

Recycling Online



Last month's column started with a general discussion of how reuse fits within a waste prevention hierarchy and then proceeded to examine its contribution to waste reduction through the elimination of single-use products. In this month's column, I look at the many different, and often complementary, reuse applications that can delay the need to either dispose or recycle products. This is accomplished by maintaining a product's economic or social utility for as long as possible, often by employing the following reuse strategies at various stages of a product's life (bear in mind that a product may transition through several of them before finally requiring recycling or disposal):

- Repair
- Donations and exchanges
- Disassembly
- Creative reuse
- Upcycling

Repair

It seems many modern products, even expensive ones like consumer electronics, are not designed to be repaired economically, or at all. This has created a prevailing attitude that products with some sort of damage, wear or dysfunction should be discarded and replaced by new ones. While this may be good for manufacturers who want to keep their factories running at full capacity, it is not so good for minimizing energy consumption and material waste.

In reaction to this situation, a small but growing movement to promote product repair is starting to emerge. There are many invaluable tools online that help guide users through product repair.

Not all of us, however, are handy with tools and could use some human help. This has helped catalyze the development of community-based organizations that offer repair assistance. One notable example is

Putting reuse to use – Part 2

by Roger Guttentag

the system of Repair Cafes. The concept started in Amsterdam in 2009 and now has grown into a network of 750 sites in 18 countries. The repaircafe.org site provides a directory for locating local cafes along with contact information. There is also an extensive FAQ section that covers cafe capabilities and the steps to start a new location.

Donations and exchanges

For unwanted items that still retain a significant market value such as electronic devices or collectible objects, online market sites such as eBay and Craigslist are proven options. However, for those items with an unknown or negligible economic value, which probably applies to much of what we own, just finding someone else willing to take them as donations is often a sufficient solution. Nonprofit organizations such as Goodwill and the Salvation Army fulfill this role quite well. To locate lesser-known organizations, try the Thrift Shopper website, which provides a national directory that is searchable by zip code or municipality.

Finally, there is the concept of online reuse exchanges. CalRecycle maintains an extensive directory of online exchanges that include or focus on promoting the reuse of products.

Disassembly

Sometimes reuse is more effectively accomplished by disassembling a product into its components. One prominent example is the reuse of parts from end-of-life vehicles salvaged by automotive recycling entities. Information on this industry can be found on the Automotive Recycling Association's website. A more recent development is the advocacy of building deconstruction practices for liberating both structural (for example, wood and brick materials) and non-structural (such as doors and windows) components for reuse in other building projects. There are currently scores of reuse centers throughout the U.S. that will accept donations of usable building materials for resale to both construction contractors and do-it-yourself homeowners. The Loading

Dock, located in Baltimore, illustrates well this type of operation. A great source for reuse center contact information is the website for the Building Materials Reuse Association.

Creative reuse

The goal of creative reuse (also known as repurposing) is to take products and materials that can't be reused for their original purpose and harness them in imaginative applications. There are many nonprofit organizations in the U.S. and other countries that accept donations of unwanted products from individuals, businesses and institutions in order to make them available to schools and community residents on a free or low-cost basis. Directories of these centers can be found on the websites for the Lancaster Reuse Center and the Reusable Resources Association.

Upcycling

A distinctive subset of creative reuse, called "upcycling," seeks to take existing unusable or unwanted products and transform them into products with a higher utility and economic value. One example is HipCycle, a New Jersey-based company that uses material such as glass and wood in the crafting of apparel and housewares. Another site, The Upcyclers, has online videos of artisans that explain how they developed their upcycled product lines. Finally, if you have a do-it-yourself itch, UpCycle That will provide detailed tutorials on how to make various types of upcycled projects such as a beer-bottle lamp or a pallet coffee table. All these sites also feature blogs that provide information on upcycling ideas and trends.

Pushing growth

While a great many creative reuse trends have emerged over the last several decades, reuse still occupies a small role in the overall materials management framework of developed economies. The discussions I have reviewed indicate there are three major leverage points that should be pursued in order to stimulate growth in reuse practices:

Increase the visibility of reuse through more data – A 2011 Minnesota Pollution Control Agency report on the economic role of reuse, repair and rental industries within the state estimated that these industries employed approximately 46,000 people that were paid about \$1 billion in wages and contributed 159 million in tax revenues. More reports of this type would certainly be helpful.

Promote industrial design that supports reuse – Right now reuse seems to happen despite the structure of our industrial designs and not because of them. The iFixit site has a number of resources on how current business patterns can inhibit reuse methods such as repair and how certain changes to these practices can have a huge impact on reuse. Be sure to watch the video on the Autodesk Sustainability Workshop site on the relationship between extending product life and reuse.

Develop public policies that support reuse – A 2014 report, “Routes to Re-use,” published by the Local Government Association in the U.K. lists a number of recommendations on how to support public participation in reuse programs as well as increase the demand for reusable products. While the policy recommendations are rooted in U.K. local government practices, the report does provide a useful framework on how to make similar strides in the U.S.

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Web Address Directory

Goodwill Donation Site Locator	goodwill.org/locator
Salvation Army	salvationarmyusa.org
Repair Cafe	repaircafe.org
The Thrift Shopper	thethriftshopper.com
Freegle	ilovefreegle.org
The FreeCycle Network	freecycle.org
The ReUse Marketplace	reusemarketplace.org
Calrecycle – Listing of Reuse Exchanges	calrecycle.ca.gov/reuse/links/exchange
Automotive Recyclers Association	a-r-a.org
Building Materials Reuse Association	bmra.org
The Loading Dock	loadingdock.org
Reusable Resources Association	reuseresources.org
Lancaster Creative Reuse – Directory of Creative Reuse Centers	tinyurl.com/Reuse-Lan
HipCycle	hipcycle.com
The UpCyclers	upcyclers.tv
UpCycle That	upcyclethat.com
iFixit Resources	ifixit.org/resources
Local Government Association (U.K.) – Routes to Reuse	tinyurl.com/Reuse-UK1
Minnesota Pollution Control Agency – Reuse and Economic Activity	tinyurl.com/Reuse-Minn

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of all stripes.

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