Cellotape Inc.

RFID and the Label converter:

Uh Oh!

Cellotape, Inc.

Since 1949-

- Flexo-graphic / 15,000 tools in stock.
- Screen Print /10,000 tools in stock.
- Digital / Indigo HP / Mimaki
- Die Cut Components.
- Turnkey assemblies.
- Large bed digital: 5 x 10 ft.
- * RFID Smart Labels.

Schober RFID insertion device:



- Inserts wet inlays
- Can process preprinted labels.
- Run speeds of 200 feet per minute.
- Small, user friendly. One day training, and your making RFID labels.

Converting Process

- Wet or Dry?Wet: cingulated, with Adhesive
- Dry: in contious forms, not cingulated, no adhesive.

- Wet inlays cost more, processing costs less.
- Dry inlays cost less, processing cost increases.
- Both wet & dry quality up since 2004. average yield per roll: 97% +.

Inlays: 31 Flavors!



They all operate differently, one size does not fit all applications.

Inlays: 31 Flavors!:



- ♣ LF
- → HF
- UHF
- Micro wave
- Active
- Semi-active
- Semi-passive

What type of equipment?

- Mulbauer, one pass operation possible, able to handle wet & dry inlays. \$\$\$ 1.0MM for the top of the line unit.
- *Bielomatic, one pass operation as well, also can make RFID tickets and RFID smart cards. \$\$\$ 1.2MM for top of the line unit.

Other factors:

- Programming? Costs? Average: .1 /.2 cents each.
- Special materials, foam backed RFID labels are most popular for on metal applications. This requires special processing equipment.
- Security: labels can have photopolymers. Tamper evident materials.

More factors:

- Plan: initial investment by Cellotape exceeds 300K to date.
- Schober insertion unit: over 200K
- Inlays, films, RFID printers: 75K
- Internal cost for installation: 20K
- What markets? Asset Tracking,
 Security Gates, Vehicle ID, IT Assets.
- Active / Semi active, Passive? Where do we start.

Look for a dancing partner:

- Integration: the step child of RFID. Do you need them? Some say no, others think its the key to getting in the game.
- What level of integration do you want to offer your clients.
- If you're a Wal-Mart 3PL, you will need a integrator.

Dancing Partners:

- Venture Research, one of the best. Full service lab, local sales contact: Mike Gaskill, in the RFID game for over 15 years. Cellotape preferred integrator.
- *Domino EIS, mainly servicing the retail end. Large company with a diverse product line.
- And about 1 Million others.....

Road to \$\$\$\$\$

- World is not ready for RFID.
- *Wal-mart & DOD still the big dogs.
- ITL & Asset tracking applications growing.
- Picking the right process and market early and stick with it.
- Keep clients involved early and often.

