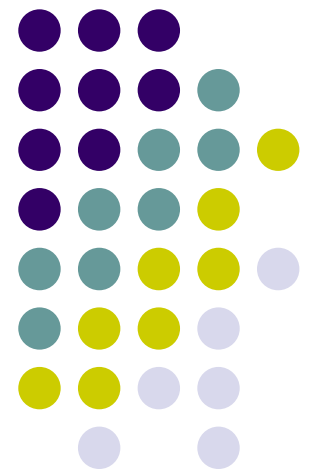
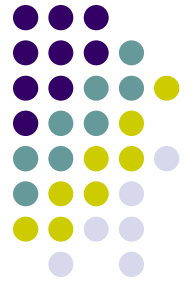


Remanufactured Cartridges

Making the Case

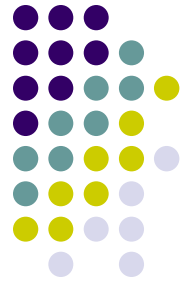


Landfill Issues Global Concern



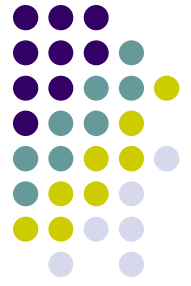
- Most trash throughout the world will end up in landfills, some will be remanufactured or recycled, some will be burned and some will be illegally dumped on land and into oceans.
- In the United States, 90% of solid wastes are disposed of in some sort of landfill.
- In the last 20 years, there has been growing awareness of the need to reduce the amount of waste that ends up in landfills. This is due to lack of space as well as waste of resource involved in this disposal method.

Problematic Dumping of e-Waste

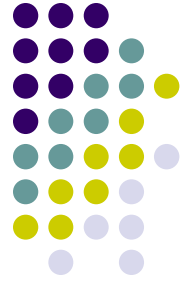


- Many products are being transported to areas without strict environmental controls.
- These may easily be products that consumers think are being recycled, but end up dumped where they pollute water, ground and air.

Reduce, Reuse and *then* Recycle



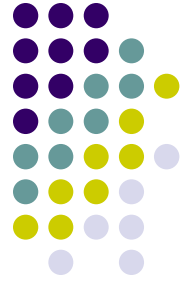
- Around the world, environmental organizations and government regulators have adopted the Reduce, Reuse and Recycle mantra for making a positive impact on the environment.
- It is a hierarchy of preference. This means reuse, or remanufacture, is a superior choice to recycling.
- Recycling is only slightly more environmentally and economically efficient than disposal, where remanufacturing utilizes recovered parts and extends the product life.



From the Canon Web site:

“Remanufacturing means refurbishing used products to make them equal in quality to new products. Remanufacturing exerts less burden on the environment than turning parts back into raw materials for input into the manufacturing system or reusing parts in other products.”

<http://www.canon.com/environmental/glosary/index.html>



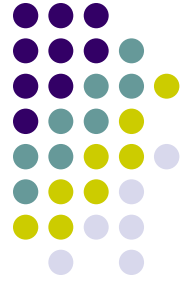
United States EPA agrees:

- In 1997 the United States Environmental Protection Agency stated that remanufactured products are as good as new in its publication WasteWi\$e Update. The publication promotes the benefits of purchasing recycled products, and is distributed to businesses that are WasteWi\$e Partners, government agencies and other subscribers.
- The EPA update defined "remanufacturing," and contrasted the benefits of remanufacturing and recycling. The article concludes that remanufactured and reused products are far more beneficial than recycled products with specific reference to remanufactured toner cartridges.

How it Happened...

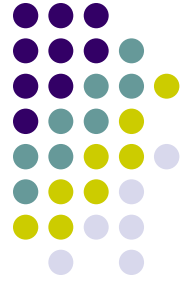
Why the remanufactured cartridge industry even exists.





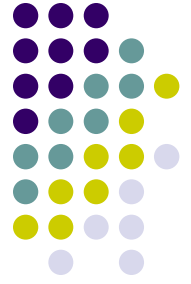
The Photocopier

- In 1938, an American law student named Chester Carlson created the first xerographic image, after many years of work. Xerography uses the principles of static electricity to transfer dry ink (or toner) to the page. In 1946 Carlson found a company willing to manufacture his electrostatic photocopiers: the Haloid Company, which later became the Xerox Corporation.



First Laser Printer

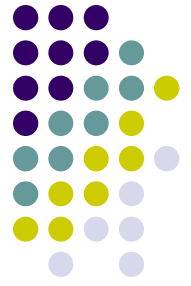
- In 1978, a Xerox employee named Gary Starkweather added a laser beam to existing Xerox photocopier technology and created the first laser printer. The size and cost of the equipment were prohibitive, particularly as personal computing became more and more popular and printers needed to be marketable to individual consumers.



The Desktop Approach

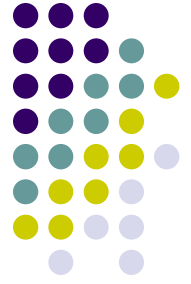
- In the early 1980s, Hewlett-Packard responded to the need for better printers than the impact models currently available in the market. By redesigning the toner cartridge so that it could easily be replaced by the printer's owner, HP made desktop laser printing possible.

... and the Industry it created

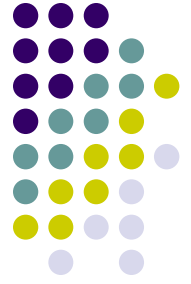


- The expense and environmental questions raised by disposable toner cartridges spawned the creation of the toner cartridge remanufacturing industry.
- While it is true that some of the first cartridges were simply refilled with toner, this method was quickly replaced by the complete remanufacture processes that replace or restore worn or exhausted components.

Remanufacturers are Diverse



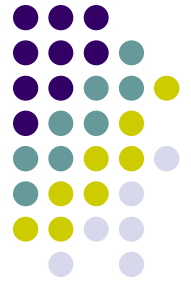
- Local remanufacturers with in-house production
- Outsourcing manufacturers produce for wholesale, dealers and distributors
- OEMs have programs to remanufacture their own brands and those of other OEMs



Cartridges in Landfills

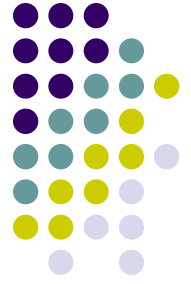
- In 2001, remanufacturers likely saved from the landfill:
 - 29.7 million toner cartridge
 - 136.5 million ink cartridges

But ... there were 695 million more toner and ink cartridges that probably did go into the landfill!



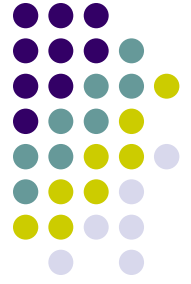
Compared to the OEMs:

- HP says that it “recycled” 1.8 million inkjet cartridges in 2003
- That sounds nice, but there were more than 900 million inkjet cartridges shipped worldwide that year (all OEMs), so that is only 0.2% of the total



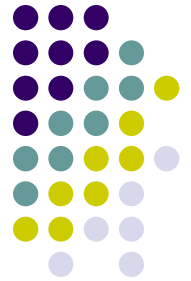
Quality Products

- High-quality remanufactured products are available.
- Use slides to promote your own quality data on:
 - Print quality
 - Defect rates
 - Fade resistance
 - Yield



Service and Other Benefits

- Local remanufacturers and resellers can provide personalized individual service at a level that OEMs cannot deliver.
- Consumers are price conscious.
- Consumers deserve a choice in vendor as well as product.
- Local service and repair offerings are a value-add.



Market Data

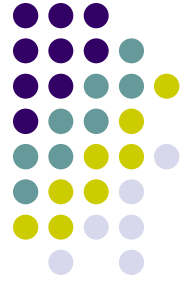
- A study by Lyra Research found that 77 percent of users ranked remanufactured cartridges as equivalent or better than the OEM.

–Lyra Research’s 2002 Office Survey

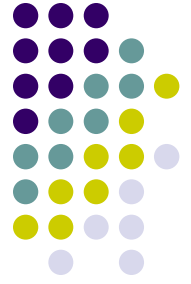
- According to Cap Ventures, for monochrome all in one cartridges, more than 30 percent of sales are aftermarket.

–<http://www.capv.com/home/CAPStats/CSArticles/2003/08.19.03.html>

If Remanufacturing is Good ...

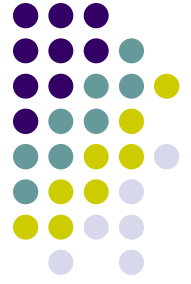


... Why would the OEMs not want you to use remanufactured cartridges?



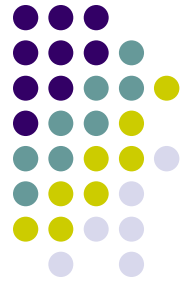
Could be about Money

- HP reported that for the first half of fiscal 2002, consumables revenue was \$5.1 billion USD! This is 13 percent of the total company revenue, and 53 percent of the Imaging and Printing Group revenue.
- In Q2 2003, Lexmark sales of supplies accounted for \$630 million USD, or 56 percent of Lexmark's second quarter revenue.



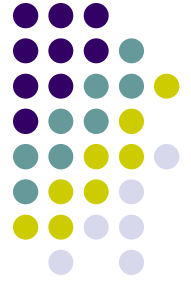
Protecting Revenue?

- OEMs add technical barriers and new technology to cartridges that can serve to restrict ability to remanufacture.
- Legal challenges keep all parties in check.
- Marketing tactics and customer confusion may discourage customers from trying products other than the OEMs.



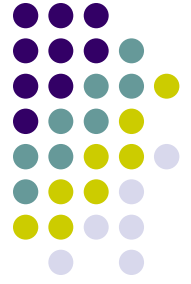
Warranty Issues

- A common myth is that using a remanufactured, compatible, or any cartridge other than that of the OEM, will void the equipment warranty.
- Limited warranties usually will not cover damage due to a non-OEM consumable, but warranty is still in effect for other problems



Warranty Issues

- Fact: for U.S., Magnuson-Moss Warranty Act of 1975 states that the warranty can NOT be voided because of use of aftermarket products. Known as the “anti-tying” provision.
- Warranties must be available at the point of sale (also required in the UK, for example).



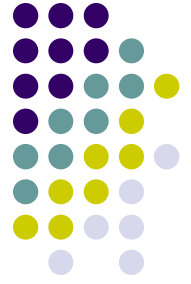
Warranty Issues

- China: Law of the People's Republic of China Protecting Consumers' Rights and Interests

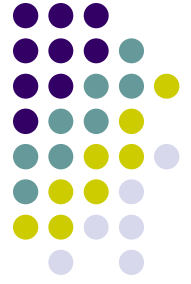
Article 9: “Consumers are entitled to choose their own commodities or services

Article 11: “Consumers enjoy the right to receive compensation in accordance with the law for personal and property damages incurred as a result of the purchase and use of commodities or receipt of service.

HP Says it Best

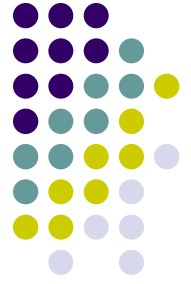


- Top Hewlett-Packard executive Pradeep Jatwani, a Senior Vice President with the printer giant, acknowledged that intellectual property rights are vital in the printer industry, but felt that Lexmark was wrong to try to use the DMCA for safeguarding those rights.



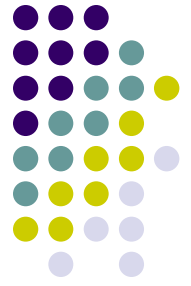
HP Says it Best

- Further, Jotwani said he believes there should be an industry for companies that sell remanufactured supplies.
- “I think the customers draw the line. Part of that choice is they can choose our original supplies, which is always what we’d like them to do. But there is a segment of the market that is cost conscious and that draws a different line.”



The Next Steps

- Use this information to educate officials and consumers
- Customize the presentation to include you product information, service, delivery options and most importantly your quality statements.
- Use this information to reach prospective and current customers though:
 - Your website
 - Email or print newsletters
 - Packaging or billing factoids
 - Advertising



Additional Resource

- Recharger Magazine offers Marketing Solutions on its web site.

Visit <http://rechargermag.com/marketing.asp> for an archive of downloadable pdf's available for use in communicating with your prospects and customers.