



SCYCLE

Programme

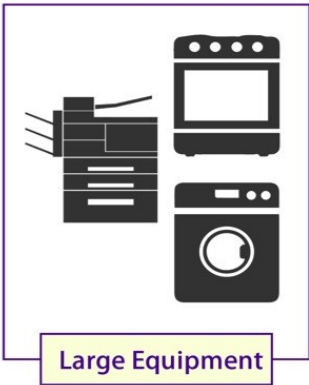
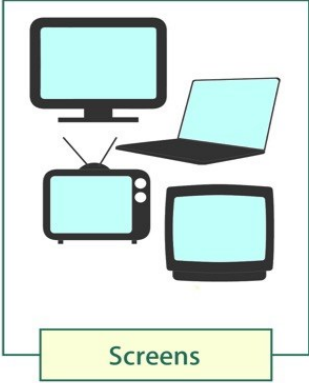
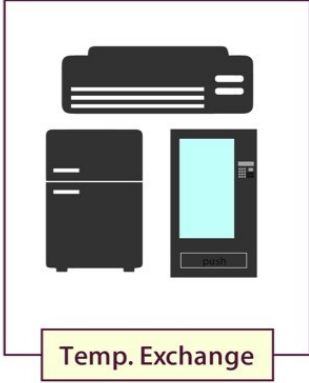
E-waste

What is electronic waste (e-waste) and its global problems

15 November, 2017 – WTIS – balde@vie.unu.edu



What is e-waste



Overview of global e-waste statistics



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4500 Eiffel Towers

6.5 Mt
are collected
by official take
back systems



0.7 Mt
end up in waste
bins

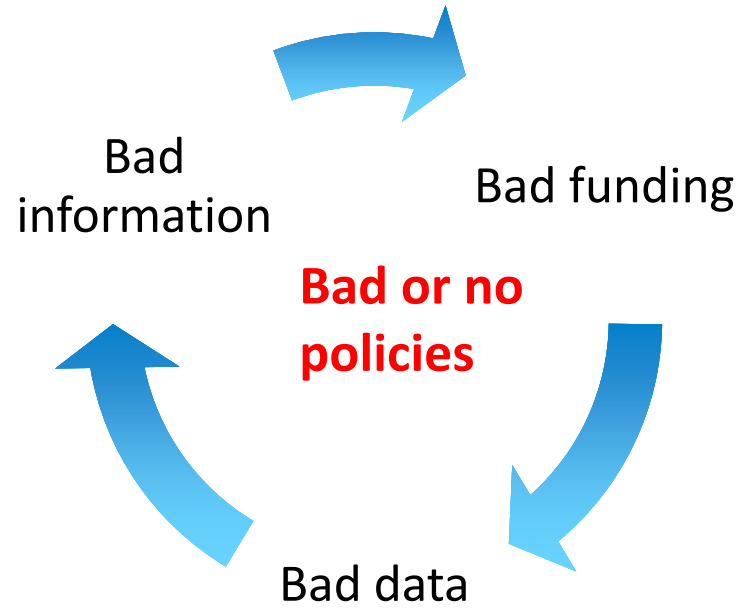


34.6 Mt
Unknown!
Traded, then
“recycled” or dumped

E-waste global problems



Only **41** countries in the world collect international statistics on recycling of e-waste



Statistics on recycling of e-waste



- Waste Statistics (waste collection points: UNSD and OECD)
 - 41 countries
- Big data
- Household statistics (representative sample of households)
 - Discard behavior of households

Household statistics



Example of an household survey template

1a. Did you dispose of a “E-WASTE CAT” during the last year?

If YES:

1b. How did you dispose of the product?

1. Returned it to the shop
2. A retailer picked it up at home
3. Took it to municipal collection point
4. Municipality picked it up at home
5. Sold it or gave it to family, friends for free
6. Moved it to my old/other house
7. Sold it to a refurbisher
8. Threw it into a waste bin
9. Threw it away with plastic waste
10. Warranty substitution
11. Do not Know/Do not Remember

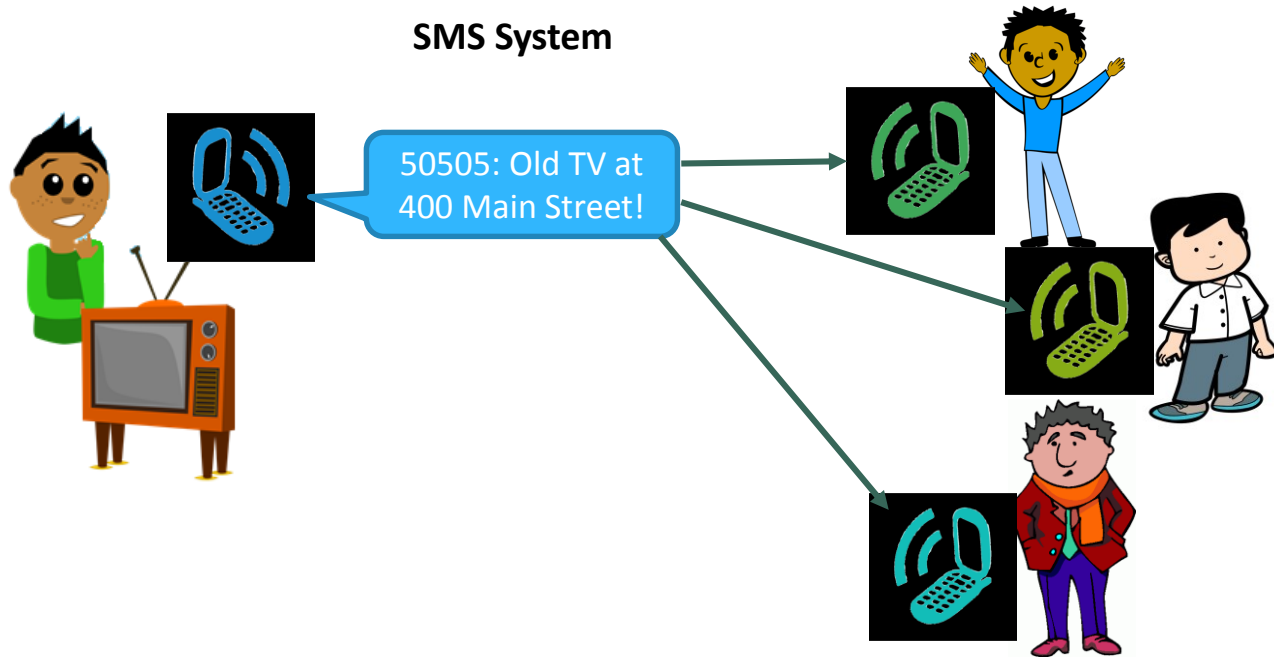
1c. How many items.

Temperature exchange equipment	More commonly referred to as cooling and freezing equipment. Typical equipment includes refrigerators, freezers, air conditioners, heat pumps.
Screens, monitors	Typical equipment includes televisions, monitors, laptops, notebooks, and tablets
Lamps	Typical equipment includes fluorescent lamps, high intensity discharge lamps, and LED lamps
Large equipment	Typical equipment includes washing machines, clothes dryers, dish-washing machines, electric stoves, large printing machines, copying equipment, and photovoltaic panels
Small equipment	Typical equipment includes vacuum cleaners, microwaves, ventilation equipment, toasters, electric kettles, electric shavers, scales, calculators, radio sets, video cameras, electrical and electronic toys, small electrical and electronic tools, small medical devices, small monitoring and control instruments
Small IT	Typical equipment includes mobile phones, Global Positioning Systems (GPS), pocket calculators, routers, personal computers, printers, telephones

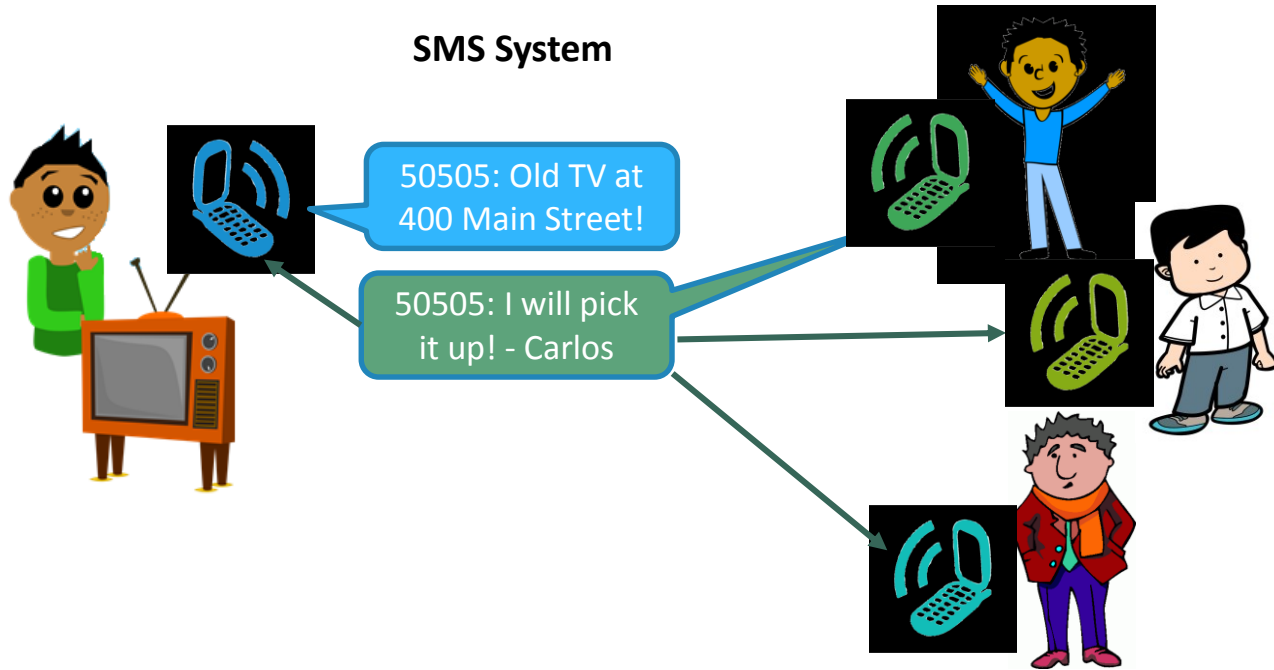
Big data idea: Utilize Mobile Phones to Facilitate Electronics Collection



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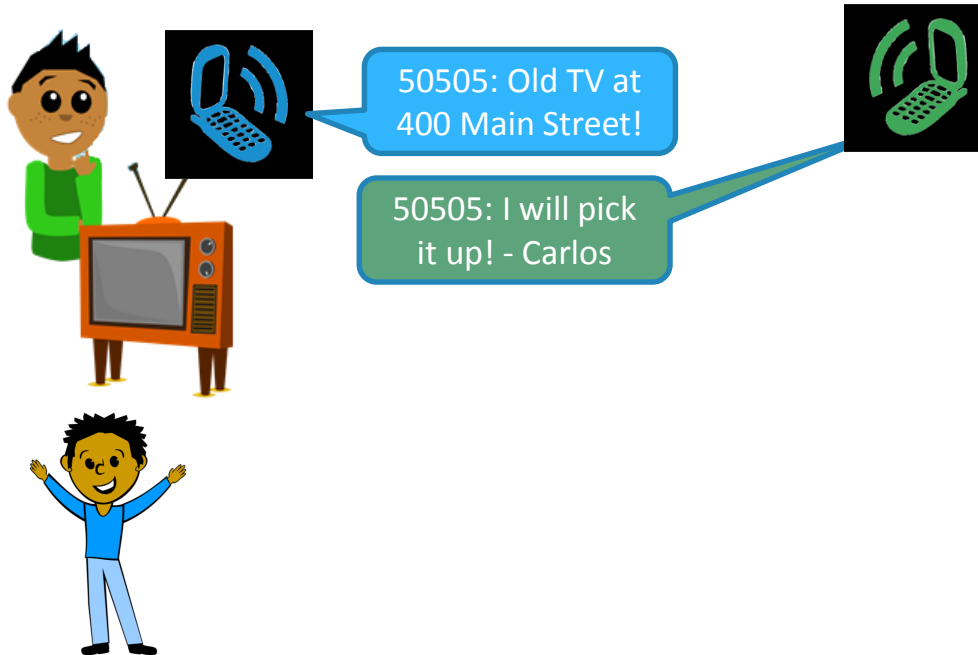


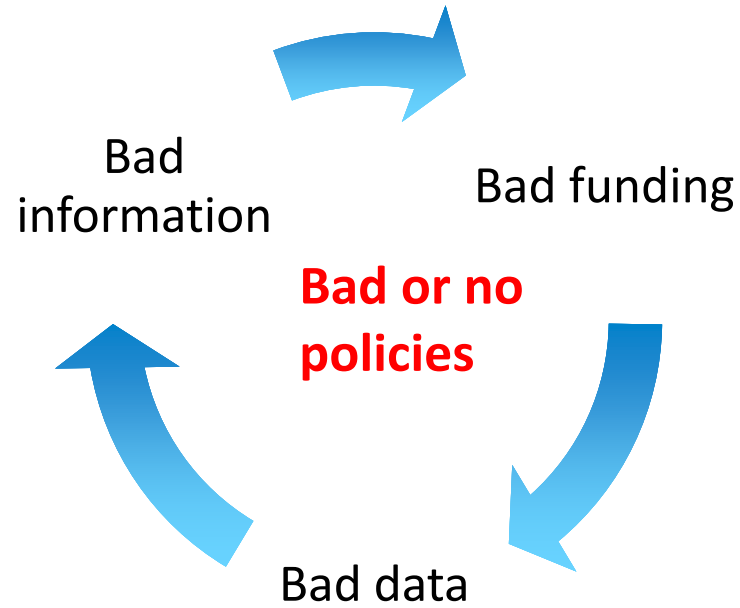
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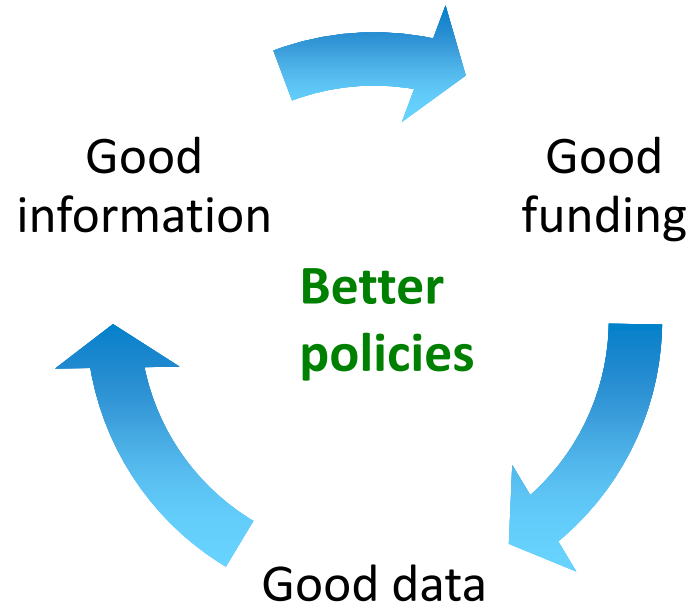


Big data idea: Utilize Mobile Phones to Facilitate Electronics Collection

SMS System







Join the Global Partnership for e-Waste Statistics!



- Improve the world through data and evidence based policies
- Raise awareness
- Global workshops + e-learning
- Measure impact on SDG + Connect2020 agenda
- <http://www.itu.int/en/ITU-D/Climate-Change/Pages/ewaste/globalewastestatisticspartnership.aspx>





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Sustainable Cycles Programme



Thank you for your attention!

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