

Sustainable Solutions for Used Clothing: The Case of Overflow Thrift Store in Ames

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Background

- “Almost **100%** of textile-based products can be recycled, yet, currently, the **majority of them ends up in landfills**. The current rate of overall waste recycling and composting in the US is only around 34%” (Williams, 2015)
- Waste volumes are **growing every year** (Kunz et al., 2016)
- An average U.S. consumer disposes **100 pounds** of clothing and textiles **every year** (Kunz et al., 2016)
- “**23.8 billion pounds** of textile and clothing go to U.S. landfills every year” (Goodwill Industries International, n.d.)
- Many of the **textile products given to nonprofit organizations end up in landfills**. The Council for Textile Recycling was created to increase recycling efforts for textiles so they do not end up in landfills, but it is **still a problem** (Chen & Burns, 2006)

Overflow Thrift Store

Location: Ames, Iowa
Founded: July 2015
Mission: Give, Shop, Serve
Certified Non-Profit, 501c3
Volunteer-Based Organization

- Specific Challenges**
- Overabundance of items** that are deemed unsellable, but are **still a resource**
 - Desire to **identify sustainable solutions** for excess apparel items

- Steps taken to deal with unsellable apparel:
- Partnered with Appalachia Committee to send items to Williamsburg, KY
 - Partnered with Good in the 'Hood in Minneapolis, MN

Purpose & Methods






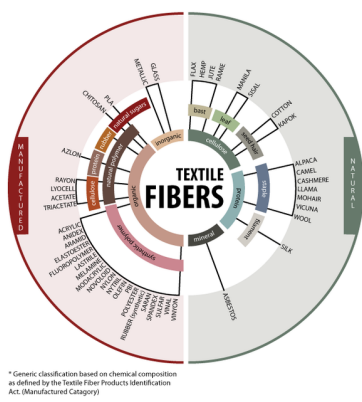


- Purpose of Study**
- To examine current practices to deal with disposed apparel products
 - To identify the most sustainable and practical strategies to dispose of unsellable apparel

- Methods**
- Interview method was used to identify specific challenges faced by Overflow Thrift Store
 - Research method was used to analyze books, academic journals and industry practices
 - The widely used waste disposal hierarchy served as a framework to organize and analyze the data collected

- Definitions**
- Reuse*: Finding a new application for an apparel product
 - Recycle*: Using parts of the whole or the whole of an apparel product to make a new product
 - Recover*: Processing an apparel product at the end of it's life into a new form, into a raw material

(Kunz et al., 2016)

Sustainability Matrix: Business Guide for Disposing Textile-Based Products

Stages	Most Preferred	Practice	Pros	Cons	Industry Examples
Reuse		Offer care and repair product services	Extends life of product	May add additional services to the business that are undesired	Patagonia (Repair Your Gear, n.d.) 
		Give back to retailers	Win-win for consumer and business, extending the life of the product	May continue to encourage the cycle of buying more and more	H&M, Patagonia, Eileen Fisher, Lands' End, Nike, The North Face 
		Resale in consignment and thrift stores, collaborative consumption, or export to other countries	Benefits a viable market, extending the life of the product	Direct and indirect costs of the process may lead to a less cost-effective practice	Mitumba, Kombo, Salaula, Appalachia Committee, 'Good in the Hood, Twice, Yerdle, Rent the Runway, Le Tote 
Recycle		Upcycle garments	Creates high value product	Demands skill and man-power	Urban Outfitters, Freitag 
Recover		Garnete textiles	Recovers fibers to create new products		debrand, Donate Stuff, Textile Waste Diversion, Inc., Chicago Textile Recycling, USAgain, Patagoina 
		Compost materials	Creates a closed-loop cycle	Natural process with man-power	US Composting Council 
		Incineration	Incinerate products to create alternate forms of energy	Emits dangerous levels of harmful substances (Williams, 2015)	City of Ames: Resource Recovery System 
Landfill & Incineration		Least Preferred	Landfilling		"23.8 billion pounds of textile and clothing waste go to the U.S. landfills every year" (Goodwill Industries International, n.d.) 

Conclusions

- Solutions are available for **reusing, recycling and recovering** apparel items but...
- Very little research has been done on this subject
 - More research is needed to identify effective, sustainable, and feasible solutions
 - An industry-wide association should be developed to connect small businesses, to provide current information and offer viable resources

Overflow & Small Businesses

Increase brand awareness to increase sell-through and decrease apparel waste

- Build marketing strategies
 - Social media
 - Local farmer's market
 - Secondhand mobile truck
 - Events



- Partner with local schools and universities
 - Increase awareness to attract customers
 - Increase volunteers by offering opportunities
 - Educate students on current issues

However, having unsalable apparel is unavoidable. So, small businesses should...

Develop partnerships with recyclers

- Sell apparel items (Ex., Chicago Textile Recycling)
- Host a drop box (Ex., USAgain)
- Ship apparel items (Ex., debrand, Donate Stuff)



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