

CommonWaste: Social Recycling

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Figure 1.

ABSTRACT:

This paper is an examination of the social application and the sustainability effects of CommonWaste (Figure 1.), a social recycling network. It explains CommonWaste's inspirations, social environment expectations, technical function and operation, and other applications for the project. Because people don't see the effect of recycling quickly enough to understand its importance, showing them the effect through a virtual representation of the real world will create a new incentive.

KEYWORDS:

Recycling; social media; sensor making; environment effect; community; identity; incentive.

INTRODUCTION:

CommonWaste is a social recycling project. I was inspired by the artists of TheFunTheory.com (an Initiative of Volkswagen) Bottle Bank Arcade (Figure 2.) game for its community-based involvement and Nintendo Wii's Animal Crossing: City Folk (Figure 3.), for its color and welcoming environment. My social recycling project would work when you place your recycling into the recycle bins. The bins would have sensors that register the item and transfer your recycling to a Facebook.com-like social world.

LEAVE BLANK THE LAST 2.5 cm (1") OF THE LEFT COLUMN ON THE FIRST PAGE FOR THE COPYRIGHT NOTICE.



Figure 2.



Figure 3.

There, you and your friends can see the positive effects of your recycling instantly. The more you recycle the more your environment will become clean: the sky gets brighter/bluer, the water becomes drinkable, more flowers grow, and you can invite more people (friends) to live in your world. Together you make the digital world a better place.

INCEPTION:

This project came from an idea that I presented in class at the beginning of the Fall 2012 semester. The assignment was to take something physical and mash it with something digital. I took the idea of recycling and transferring the effect to a social network. You affect the CommonWaste network through your actions in the real world (Figure 4.).

The general idea for the mash up assignment was to create a social environment where your recycling made an impact in a digital world that mirrored your own. Coming from rural

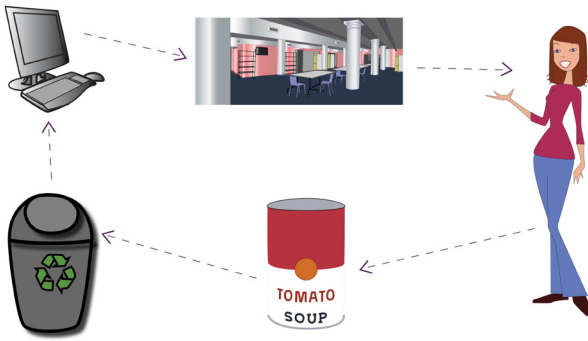


Figure 4.

New Mexico, the positive effects of recycling were seen almost on a daily base. In the coffee shop I worked at we used eco-friendly cups, plates, etc., and most, if not all, of our customers recycled the cups or used them again later or the next day. Being here in New York, I see recycling signs and bins everywhere, but I don't see the effect so much. I still see trash everywhere. I wanted to try and use the tenants in our apartment building as a part of a social experiment—since I presented this assignment to my class I have changed the location of the project to D12 (Parsons), the graduate student lab (Figure 5.) —to see if they would be more excited about recycling their trash than getting a tweet. Or, if they saw how much their recycling effected a social environment, would it make them more interested in their own? This is still a vague concept, and my thoughts are all over the place, but the bottom line would be to create a recycle bin in the same vain as TheFunTheory.com created their Bottle Bank Arcade, then showcasing (in a digital format or social network) how the person recycling affects their digital world (and by extension, how it could affect the real world).

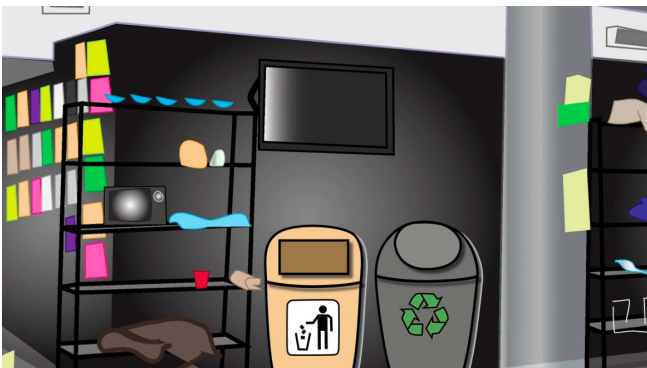


Figure 5.

Placing the bin in a familiar location and then having that location represented in a virtual world would create a more interesting incentive to recycle. Also, having the bin in a place where others can utilize it conveniently encourages community participation that will affect both the digital and

real world. Installing the bin in the physical environment would help keep community accountable and in return keep D12 clean.

These three inspiring projects helped me form my own: “We believe that the easiest way to change people’s behavior for the better is by making it fun to do. We call it The fun theory.” -thefuntheory [1]

The interface of the Bottle Bank Arcade is simple to understand, like a pinball machine or ball toss game. You accumulate points when you place a bottle into a slot and the light blinks. Using bright and understandable symbols help demonstrate how to use the bin. It’s a fun and creative way to recycle. My project relates to this one through the interaction of random people. The want to recycle is encouraged by the outcome of what you recycle.

“Step into a living, breathing world where days and seasons pass in real time and your destiny is yours to create.” -Nintendo Wii [2]

In Animal Crossing the environment depends on you. You go out to pick weeds, plant trees, and pick up trash. You want people to live in your city, and all of these actions help keep your world nice and inviting. The better looking your city, the more your city grows and the more you can do in your city. You have to keep you city clean. The cleaner the city the prettier it looks and more rewards you receive. For the social world element of my project, the more you recycle the better your world looks.

"If Trash Tycoon was a sandwich, the goals would most certainly be the meat. Goals are what keep us motivated in the real world, and the same works in Trash Tycoon. Here’s some tips and tricks on completing these missions." -Trash Tycoon [3]

What I found influential about this game is that you are a member in a virtual world, and you have to be responsible to keep it clean.

FEEDBACK:

As this project grew, I began thinking what recycling does within the community or whether it even affects it all. I sent a survey out asking: “Do You Recycle? Are You a Member of a Social Community? Would You Be Interested in Knowing the Effect Recycling has in Your Community?” Of the first question, everyone said that they did recycle when they had a place/bin to recycle. The second question was a defining “Yes.” Everyone is active on some sort of social network, whether it was all the time or just a few times a week. Yet the final question was interesting. When I asked if my project concept would be valuable, half said “Yes” but the other half said “No.” This got me to thinking about how to make my project more engaging to my users. But through this response, I also gather that the half who said “Yes” do not need an incentive. They know the virtues of recycling and recycle without a second thought. This would apply

to most people that live in New Mexico; they would never have a need to use this network because they already know the importance of recycling. Maybe this response just means that CommonWaste would be most useful to people who still need an incentive. The last question was, "Is Recycling Important To You?" The most interesting response was, "yes and no it is A real hassle to recycle without an actual program built within the waste management system." Based on this quote from the survey, I want to start looking into how to make this network branch out beyond an urban setting and one that has a waste management program. It came to light through this survey that not all communities have a recycling program and that it is a huge hassle to recycle. So how do I make this something that can be easily transferable no matter where the community is? Would this simple recycling network help start a program and help bring awareness to the effects of recycling?

UNDERTAKING:

To create CommonWaste I hatched out several options and methods. I researched local and national waste management programs that dealt with the community and utilize social media, and added them to support my project's concept. The following are the steps I took:

- Visualizing the virtual environment (Figure 6.);
- Surveying the importance of recycling and whether or not adding a social element would make a difference;
- Prototyping a functional sensor switch (Figure 7.) that would demonstrate how the action of recycling would affect the virtual world.

CONCLUSION:

CommonWaste became more of a project in development. It seems that there is a need for a new type of recycling method and this might be the birth of one. For the future continuation of this project, I would like to create different bins to add to the system where the items you recycle have a related effect. For example, recycling paper and cardboard would affect trees and plants. Recycling glass would develop solar panels on the virtual windows. And compost and recycled electronic parts would have an effected place in the digital world. The social world would be shared as you are more active with others and the more your environment changes. A type of trophy system would be developed to show your growth as a real life recycler. In the end, my hope is simply that this project would have a positive effect on the environment.

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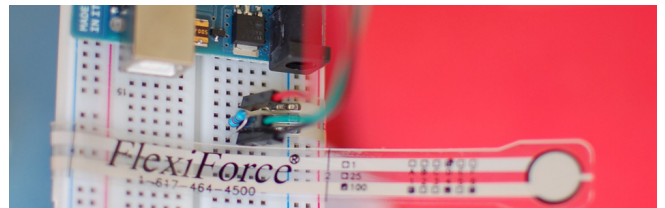


Figure 7.



Figure 6.

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