Disassembly Depth Analysis

Conceptual diagram for doing disassembly depth analysis.

From this diagram conclusions are a) for material recovery, disassembly is not worthwhile; b) for component recovery, disassembly is worthwhile through step four.

General Guidelines

1. Find market value of replacement component on the internet. Use replacement value x 0.45 (for testing, servicing, replacement, inventory, and risk) x 0.10 (for sensitive market.) = replacement value x 0.045.

2. Use tables, internet, and other sources for scrap or virgin material value. Use ½ virgin value for scrap.

3. If no useful estimate exists, use: value = product price x 1/2 (average for retail of home product) x 1/3 (average for manufacturing consumer goods) x %weight

4. Use your own estimate of labor time and adjust for the learning curve. How long did it take you to complete each step?

5. Use Excel to prepare diagram.