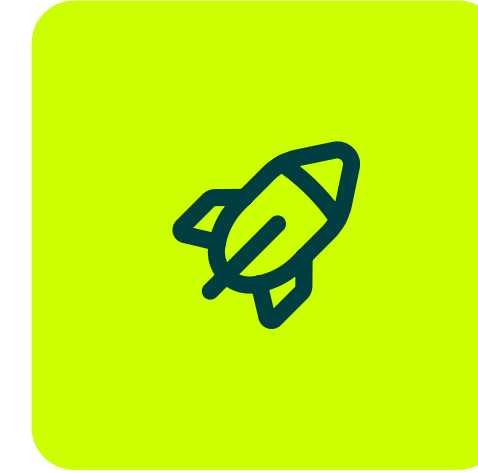


Containers



Bumerang Return

Bumerang Return helps you manage the return of containers in any environment.



Quick and easy operation



Integration with your current system



Reduce costs



Total control

Returning has never been easier.

- **Dummy Model:** simple, cost-effective and functional.
- **Smart Models:** with automatic QR reading for a seamless and autonomous experience.



Packaging Portfolio



Bowls

- ✓ +200 uses
- ✓ Microwavable
- ✓ BPA free

- ✓ Ergonomic
- ✓ Brandable



Cups

- ✓ Bockatech Tech
- ✓ Microwable
- ✓ BPA free

- ✓ Ergonomic
- ✓ +125 uses
- ✓ Brandable



Cup S 250ml



Cup M 340ml



Cup L 450ml

Impact



Communicate your impact with Data

Both the Bumerang app and partner portal provide real-time access to key metrics on environmental impact and the operations of your centres.

- Visualisation of metrics by centre.
- Custom reports on avoided waste (extra cost).
- Centralised management of operations (coming soon).



+1.0000.000

Marketing Strategy

1

An aerial photograph of a rocky coastline. The rocks are covered in vibrant green algae or seaweed. Pools of water are scattered among the rocks, reflecting the sky. The water transitions from a shallow, rippled turquoise near the shore to a deeper blue further out. The overall scene is a natural, coastal landscape.

“Poor distribution - not product - is the number one cause of failure.”

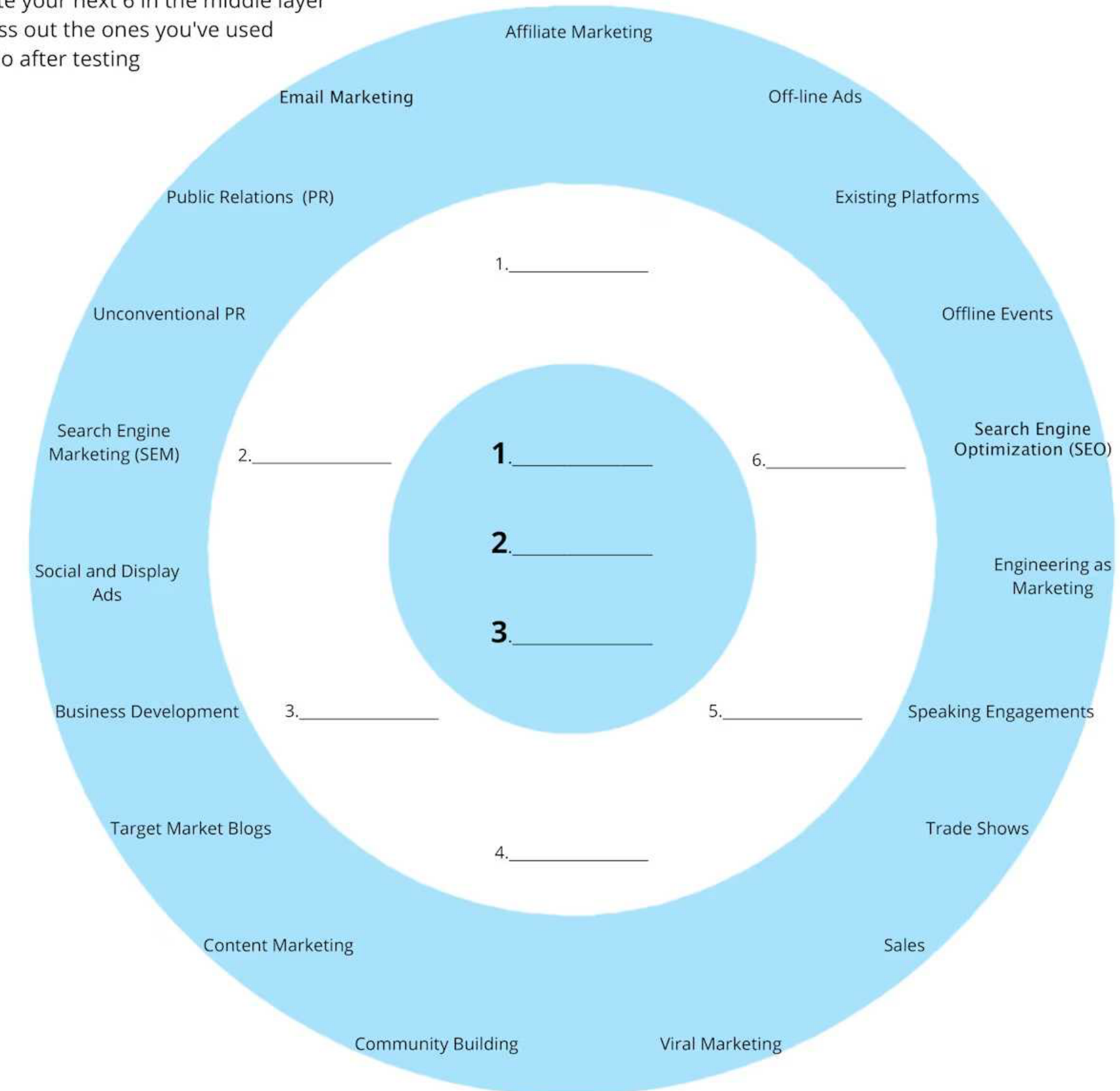
The Bullseye Framework Overview

A Systematic approach to finding the most effective marketing channels for your startup

Developed by Gabriel Weinberg and Justin Mares in their book Traction: A Startup Guide to Getting Customers.

The Bullseye Framework For finding the best traction channels

- 1) Read Traction by Gabriel Weinberg & Justin Mares
- 2) Select your top 3 & write them in the center
- 3) Write your next 6 in the middle layer
- 4) Cross out the ones you've used
- 5) Redo after testing



Method and content created by Gabriel Weinberg - Founder & CEO of DuckDuckGo, Co-author of Traction & Angel Investor

This page designed by Deven Nemer - Founder of Power Portal A Smarter Web Browser that could save you 4 hours per week or more by helping you do more in less clicks.

19 Marketing Channels to Test

- ☐ Viral Marketing
- ☒ Public Relations
- ☐ Unconvenient PR
- ☒ SEM
- ☐ Social & Display Ads
- ☒ Offline Ads
- ☐ SEO
- ☒ Content Marketing
- ☐ Email Marketing

- ☐ Engineering as Marketing
- ☒ Target Market "Blogs"
- ☐ Business Development
- ☒ Sales
- ☐ Affiliate Programms
- ☒ Existing Platforms
- ☐ Trade Shows
- ☒ Offline Events
- ☐ Speaking
- ☒ Community Building

Exercise: Build your current Bullseye

1. Viral Marketing - Growth through word-of-mouth and user-driven sharing.

2. Public Relations (PR) - Gaining media coverage to build credibility and awareness.

3. Unconventional PR - Stunts or unique actions that generate media attention.

4. Search Engine Marketing (SEM) - Paid ads on search engines like Google Ads.

5. Social and Display Ads - Paid ads on social platforms (e.g., Facebook, Instagram, LinkedIn).

6. Offline Ads - Traditional ads like billboards, radio, TV, and print.

7. Search Engine Optimization (SEO) - Organic traffic through content optimization.

8. Content Marketing - Creating valuable content to attract and engage customers.

9. Email Marketing - Building and nurturing a subscriber base.

10. Engineering as Marketing - Using tools, calculators, or software to attract leads.

11. Target Market Blogs - Guest posts and collaborations with niche blogs.

12. Business Development (BD) - Forming strategic partnerships to grow reach.

13. Sales - Direct, personalized outreach to potential customers.

14. Affiliate Programs - Creating a network of partners to promote your product.

15. Existing Platforms - Leveraging established platforms (e.g., Amazon, App Store).

16. Trade Shows - Networking and brand exposure at industry events.

17. Offline Events - Hosting or participating in local meetups, conferences, or festivals.

18. Speaking Engagements - Presenting at conferences or events to build authority.

19. Community Building - Creating loyal user communities around your brand.

The Bullseye Framework For finding the best traction channels

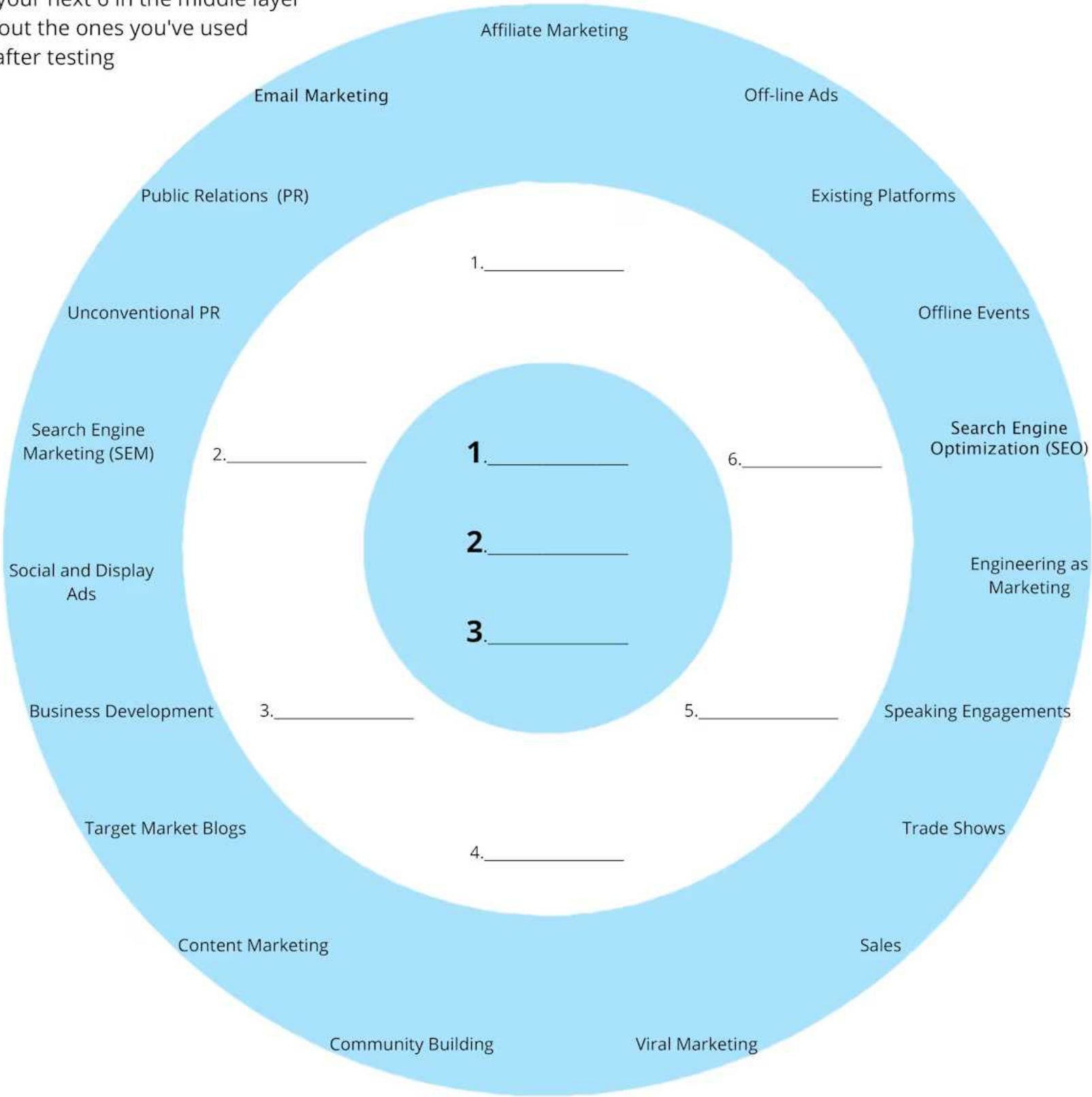
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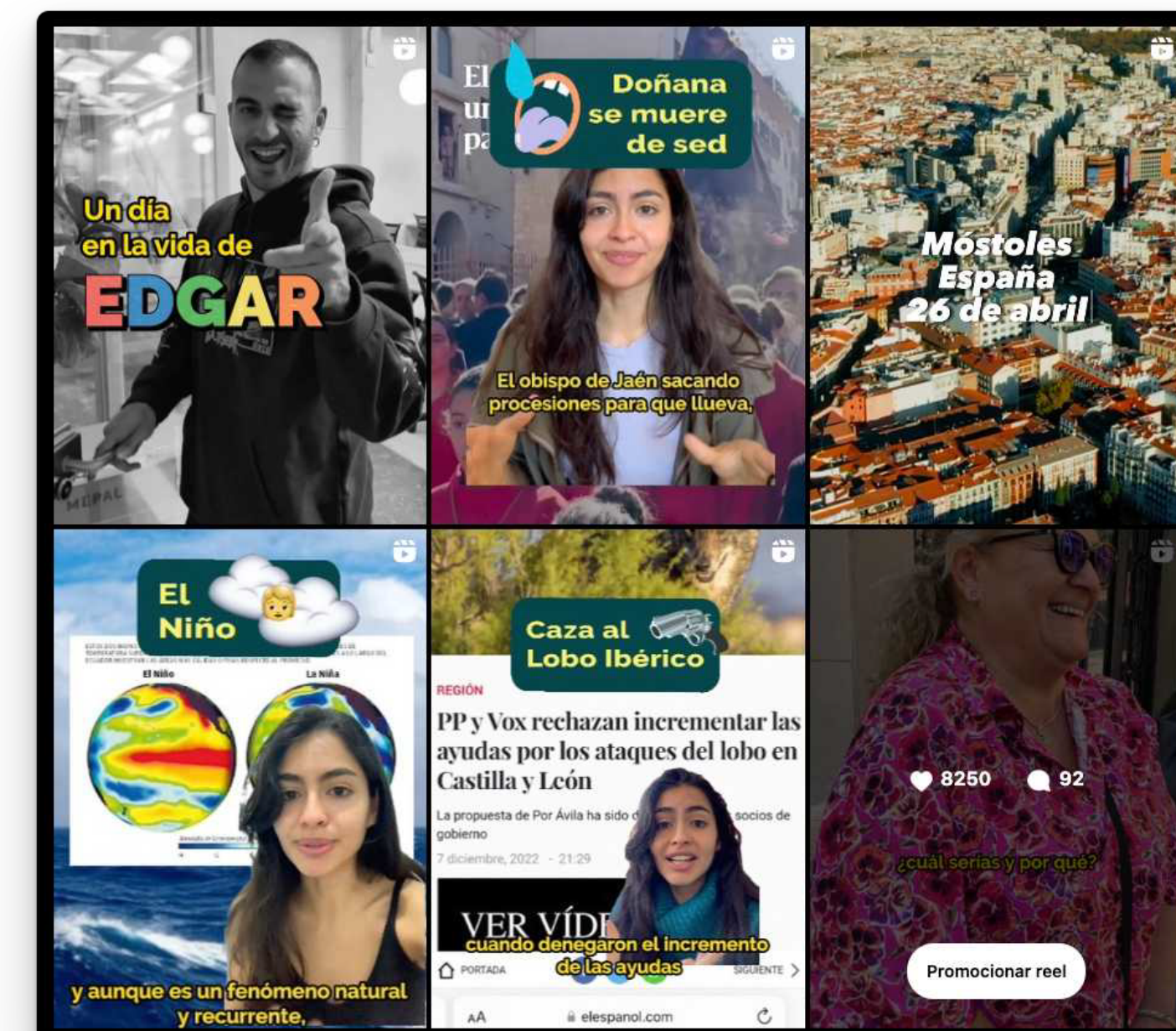
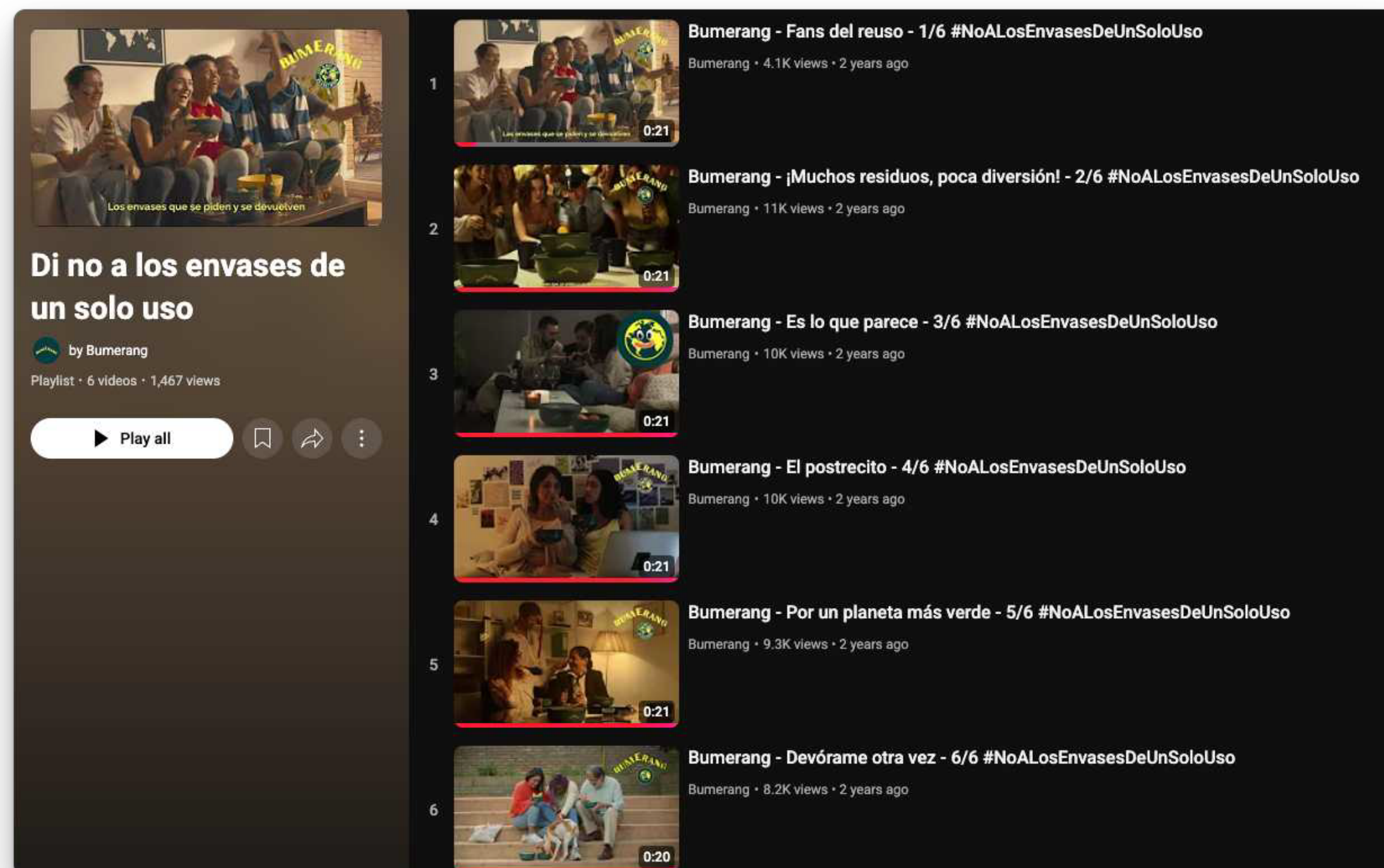
This page designed by Deven Nemer - Founder of Power Portal A Smarter Web Browser that could save you 4 hours per week or more by helping you do more in less clicks.

What worked for us



Content Marketing & Branding

- Branding is really important
- Long term investment
- Specially good for B2C
- Good for raising money
- Content with real people



Outbound Sales

- Get a CRM ASAP
- If you sell to local businesses use Google Maps & Tripadvisor Scrapers
- Create a sales process
- Define very well your ICP
- If email is an option, use Apollo to find emails and personalize outreach campaigns with AI

Fijar filtros					Ordenar por: Siguiendo actividad				
Cantina Interesada	Demo Programada	Demo Realizada	Getting Approvals	Firma pendiente / Fecha Inicio Programada					
464,20 € - 8 negocios	0 €	1.622,88 € - 3 negocios	3.792 € - 1 negocio	0 €					
Ros group Ros group, Adrià San Vicente 0 €		Nestle Purina Sergi Paga 840 €	Mango comedor (Nora Real Food) Mango, Joel Moreno Bull 0 €						
Inbound lead-form: Fundacio Santa Susan / Sebastia Rubio Fundacio Santa Susan, Sebastia Rubio 0 €		CBMSO Tamar colectividades, Carolina Sánchez 0 €							
Teamlabs BCN (Asociación Junior Empresa Intra) Asociación Junior Empresa Intra, Marcel Torrent 0 €		Inbound lead-form: Parc Sanitari SJD / Ainara Villamayor Parc Sanitari SJD, Ainara Villamayor 0 €							
Hospital Santa Maria de Lleida (Serhs) Serhs Food 0 €									
HOSPITAL UNIVERSITARI ARNAU DE VILANOVA DE LLEIDA (Serhs) HOSPITAL UNIVERSITARI ARNAU DE VILANOVA D... 0 €									
HOSPITAL DE TORTOSA VERGE DE LA CINTA (UTE CLECE-SERHS) HOSPITAL DE TORTOSA VERGE DE LA CINTA 0 €									
HOSPITAL UNIVERSITARI JOAN XXIII DE TARRAGONA(UTE CLECE-SERHS) mess (ute arcasa-clece), Beatriz Neila 0 €									
Hospital Duran i Reinalds (En Licitación) Arcasa Grup, Montse Arqués Gírbau 0 €									

Trade Shows



- We sell packaging systems, people want to touch them
- Suppliers trade shows are good too
- Very good as well to make business development
- Very good to meet people unaccessible otherwise, specially in traditional industries

Offline Events

- Sponsoring and supporting local events helped us gain visibility
- Select events where your ICP might be or for good networking
- Create a “free” kit for event organizers



Business Development

- Tech or sales partnerships are great. We partnered with a food ordering app to enter cantines with a co-created solution
- Reuse is a circular economy topic, try to get grants or subsidies
- Join or create an association for reusable packaging businesses



extra: Reuse Associations & Lobbying



- Policy plays a big role in Reuse
- Join or create a local or region wide association if it doesn't exist
- Lobbying is part of the game here
- Together we are stronger

Bad Channels

Social & Display Ads

- Our app was very local and intentioned
- Society not aware of these solutions
- Just drove people with interest but no buy intention or ICP

Viral Marketing & Unconventional PR

- Guerrilla Marketing tried, lots of noise, 0 results.
- Society not aware of these solutions
- Just drove people with interest but no buy intention or ICP



PR

- Good for getting noticed, 0 sales results
- Get a PR firm to put you in the best outlets, thanks to AI they are cheap now
- Good for announcing stuff
- Good to do it before raising money

EMPRESA
16



Oriol Segarra y Luis de Tord son los fundadores de este proyecto empresarial

ECONOMÍA CIRCULAR Propuesta innovadora

La guía tecnológica que impulsa el reciclaje de envases

A través de soluciones QR y NFC, la startup Bumerang crea códigos para cada recipiente que permiten su seguimiento desde la recogida hasta su devolución

ROBERTA SEBASTIANI

dejar un depósito. En caso de

empresa fue fundada en 2020, durante ese año y 2021 Bumerang se centró en crear un producto para el mercado de la restauración de pie de calle; sin embargo, «el producto tenía buena aceptación por parte de los restaurantes, pero no sus

Menjar per emportar en envàs reutilitzable

Bumerang té com a raó de ser evitar la generació de residus perquè no acabin en mars i oceans

Quan va començar a practicar surf, la connexió amb el mar va ser instantània, explica Oriol Segarra. Aquesta connexió, unida a "la seva vena emprenedora", han portat Segarra a col·laborar i a impulsar projectes encaminats a combatre un dels grans problemes d'aquests entorns: la contaminació per plàstics. L'última d'aquestes iniciatives és Bumerang, una *start-up* que ofereix envàs reutilitzables en el menjar per emportar.

El primer dels envàs va veure la llum l'octubre del 2019, i el naixement de l'empresa va arribar un mes abans de l'inici de la pandèmia per Covid-19, el març del 2020. Segarra va començar treballant amb tres restaurants, però de seguida es va unir a

una companyia de càtering que servia menjar als treballadors de sis oficines. "Aconsegüem evitar entre 200 i 300 envàs de plàstic diaris, i aquesta era la meua motivació principal", explica l'emprenedor. Amb el teletreball, però, el negoci se'n va anar en orris, fins que va arribar el boom del *take away*, amb el tancament actual de restaurants i bars.

En l'actualitat Bumerang ofereix els seus envàs reutilitzables a 16 restaurants de Barcelona, que paguen una subscripció mensual o anual. El funciona-



ment és el següent: Bumerang proporciona els seus envàs als restaurants perquè lliurin el menjar als clients. Aquests últims es comprometen a tornar l'envàs en qualsevol dels 16 establiments amb què treballa Bumerang en un termini màxim de 15 dies. El restaurant receptor s'ocupa de rentar-lo perquè es pugui tornar a utilitzar. Facturen uns 5.000 euros mensuals, però la xifra realment important per al fundador és que a l'octubre van evitar la generació de 670 envàs d'un sol ús.

Amb seu al Coworking Impact Hub Barcelona i un equip de vuit persones entre autònoms i persones en pràctiques, Bumerang ha aconseguit aixecar 166.000 euros en inversió: 10.000 euros procedents de recursos propis, 88.000 euros en una ronda d'inversió tancada en ple confinament i 68.000 euros d'un crèdit Enisa.

Més enllà d'arribar a més restaurants, a mitjà termini l'empresari es vol obrir a nous àmbits de l'envasament. La "nostra lluita és contra el consum d'un sol ús", assenyala.



Amb el sistema de retorn

Existing Platforms (Glovo)

- Plugging into Delivery is the hardest thing for Reuse
- Asymmetrical interests
- Depending on big players and their decisions
- Long time decision making

Thank you

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