



H-GAC Solid Waste Workshop Series on Recycling  
**Recycling - Contamination and  
Challenging Markets**

Digital Solutions

Creighton Hooper



Since 2001



## About us



# Our areas of focus

1

## **Digital transformation**

Helping local governments achieve better waste & recycling program performance, at a lower cost.

2

## **Recycling education**

Focusing on what residents want, we help you empower them to be better recyclers.

# We've been at it a long time

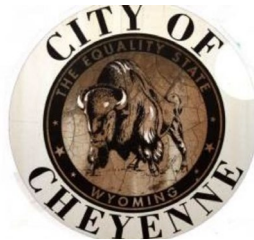
- North America's largest provider of recycling education technology – available in over 3,000 municipalities
- Founded in 2001
- Headquartered in Toronto

## Leaders in innovation

- Pioneered the use of traditional wall calendars for recycling education
- World's first mobile app for MSW
- Early adopter of voice technology (Google Home, Amazon Echo/Alexa)



# Progressive organizations choose Recycle Coach



Question #1

**Do you feel you have contamination under control?**

Question #2

**Do you feel you have very little control over  
contamination?**

### Question #3

**Over the next 12 – 24 months do you expect  
contamination rates to improve? Get worse?  
Stay the same?**



Question #4

**Do you feel that lack of funding for education is – at least in part - a reason for high contamination levels?**

# Goal for today

Empowerment.



# Full disclosure

We have competitors

- Recyclist
- Recycle by City
- Recyclebank
- Recollect Systems
- Remyndr
- Waste Management
- Republic Services
- 'In house' IT departments
- Teenagers



# Recycling programs are a mess

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Many people aren't very good at it

- Don't know; guess
- Think they know
- Simply 'recycle' everything

Programs are losing money

- Low recovery rates
- Low quality (contamination)





**Unrecovered recyclables  
and contamination cost  
US municipalities \$3.7  
BILLION every year**

**\$327M in Texas**

*Source: EPA 2015 Facts and Figures about Materials,  
Waste and Recycling report.*

An aerial view of a city at dusk or dawn, with a blue digital network overlay consisting of glowing lines and nodes connecting various points across the cityscape. The text is centered over the image.

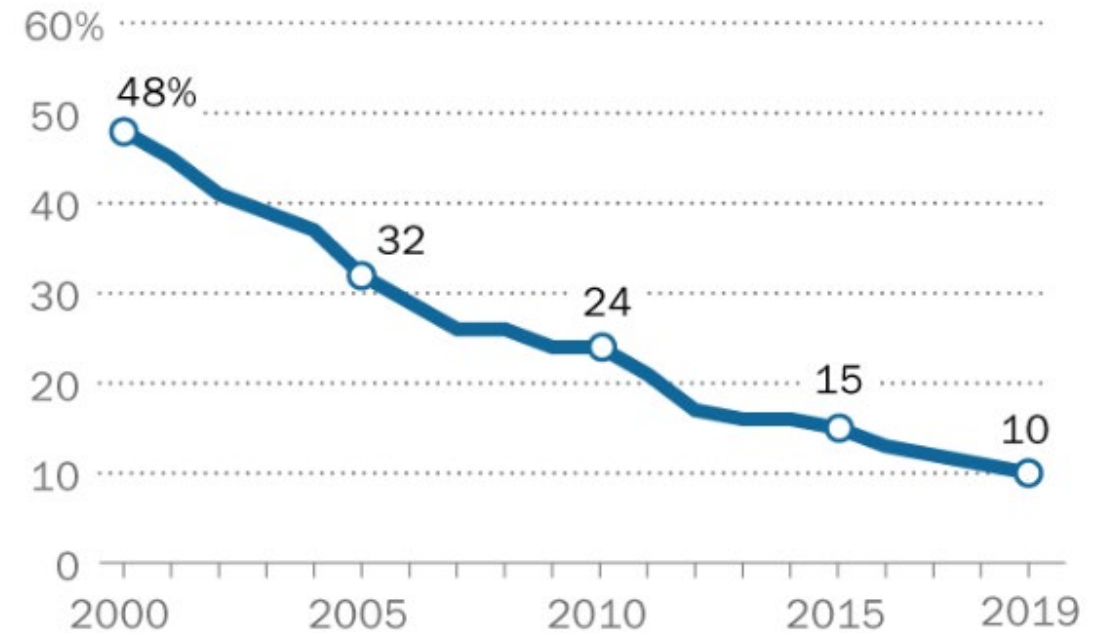
# What to do.

Digital transformation lowers contamination and improves recovery by leveraging technology to engage residents, and teach them to be better recyclers.


Almost  
everyone is  
online

## Offline population has declined substantially since 2000

*% of U.S. adults who say they do not use the internet*



Source: Survey conducted Jan. 8-Feb. 7, 2019. Trend data from previous Pew Research Center surveys.



Educating 25-55 year old adults about recycling is a priority



What about  
older  
residents?

According to

**AARP**<sup>®</sup>

91 percent of those age 50+ report using a computer

More than 80 percent of Americans age 50 to 64 have smartphones, which is about the same as the population at large

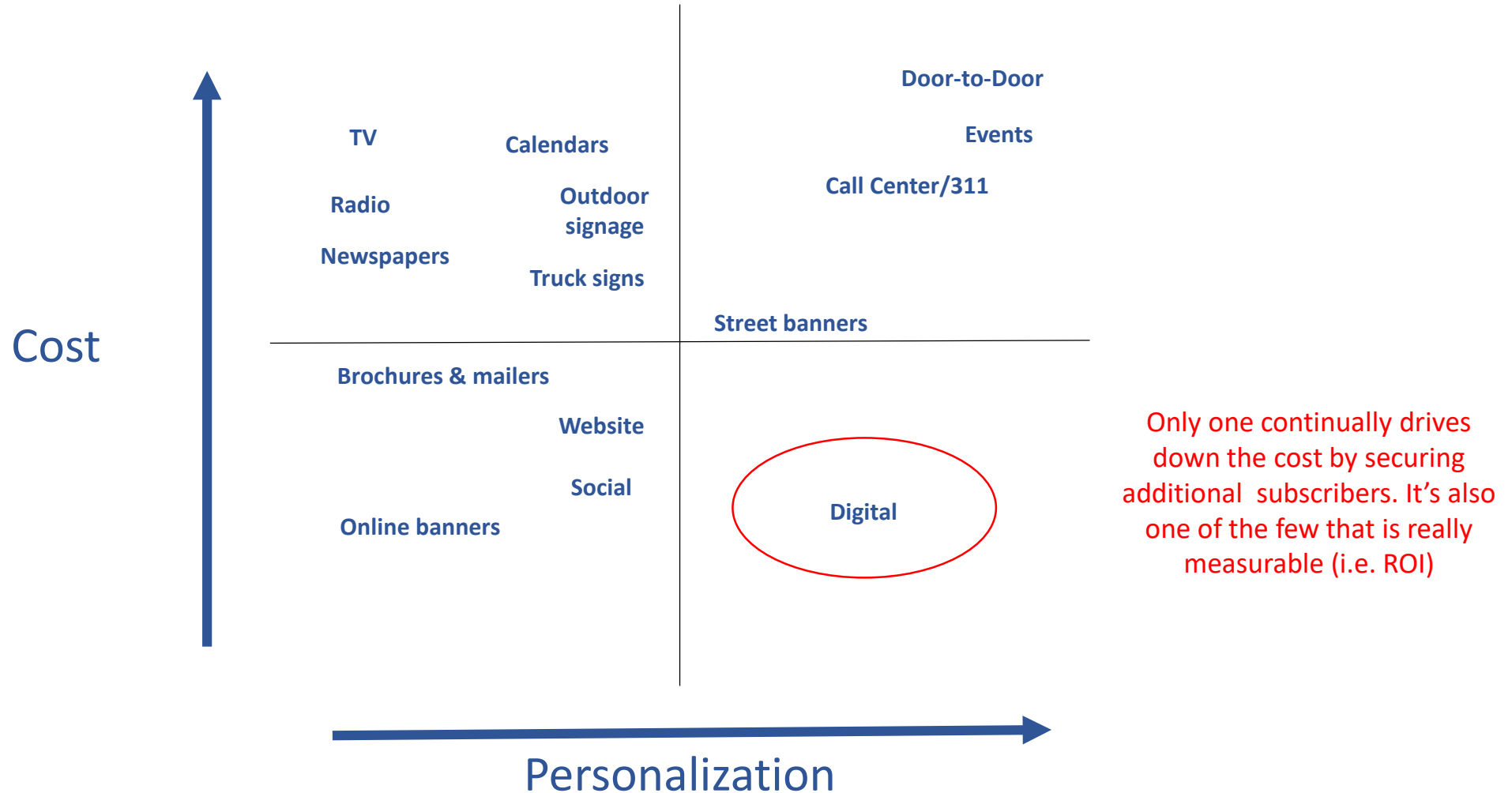
Nearly 1 in 7 Americans over 50 own a home assistant, such as Google Home or Amazon Alexa

# Breakdown by age

Comparing states with the  
highest & lowest % of  
residents 55+

Population by Age							
	Total Population	Age 0-24	%	Age 25-54	%	Age 55+	%
United States	321,418,820	104,865,003	32.6%	127,915,146	39.8%	88,638,671	27.6%
<b>States with the highest percentage of residents 55+</b>							
Maine	1,329,328	367,134	27.6%	503,052	37.8%	459,142	34.5%
Vermont	626,042	187,851	30.0%	231,553	37.0%	206,638	33.0%
West Virginia	1,844,128	545,190	29.6%	693,728	37.6%	605,210	32.8%
Florida	20,271,272	5,863,852	28.9%	7,811,289	38.5%	6,596,131	32.5%
Montana	1,032,949	327,230	31.7%	376,229	36.4%	329,490	31.9%
	<b>25,103,719</b>	<b>7,291,257</b>	<b>29.0%</b>	<b>9,615,851</b>	<b>38.3%</b>	<b>8,196,611</b>	<b>32.7%</b>
<b>States with the lowest percentage of residents 55+</b>							
Georgia	10,214,860	3,521,179	34.5%	4,179,585	40.9%	2,514,096	24.6%
Texas	27,469,114	9,983,424	36.3%	11,208,891	40.8%	6,276,799	22.9%
Alaska	738,432	266,889	36.1%	305,082	41.3%	166,461	22.5%
District of Columbia	672,228	199,758	29.7%	325,777	48.5%	146,693	21.8%
Utah	2,995,919	1,252,818	41.8%	1,150,801	38.4%	592,300	19.8%
	<b>42,090,553</b>	<b>15,224,068</b>	<b>36.2%</b>	<b>17,170,136</b>	<b>40.8%</b>	<b>9,696,349</b>	<b>23.0%</b>

# Relatively speaking, how personalized is digital communication?





# Let's talk digital

Digitally transforming your education & outreach efforts to lower costs and increase engagement

## INBOUND

# Make your program information EASY TO FIND

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According to Zendesk:

- 67% of people prefer finding information using a self-service option over speaking with a representative
- 40% call only after looking for an answer online
- 91% said they would use a searchable online database if it was available and easy to use



## INBOUND

# What's the strategy?

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1. Digitize your program information
2. Optimize it for search
3. Allow residents to access it any way they want



# INBOUND

## How it works

### Program Info

Personalized calendar

Regular & holiday reminders

What goes where?

Collection requirements

Depots

### Devices

Computers

Tablets

Smart phones

Smart devices  
(Amazon Echo, Google Home)



### Search

Mobile app

Web app

Digital assistants  
(e.g. Alexa)

## INBOUND

# Why embrace digital technology?

1. Many residents, particularly millennials, will not spend much more than 5 seconds looking for information
  - a) If they cannot find what they need quickly, they give up (likely forever?)
2. Develop your own COMMUNICATIONS NETWORK!
3. Save valuable time (answering the phone) that can be spent more productively
4. Get valuable insights through data analytics
5. It's cheap – making basic waste & recycling information widely available to residents has become commoditized





## INBOUND

# Things to consider

People love networks

- Custom self-branded solution or leverage a popular network?
  - Flexibility (not locked in)
  - Design/performance updates
  - Promotional budget
- Who sets up and manages your database?
  - Having searchable information that is incomplete is almost as bad as not having it searchable
  - Take advantage of crowd-sourcing or be prepared to devote hours to weekly upgrades

Uber



SeeClickFix



 Nextdoor



remyindr



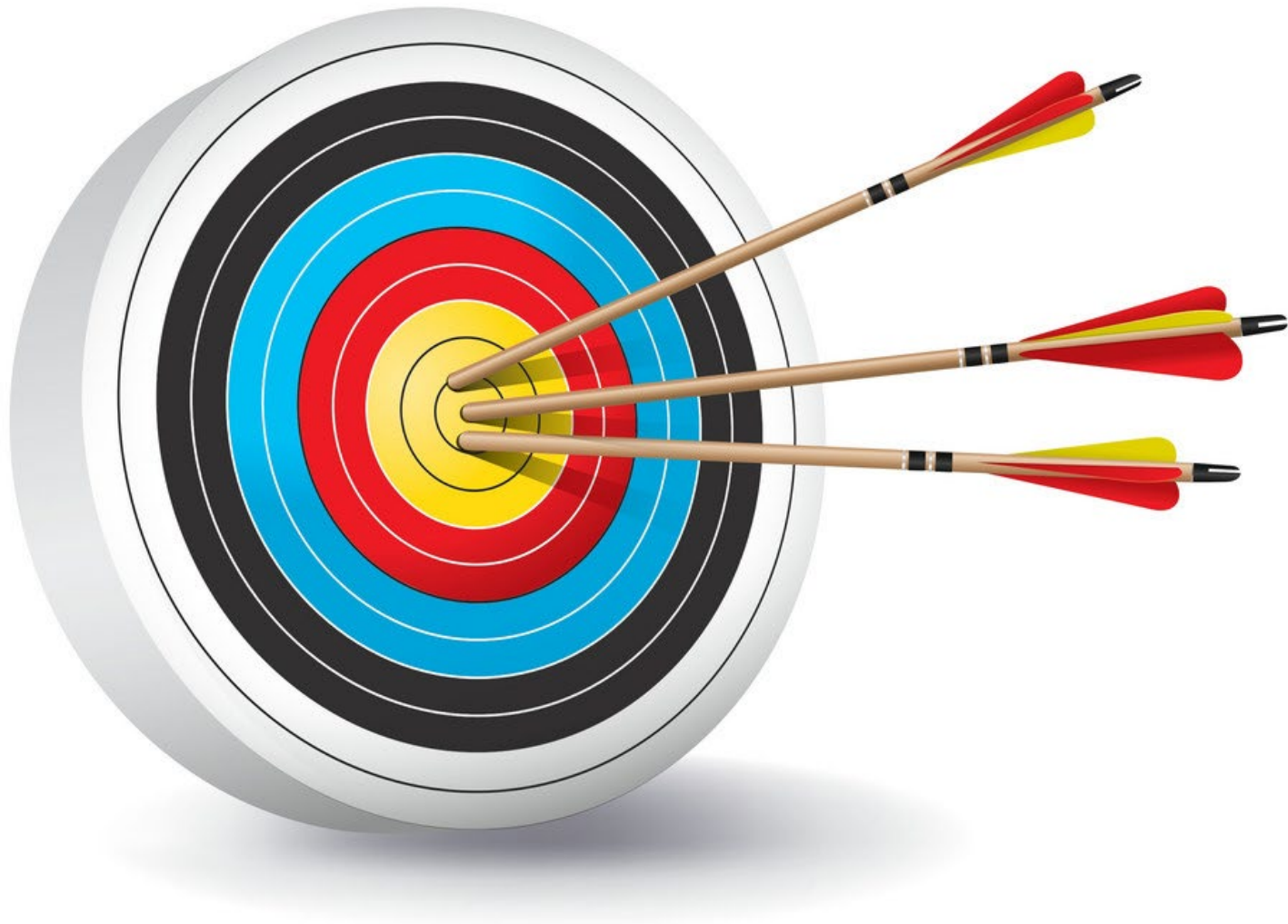
ticketmaster®



Why wait?

Questions?





# Outbound

Addressing the issues that are affecting your program performance

## OUTBOUND

# Strategy & tactics

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### Engage & educate:

1. Save money by leveraging your own communications network
2. Get their attention; make recycling fun
3. Promote engagement and curiosity with a few key (simple) messages
4. Launch campaigns about specific program challenges
5. Teach them where they can find answers to their questions



## OUTBOUND

# 1. Own your communications network

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People willingly download the app or sign up to get:

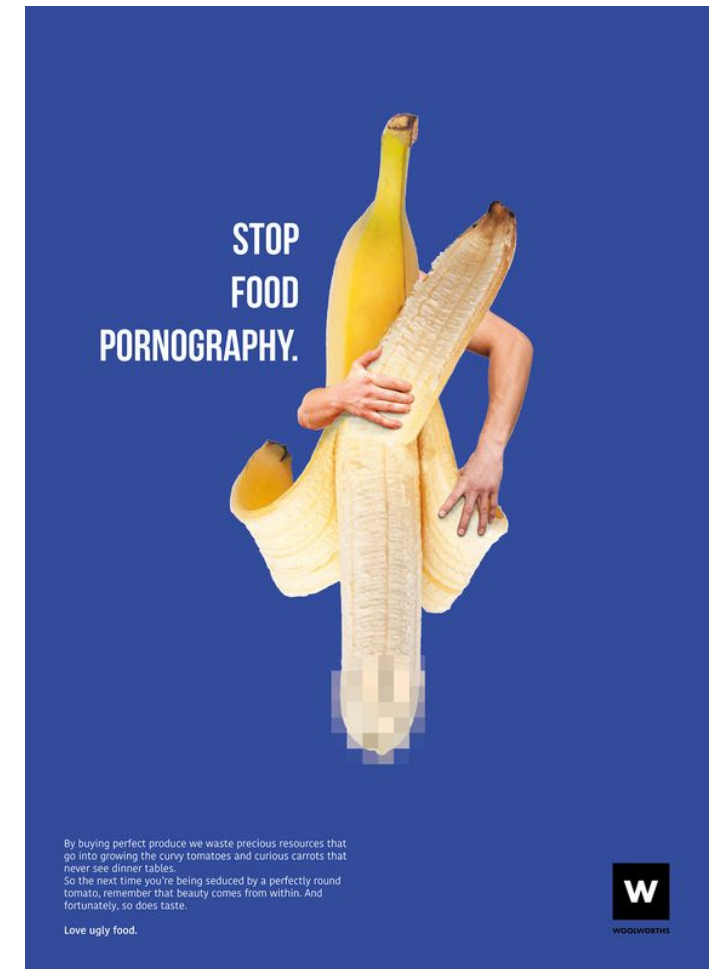
- Reminders
- Printable PDF calendars
- ‘What goes where?’ information
- Event details
- Relevant articles



## OUTBOUND

# 2. Get your residents' attention

1. Use eye-catching images
2. Humor works!



## OUTBOUND

# 3. Keep it simple

Promote engagement and curiosity with a few key (simple) messages



“3 things you need to know”



## OUTBOUND

# 4. Focus on key challenges

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Launch Campaigns about specific program challenges:

- Tanglers
- Food residue
- Plastic bags
- Pizza boxes
- Recycle more aluminum cans
- Coffee cups

Leverage your own communication network, which GROWS every time you run a Campaign!



# OUTBOUND

## 5. Teach them where they can find answers

Don't forget about other communication channels

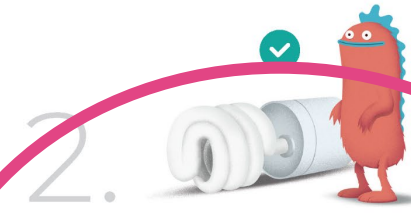
Also what to do if they aren't sure

### Recycling Guide



#### 1. Don't bag your recyclables

When you put recyclable materials inside a bag, they can't be seen or sorted, and will usually end up in the landfill.



#### 2. Don't know if an item is recyclable?



Search the Recycle Coach app



Ask Alexa or Google Assistant\*



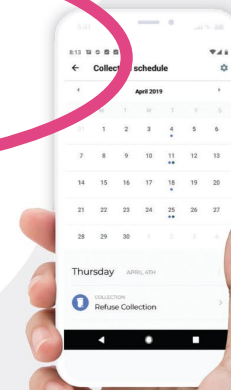
Call us at 301-725-0088

\* Download the Recycle Coach skill for Alexa or for Google, simply use the term "Hey Google, Ask Recycle Coach..."



#### 3. If in doubt, throw it out

It's true. Putting non-recyclable materials in your cart endangers the financial viability of recycling programs and can even contaminate entire loads. If you can't find out for sure if an item is accepted in our recycling program, don't put it in the cart.



- Personalized schedule with holiday changes
- Pick-up reminders
- What goes where? material look-up
- Collection requirements



OUTBOUND

# Need some help?

the  
**coachlings**

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## About the Coachlings

- Free to use; minimal charge for custom artwork
- Not necessary to be a Recycle Coach client



**Can I afford all  
this?**



# What does it cost?\*

Fees are typically charged annually; set-up fees are often waived

Usually based:

- Population
- # of distinct programs
- Features

A complete inbound/outbound package for municipalities with populations of 20 – 500K:

- 15¢ - 90¢ per household, annually

Population – 20K	Population – 50K	Population – 100K
\$5-7K per year	\$10-15K per year	\$15-25K per year

## Tip

Substantial savings are available when you combine your purchasing power.

*\*Ballpark estimates only – each situation is different and pricing will vary based on the provider and program specifics*

# What we've discussed today

1. Digital transformation is a good thing
  - Reaches the majority of residents
  - Increases personalization and lowers cost
2. Implementing a digital strategy is easy
  - Inbound – make information easy to find
  - Outbound – address key challenges
3. It costs less than you may have thought – can fit almost any budget





Who feels more empowered to start taking back control of your program?

# Win me!

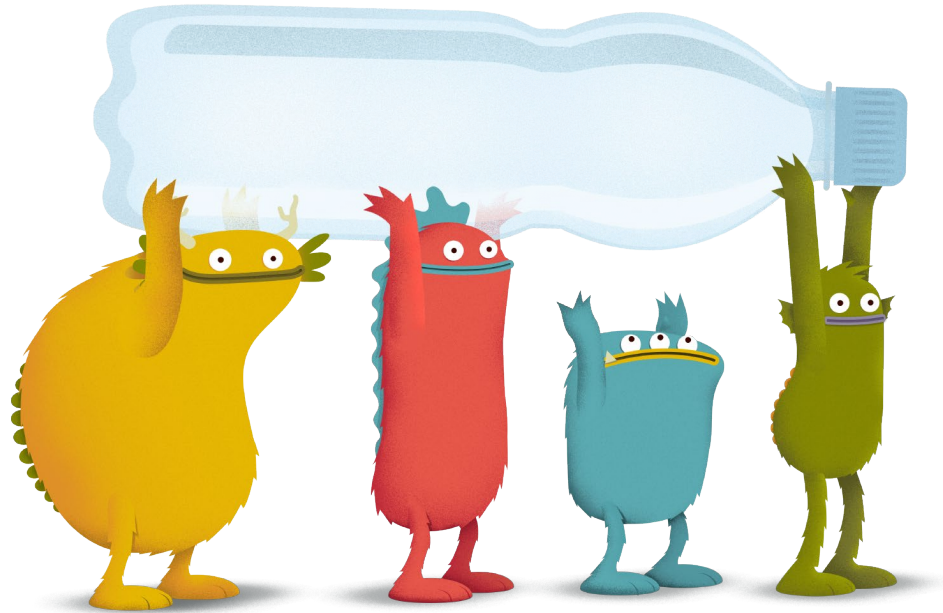


Hello, my name is Scarlett. I have 22 brothers and sisters; it's very tiring sometimes.

Who did the Toronto Raptors beat on Sunday to advance in the NBA playoffs?







# Questions?

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Empowering people to help the environment by  
becoming better recyclers