What's In Your Tool Box?

Some Key Information Management Tools that Recycling Programs Can Use

Presented by: Roger Guttentag

Recycling Online Columnist

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Presentation Overview

- Recycling Program Improvement Overview

- Some Information Technology Examples

- Technology Selection Process Overview

- Presentation Follow-Up

Recycling Program Improvement

Current Principal Improvement Strategies:

- Adding More Program Materials
- Better Equipment Designs
- Deploying new or more effective outreach / education methods

Future improvements using these strategies will increasingly depend on implementing appropriate information technologies.

- Obtain greater efficiencies from current program assets.
- Provide the data for creating better improvement methodologies.

Key New Information Technologies

- Radio Frequency Identification (RFID)

- Global Positioning System (GPS)

- Mobile Computing Devices
  - ➤ Smartphones
  - ➤ Tablets

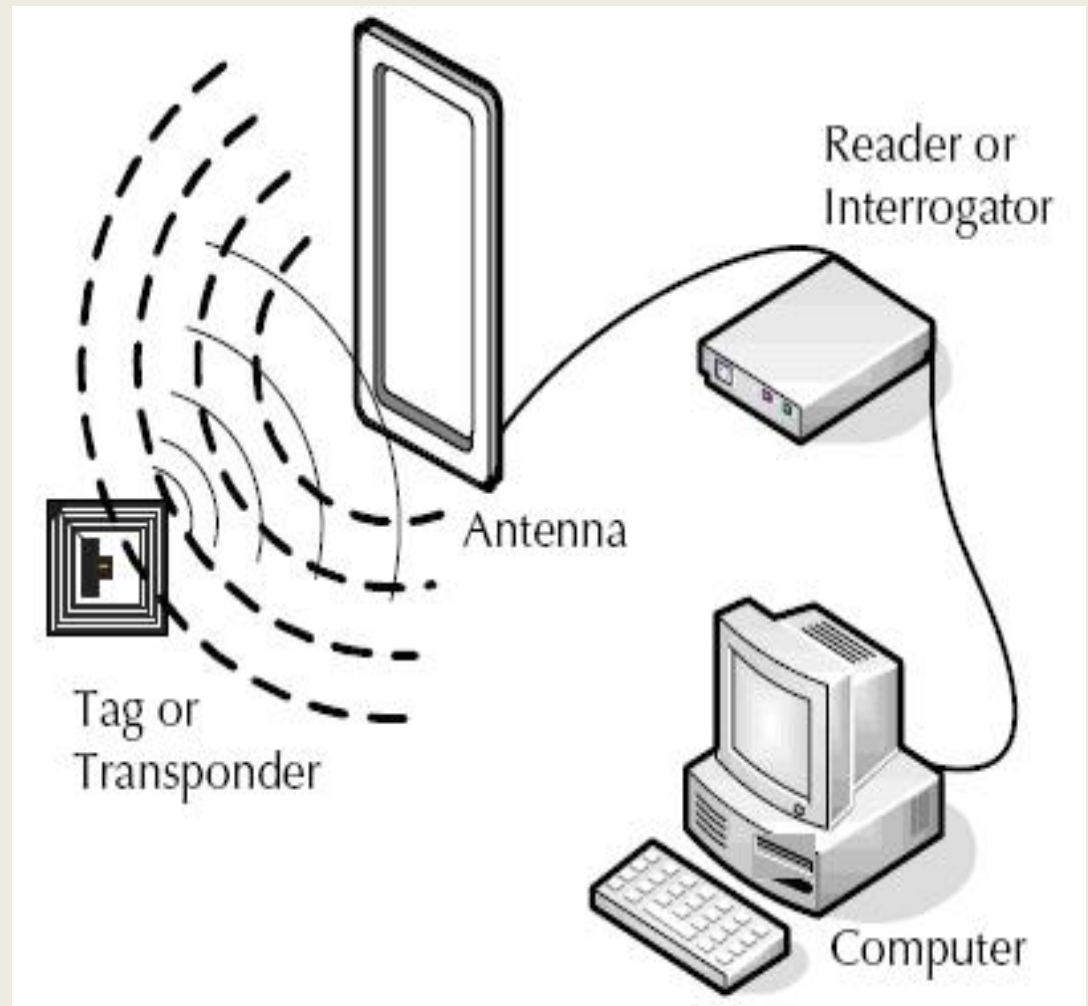What's In Your Tool Box? - Roger Guttentag - Resource Recycling Conference 2012

Radio Frequency Identification (RFID)

How Does it Work?

Tag contains encoded information and an antenna. A RFID reader energizes the tag so it can send signals that can be read. The reader then sends the information to a computing device.

Good For:

- Asset Tracking
- Operating Data Capture
- Recycling Rewards Programs
- Occupational Safety
- Tracking waste flows (in development)
- Improved Materials Sorting (in development)

Global Positioning System (GPS)

How Does It Work?

GPS satellites send signals that can captured by an on-board vehicle receiver. This data is then sent by cellular modem to a server that sends it to a Web accessible device.

Good For:

Real-time tracking of any vehicle equipped with a GPS receiver and modem. Provides detailed information on:

- Vehicle location
- Travel direction & speed
- Activity date / time stamps
- Services provided
- Routing efficiency

Smartphone

What Is It?

A mobile phone and computing platform with an operating system designed to run third party software that meet its specifications. Often equipped with other features like cameras and QWERTY keyboards.

What Is It Used For:

Runs a very large variety of applications (known as apps) that rely on the phones operating system and onboard features (like a camera) to provide specific functions. Allegedly can be used to make voice calls as well.

Major Operating Systems:
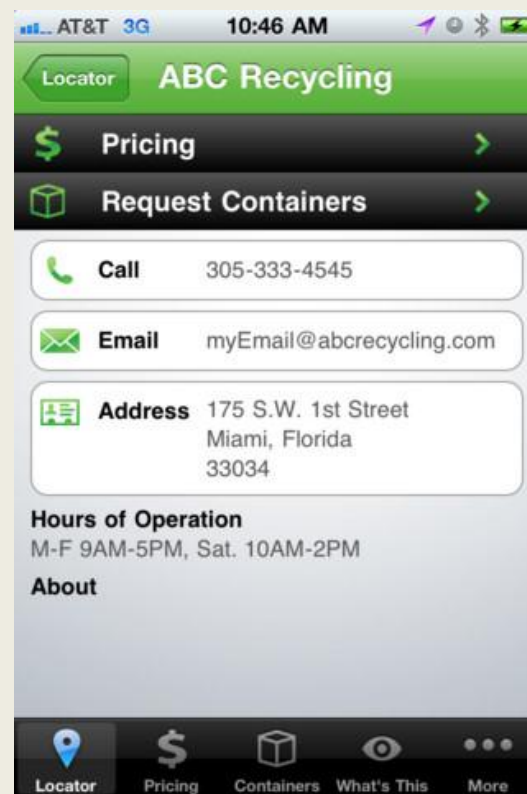
- Apple iOS
- Google Android
- Microsoft Windows Phone
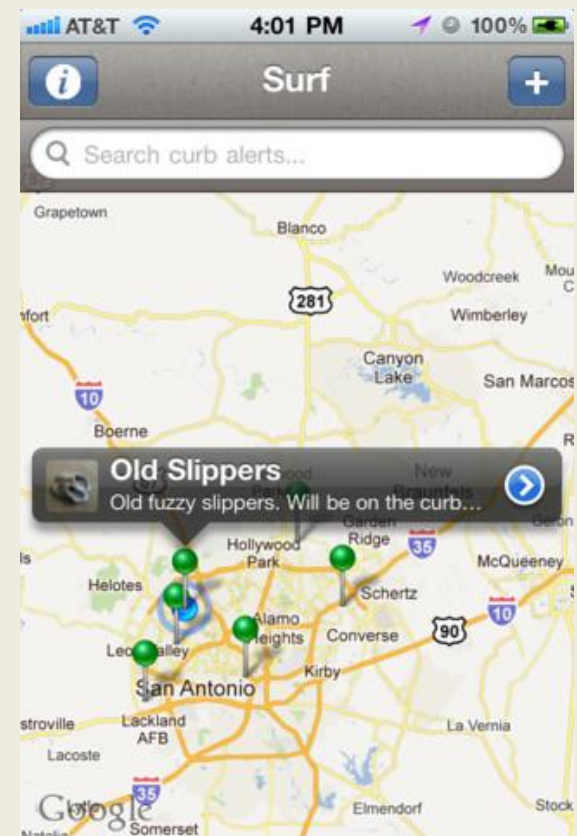
Smartphone App Examples

iRecycle   **iScrap**

More Smartphone App Examples

My Waste

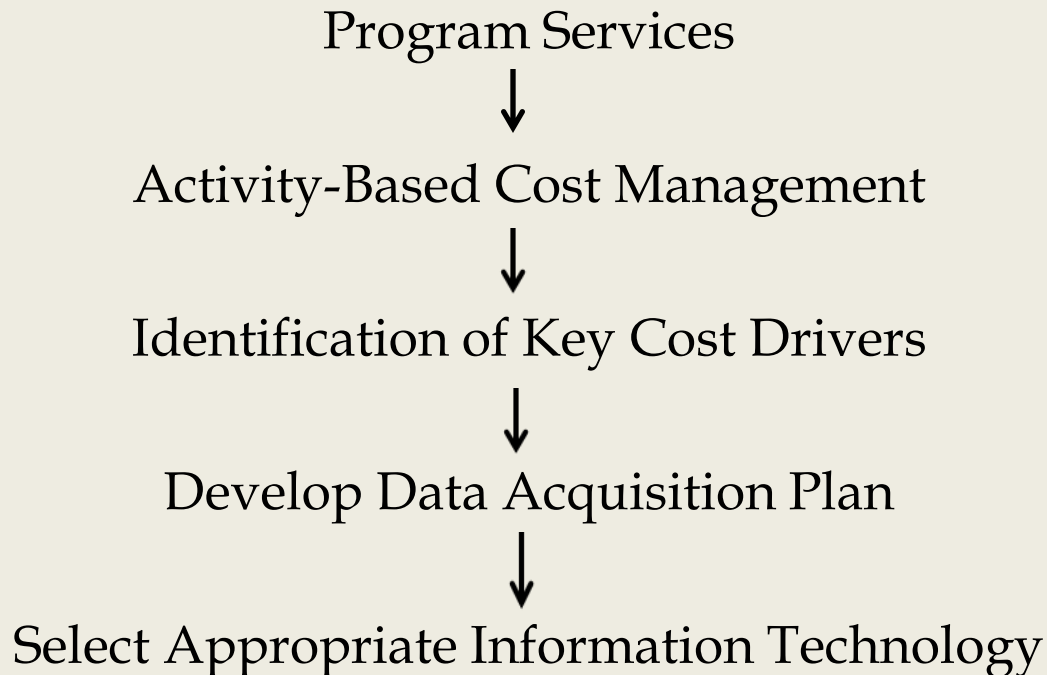**Curb Surf**

Tablet Computer

What is It

Mobile computing device designed to use a touch screen interface. Form factor ranges from 6-7" to 9+". Can use both Wi-Fi and Cellular connectivity and be equipped with supporting peripherals (e.g. keyboards).

What It is Used For

Combines features that can be found in smartphones and laptops. Used for data and content access such as email, video streaming, reading e-documents and accessing Web-based services (e.g. GPS tracking) . Can also be used for data entry purposes using apps created for tablet devices. Microsoft Surface is expected to have laptop functionality (like running MS-Office).

What Technology Do You Need?

Program Services

↓

Activity-Based Cost Management

↓

Identification of Key Cost Drivers

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Develop Data Acquisition Plan

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Select Appropriate Information Technology

Presentation Follow-Up

For additional information and links relating to this presentation:

www.recyclingandreuse.com

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To suggest Recycling Online column topics on information technologies for recycling programs and other recycling topics:

rguttentag@comcast.net

610-584-8836

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