



CASCADE

Asset Management, LLC

Chicago, IL

December 11, 2002

Profile of the Small Electronics Recycler and Remarketing Service Provider

“Advancing Electronics Recycling in the Midwest”

A workshop by the Illinois Recycling Association & NRC

Neil Peters-Michaud
Co-founder and CEO

Discussion Overview

- n Description of Cascade and its Services
- n Surviving as a Small Start-up
- n Regulatory & Environmental Challenges

Cascade's Bio

- n 1999 opening in Madison; 10,000 sq ft
- n 2002 square footage: 24,000
- n Process about 175,000 lbs./month
- n About 50/50 reuse vs. demanufacture
- n CRT glass cutting since 2001
- n Media shredding and size reduction
- n Over 450 active institutional customers
- n 14 employees; privately held company



A Hierarchy of Asset Management Services

μ Asset Identification and Management

μ Redeployment

μ End of Lease Returns

μ Off-site Disposition

4 Test, Clean, Repair and Resell/Donate

4 Destroy data and recycle components

Cascade Information Technology
Equipment to its next best use.

Cascade's Services

1. Provide Asset Management Consultation and Support
2. Collect Waste Electronic Equipment
3. Track/Audit Collected Equipment
4. Sort for Reuse or Recycling



Cascade's Services

5. Test equipment, wipe hard drives, rebuild and refurbish equipment
6. Disassemble equipment for recycling



7. Shred electronic media - size reduction of recyclable commodities

Cascade's Services

8. Clean, sort and cut CRTs for glass-to-glass recycling

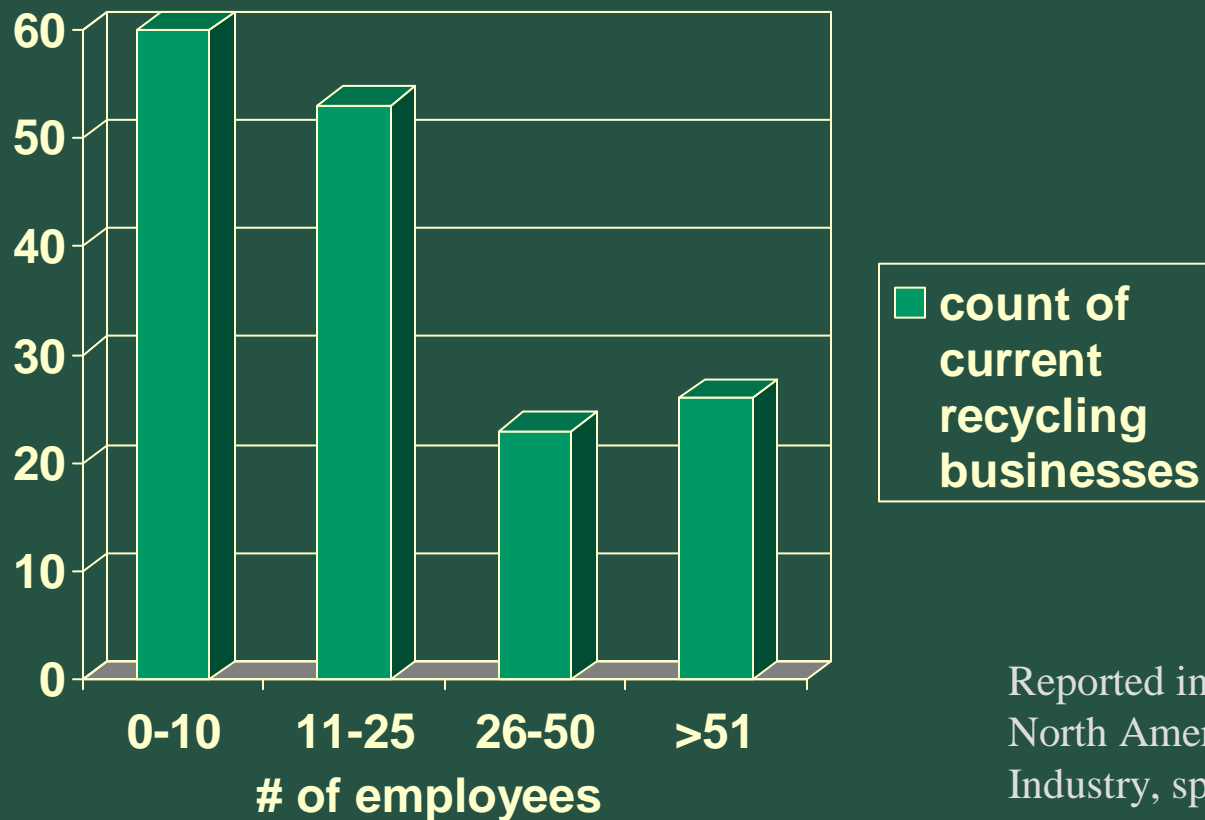
9. Resell equipment on the secondary market

10. Provide detailed disposition reports and rebate statements to customers



Surviving as a Small Start-Up

There's a lot of competition . . .



Reported in Directory of the
North American Recycling
Industry, spring 2002

Surviving as a Small Start-Up

n Find a Niche

- Post-consumer, unsorted, corporate IT equipment
- Maximize resource use of equipment
- Environmentally Responsible Disposition
- Partner with Municipal Collection Events

n Develop a Valuable Service

n Work the Geographic Territory

n Bootstrap - work hard to earn reputation



Surviving as a Start-Up

- n Understand Cost Structure
 - Charge for Value Added Services
 - Don't rely on Resale/Recycling revenue
 - Be Fair
- n Create Efficiencies
 - Productivity in workforce
 - Invest in technologies
 - Improve workflow
 - Know core business



Growing Past Start-Up

n Invest in the Future

- CRT glass-to-glass recycling
- ISO 14001 Certification
- Data Destruction capability with shredder



n Partnerships with IT Companies

- Offer full life cycle solutions for IT equip.
- Reduce handling and shipping costs

Regulatory & Environmental Challenges

- n Regulation related to CRT Cutting:
 - 10 Month process with WI DNR to develop guidance for cutting program
 - Strict conditions on how CRTs are handled, labeled, stored and shipped; otherwise, we are a hazardous processor
- n Hope for EPA Rule change - don't bet on it.

Regulatory & Environmental Challenges

- n Report on China exports impact:
 - End markets
 - n Our haz waste vendors all in US, no impact
 - n Low grade material processed in North America
 - prices went up - result is >\$50,000 difference
 - n Low grade material processed overseas
 - markets dried up or tightened
 - Customers
 - n Domestic processing requested by ~ 5%



Summary

- n Small Recyclers provide unique benefits
 - Niche services
 - Local options, reduced logistics costs
 - Flexible and willing to serve
- n Small Recyclers have limits
 - Labor intensive, little mechanization
 - Limited available capacity
 - May not have good controls in place





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