



# **Promoting waste management awareness & behavior using the Reasonable Person Model**

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# Problem



(WasteNot, 2016 Manndible Cafe Waste Audit



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# Problem



Cornell University entities in charge of waste management often struggle with contamination rates in their different post-consumer material streams.

Managing entities incur penalty fees for compost & recycling streams that are too contaminated. Additionally these rejected material streams must be landfilled.

Reducing our disposal rate (i.e. what goes to the landfill) is the first primary objective of the EPA's Sustainable Materials Management Strategic Plan (EPA, 2015).

“In 2014, over 89 million tons of MSW were recycled and composted. These activities provided an annual reduction of more than 181 MMTCO<sub>2</sub>E comparable to removing the emissions from over 38 million passenger vehicles from the road in one year.” (EPA, 2016, pg. 14)

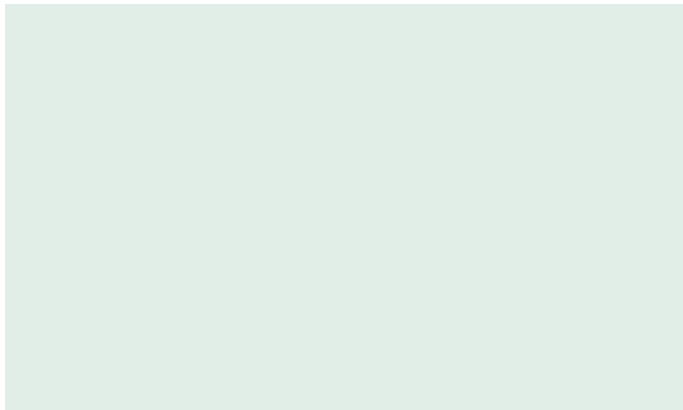
# Problem



There has been extensive research linking environmental behaviors and concerns to knowledge, values, awareness, and other influencing factors (Gifford & Nilsson, 2014).

Unfortunately, engendering concern and bridging the awareness-behavior gap in regards to waste issues has proven to be a difficult endeavor for campus entities.

Recent environment-behavior research points to importance of engendering a holistic understanding of waste management within individuals (Oke & Kruijsen, 2016) and expanding the public's understanding of what constitutes good waste management behavior beyond a narrow set of codified behaviors (Macbride, 2012).



# Objective



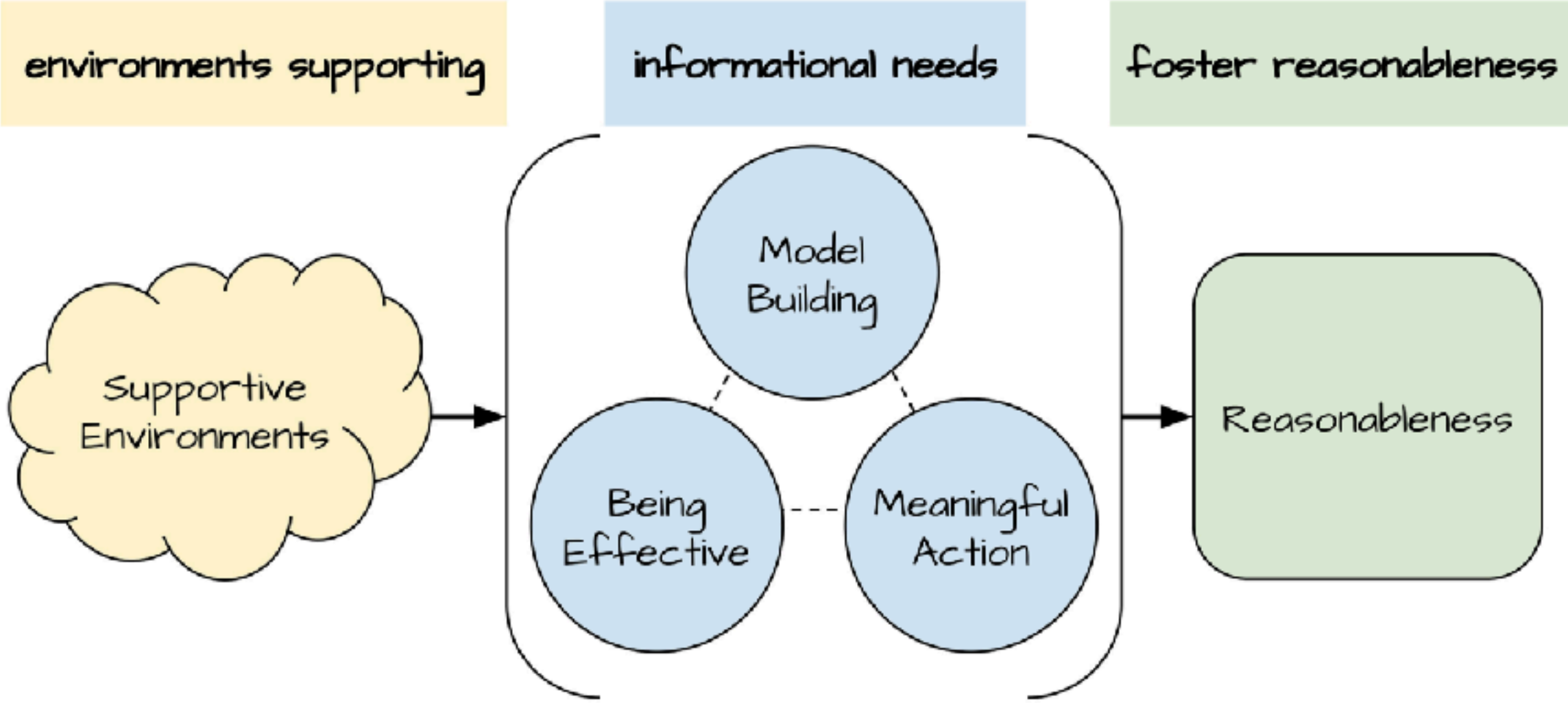
Create an environmental educational campaign to promote better individual waste management awareness & behavior based on the Reasonable Person Model (RPM).

*“The RPM organizes human informational needs into three major categories. [...] These needs relate to understanding what is going on around one (building models), the capacity to utilize knowledge and skill (being effective), and the desire to be needed and to make a difference (meaningful action).”*

(Kaplan & Kaplan, 2008, p. 827)



# RPM



(Basu & Kaplan, 2015, p.3)

# Audience

## Target Audience

- Cornell University students, faculty and staff - “lay persons”

## Community Partners

- Cornell eateries and cafes (e.g. Manndible Cafe)
- Facilities
- Cornell Waste Management Institute
- Cornell Farm Services
- WasteNot (Student Group)

## Site

- Manndible Cafe, Mann Lobby & Mann Library



# Product Concept

## **ONLY COMPOST FOOD SCRAPS & NAPKINS @ CORNELL UNIVERSITY**

(Cornell Farm Services)



# Product Concept

**DO NOT PUT UTENSILS OR  
PAPER PLATES IN THE  
COMPOST BIN**

(Cornell Farm Services)





# Product Concept

**UTENSILS & PAPER PLATES  
DO NOT DECOMPOSE OR  
BIODEGRADE PROPERLY AT  
CORNELL COMPOSTING SITES**

(Cornell Farm Services)



# Product Concept

**COMPOSTABLES FROM  
CORNELL EATERIES TRAVEL 2.3  
MILES TO FARM SERVICES'  
COMPOSTING FACILITY**

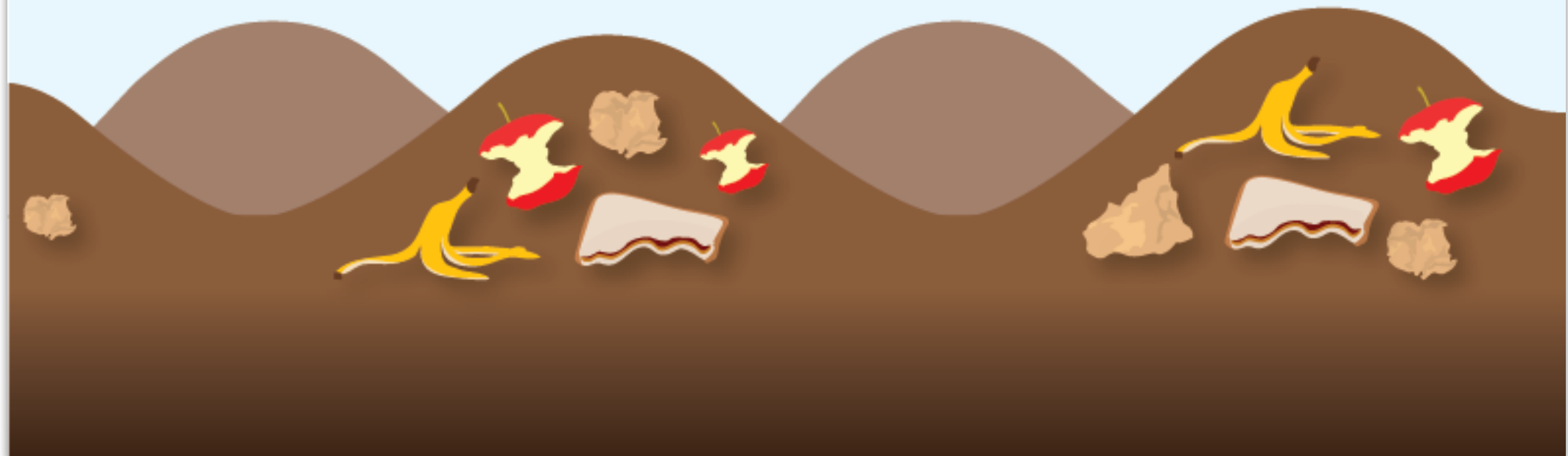




# Product Concept

**THE ENTIRE COMPOSTING  
PROCESS TAKES 6-9 MONTHS**

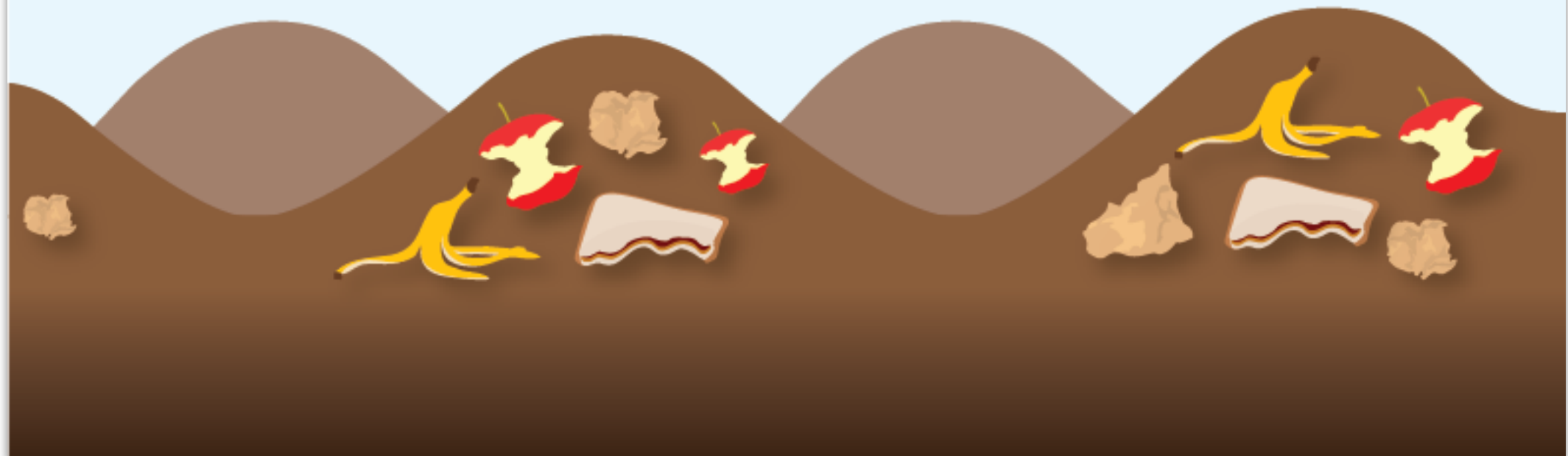
(Cornell Waste Management Institute, 2009)



# Product Concept

**Food Scraps are 6-8 % of  
the organics composted  
by Cornell Farm Services**

(Cornell Waste Management Institute, 2009)





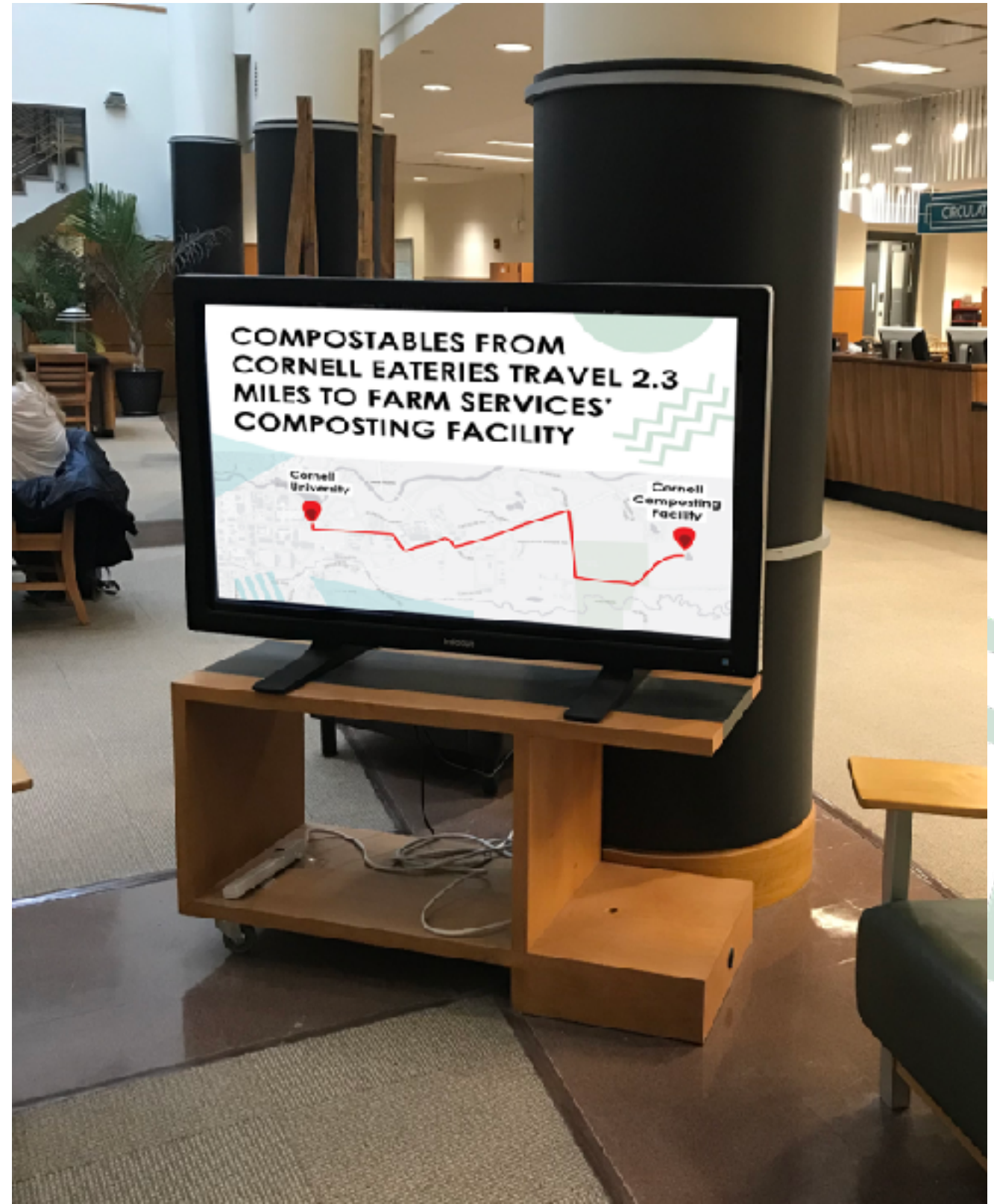
# Product Concept

**COMPOSTING CORRECTLY  
HELPS DIVERT MATERIAL  
FROM THE LANDFILL AND  
LESSENS THE NEED FOR  
ENERGY-INTENSIVE WASTE  
TRANSPORTATION**



# Delivery / Shareability

Simple animations or slideshows of the RPM intervention can be displayed on monitor screens around the proposed site (Mann Library Cafe).





# Delivery / Shareability

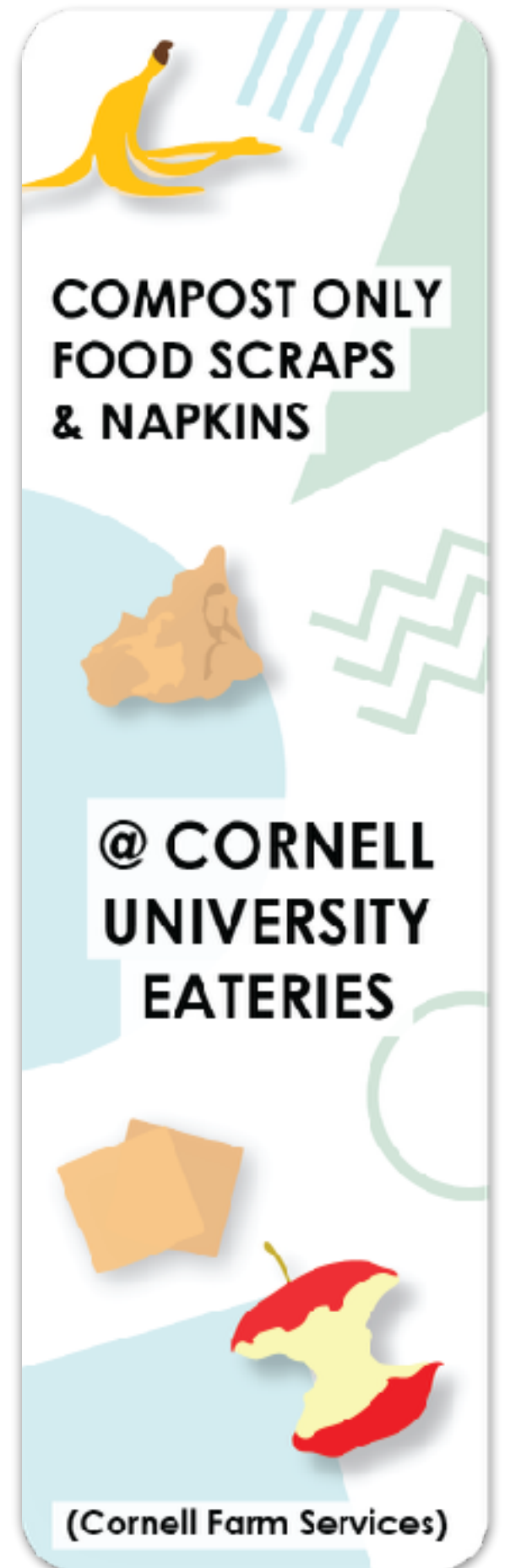
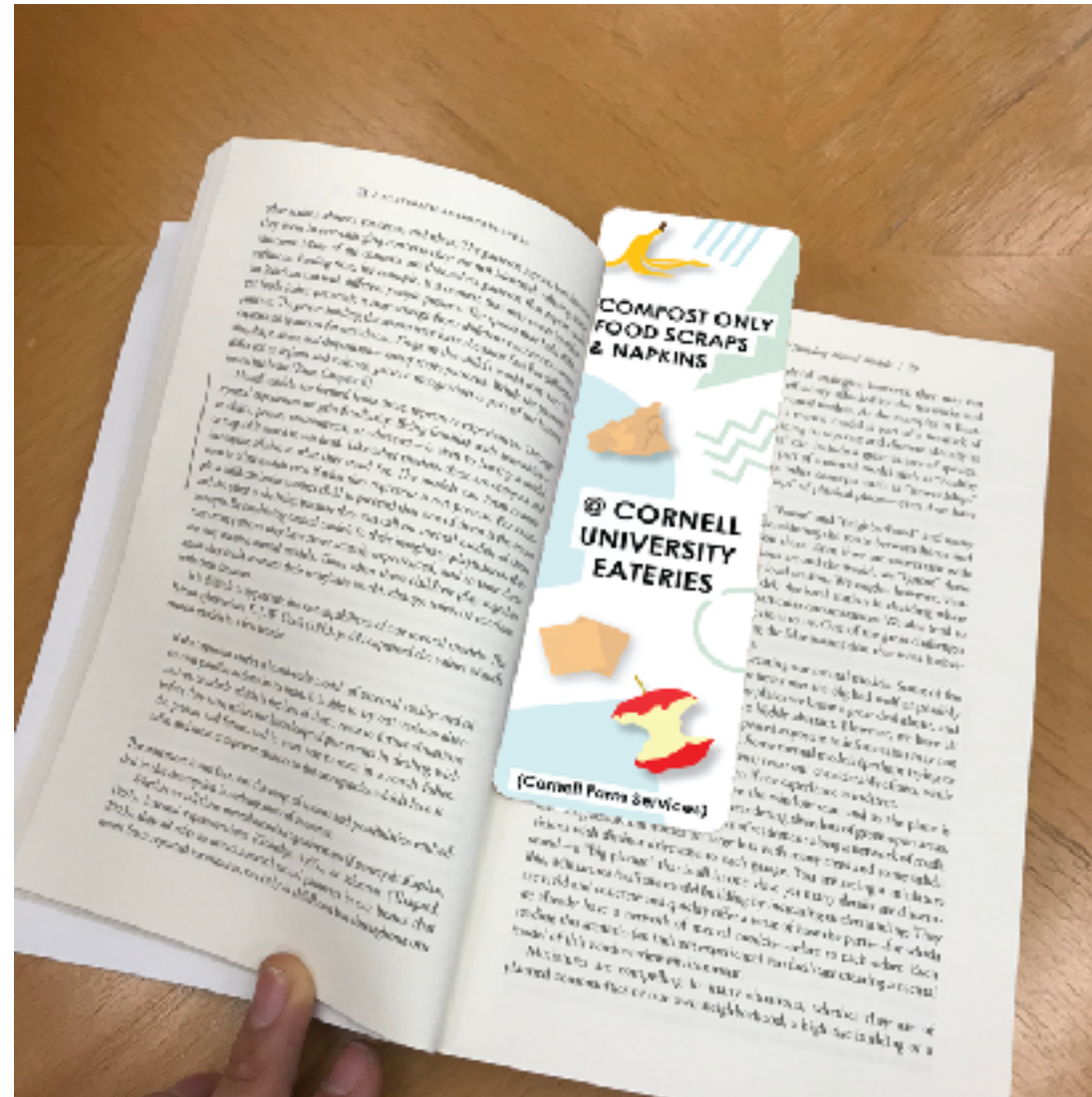


Graphic “snippets” of RPM information can populate the environment around the site.





# Delivery / Shareability



Functional objects (e.g. bookmarks) that repackage the RPM information in a fun and accessible way can be distributed.

# Delivery / Shareability

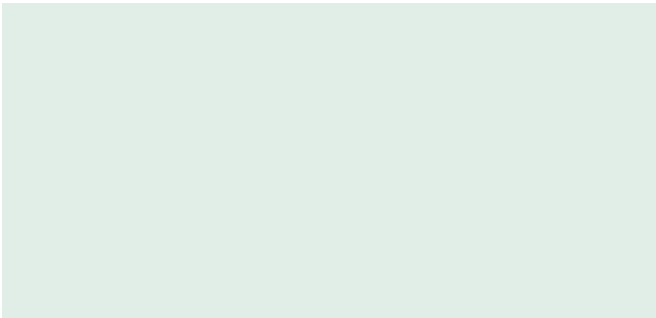
The RPM educational intervention in the form of images or simple animations, can also be posted on social media platforms associated with the site.





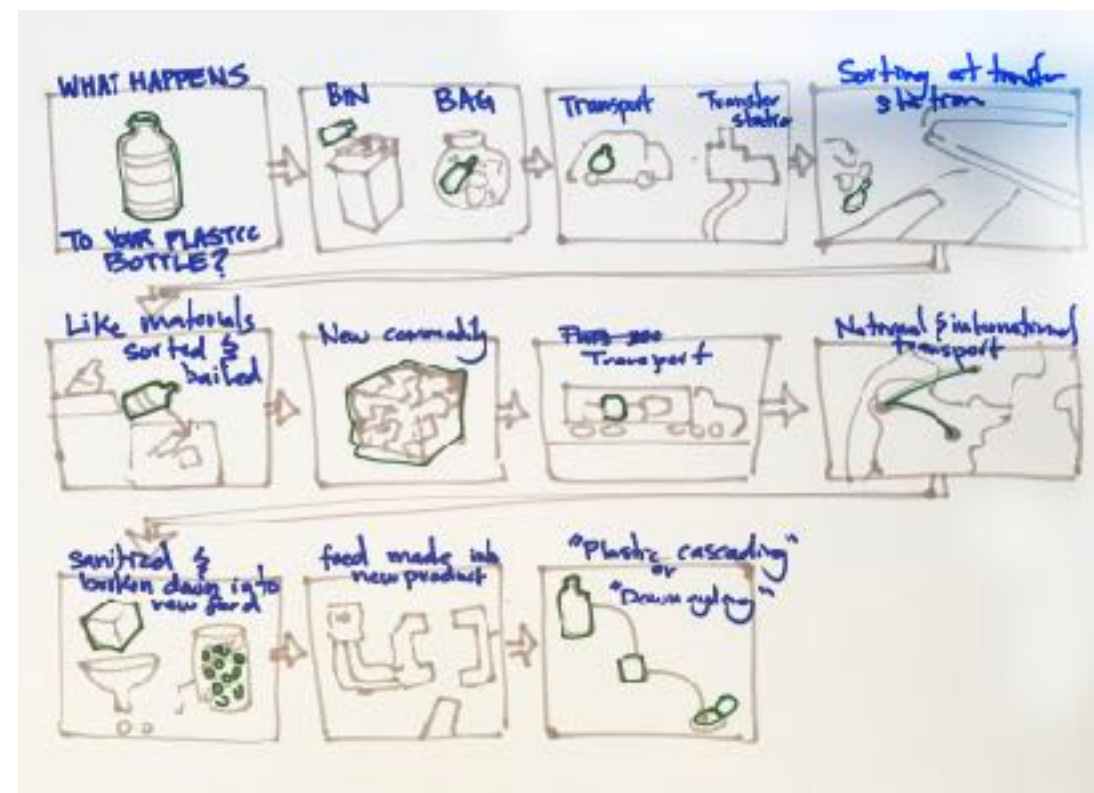
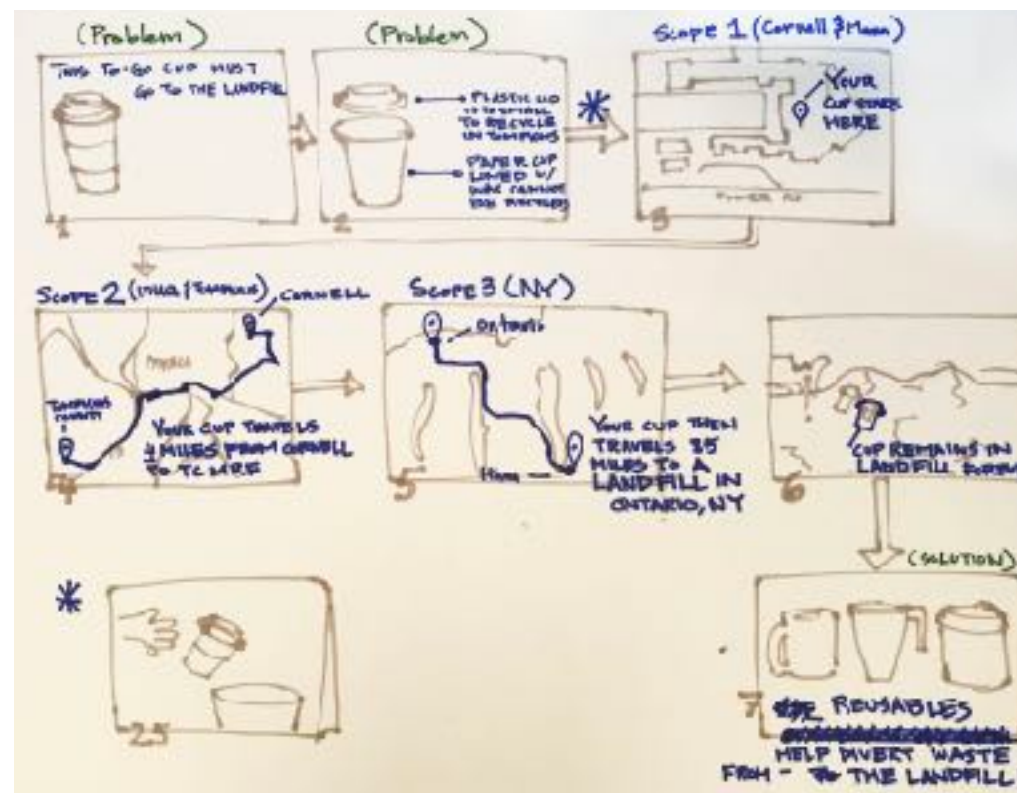
# Summary



- Environmental educational campaign to promote better individual waste management awareness & behavior based on the three components of RPM: (1) Building Models, (2) Being Effective, (3) Meaningful Action.
  - Educational information is framed in a way that is **easily digestible** and works to build on individuals' **baseline understanding** of local waste management issues. Special attention is given to show the **meaningful actions** individuals can take to address waste issues.
  - Information is delivered in the context of **relevant** and **familiar** environments through **repetitive experiences** and encounters.
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# Further Development

- Create additional educational modules around waste management issues (e.g. recycling or landfill issues)



- Develop other vehicles for sharing RPM content like a website, youtube channel or mini-lecture series.
- Develop a research study to test the effectiveness of the RPM intervention over time.

# References

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