

# **Avoiding the “Seven Deadly Sins” of Reverse Logistics**



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# Topics to be Covered



- **Introduction**
- **The “7 Deadly Sins” of Reverse Logistics**
- **Keys to Successful Reverse Logistics Programs**
- **Examples of Best Practices**

# Introduction



# **Reverse Logistics Issues Impacting Organizations**

- **Returns and exchanges**
- **Warranties and repairs**
- **Recycling**
- **Reusable containers**
- **Recalls**
- **Trade-ins and product upgrades**
- **Remanufacturing**
- **Waste disposal (hazardous & non-hazardous)**

# **The Importance of Reverse Logistics**



- **RL costs amount to about \$35 billion per year (4% of total logistics costs).**
- **Overall customer returns are estimated at 6% of sales, but have significant variability.**

# The Importance of Reverse Logistics

- **During the 1999 US holiday season, 25% of all online purchases were returned.**
- **Retailers who adopt RL programs save between 1-3% of sales, reduce returns management and transportation costs, reduce labor, capture important data, and simplify chargebacks reconciliation.**

# **Reverse Logistics**

## ***Defined***

**...the term often used to refer to the role of logistics in product returns, source reduction, recycling, materials substitution, reuse of materials, waste disposal, and refurbishing, repair and remanufacturing.**

# **“7 Deadly Sins” of Reverse Logistics**





# **The “7 Deadly Sins”**

**As Discussed in Dante’s (1265-1321)  
Divine Comedy**



**Pride (1)**

**Envy (2)**

**Anger (3)**

**Sloth (4)**

**Avarice/Greed  
(5)**

**Gluttony (6)**

**Lust (7)**

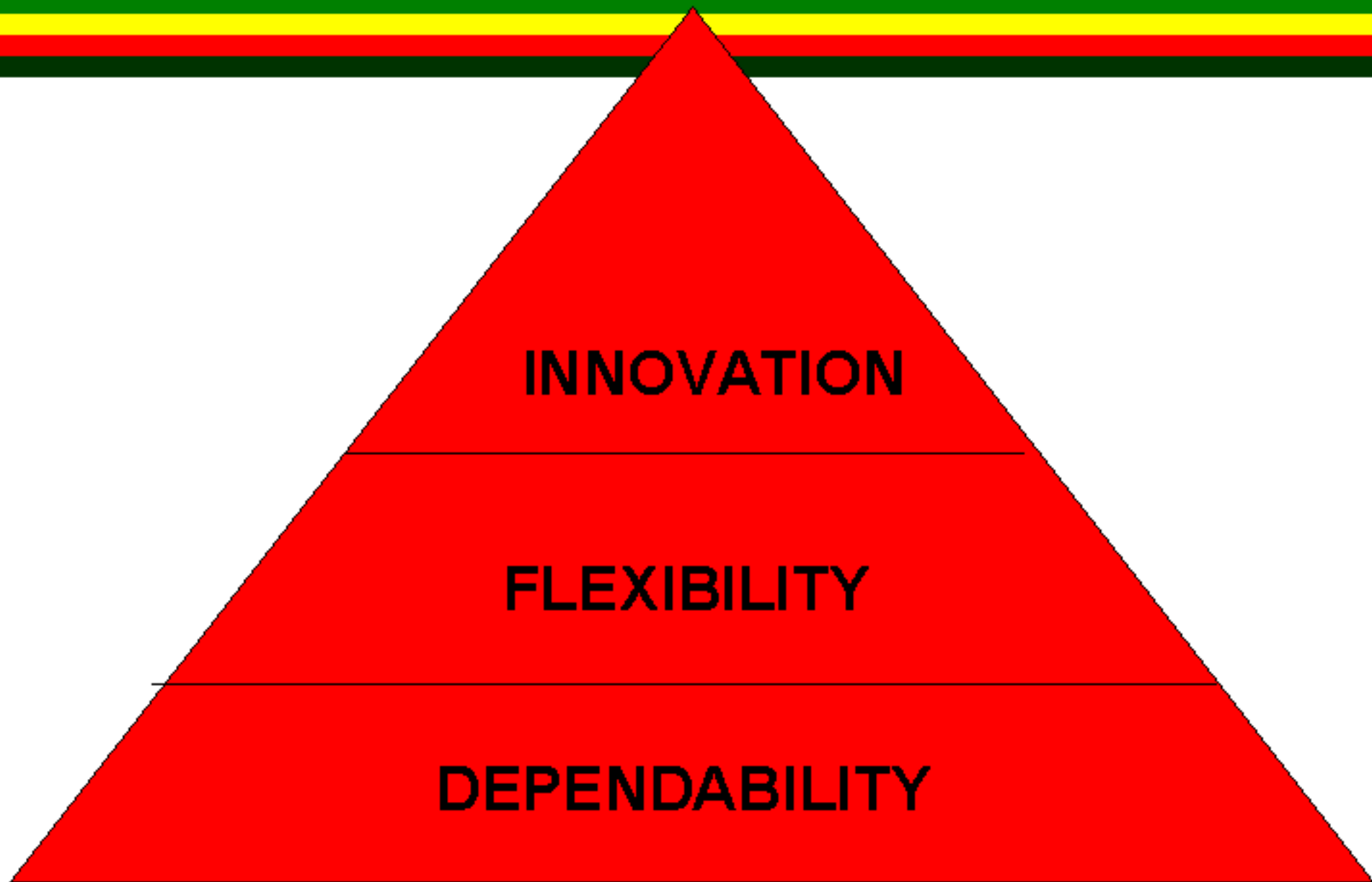
# Deadly Sin # 1

- **Not recognizing that reverse logistics can be a factor in creating a competitive advantage.**
  - **Innovation**
  - **Size and scope of product returns (controllable and uncontrollable)**

# Relevant Questions to Address

- **What differences exist between your firm and its competitors?**
- **What amount of cost savings (\$ or %) could be passed on to customers and/or be used to improve corporate profitability?**
- **Do customers want you to perform RL activities for them?**

# The Competitive Pyramid



# Deadly Sin # 2



- **Believing that once products are delivered, the firm's responsibilities have ended (e.g., computers, printers, electronics sold at retail).**

# Relevant Questions to Address

- **What return policies does the firm have with its customers?**
- **What amount and type of products are returned just prior to the last day that returns are allowed?**
- **Does the firm have a product stewardship program?**

# Deadly Sin # 3

- **Failure to match internal and external systems/processes (e.g., information/communication, financial reporting, and customer service) in E-commerce and the product returns aspect of reverse logistics.**

# Relevant Questions to Address

- **Can the firm's information system and logistics software applications incorporate reverse logistics elements?**
- **Does the firm forecast product sales and the return rates of various product types?**



# Sample Return Percentages

- **Book publishers (20 - 30%)**
- **Greeting cards (20 - 30%)**
- **Catalog retailers (18 - 35%)**
- **CD-ROM's (18 - 25%)**
- **Computer manufacturers (10 - 20%)**
- **Electronic distributors (10 - 12%)**
- **Mass merchandisers (4 - 15%)**
- **Consumer electronics (4 - 5%)**

Source: *Going Backwards* (1999)

# Deadly Sin # 4



- **Assuming that part-time effort (e.g., personnel, budgets, time, space) is sufficient to deal with reverse logistics activities.**

# Relevant Questions to Address

- **What amount of time and effort will RL activities require of:**
  - **managers?**
  - **support personnel?**
- **Do existing personnel have sufficient time and training to administer RL activities?**

# Deadly Sin # 5



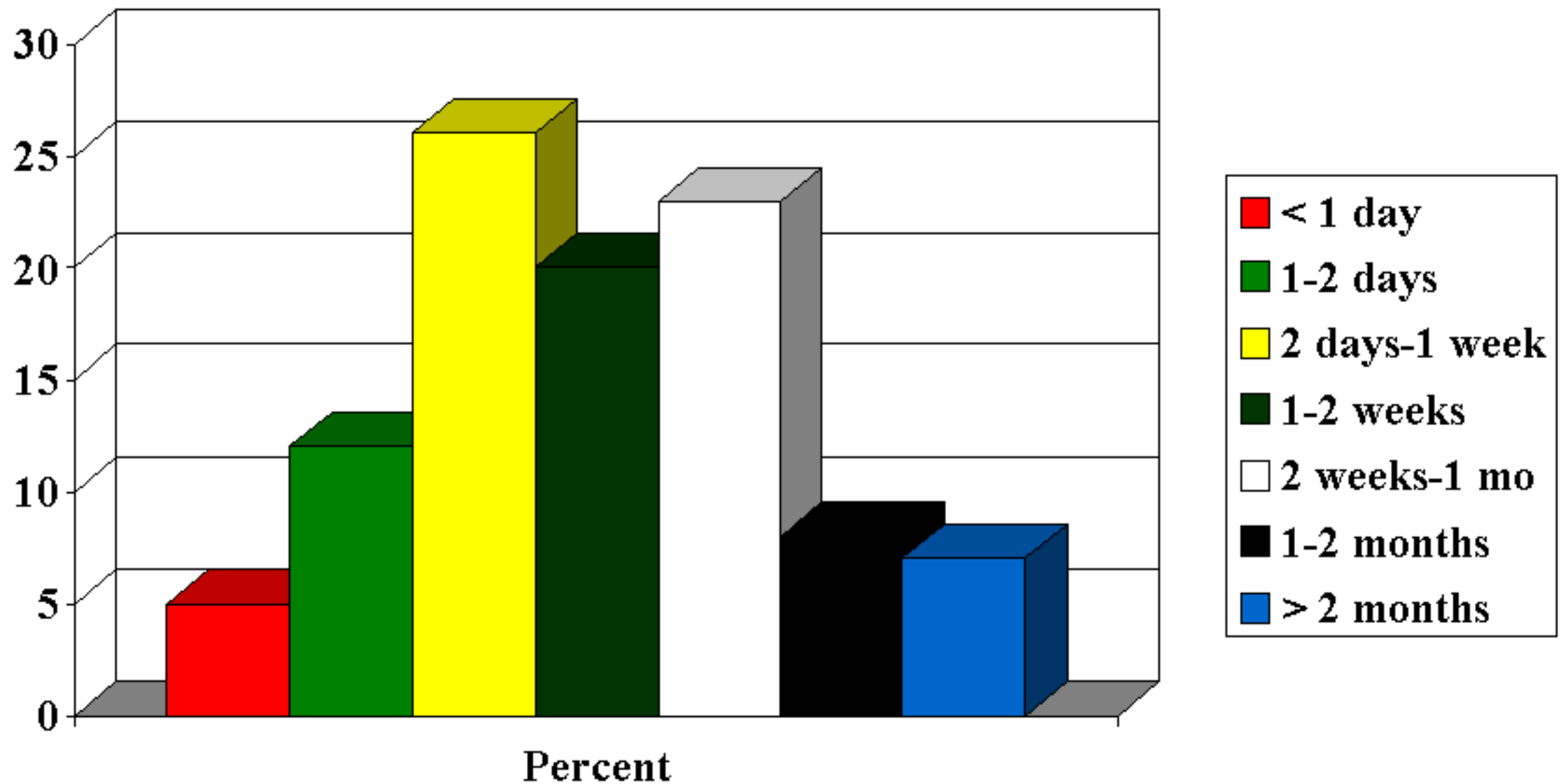
- **Believing that order cycle times for product returns can be longer and more variable than those for new items being sold or distributed.**

# **Relevant Questions to Address**



- **How long is the order cycle for returned merchandise?**
- **What inventory carrying cost percentage applies to returned items?**
- **How is the value of returned merchandise determined?**

# How Long is the Returns Processing Cycle?



# Deadly Sin # 6



- **Assuming that product returns and packaging recycling/reuse will take care of themselves, if given enough time.**

# Relevant Questions to Address

- **How do RL activities get carried out now?**
- **Who is responsible and accountable for RL?**
- **How much time is enough to allow the problem(s) to resolve themselves?**



# **Where Should Asset Recovery Decisions be Made?**

## **● Centralized**

- High value**
- Remanufactured or refurbished**
- Recycled**

## **● Decentralized**

- Resold as is**
- Recycled**
- Disposal**
- Repackaged**

# Deadly Sin # 7



- **Thinking that returns are relatively unimportant in terms of costs, asset valuation, and potential revenues.**

# Relevant Questions to Address

- **What are the kinds of products being returned?**
- **How many product returns does the firm receive during a particular time period?**
- **Are there any patterns (timing, geographical, customer, products) regarding product returns?**
- **What are the costs of processing returns?**

# Relevant Questions to Address

- **What are the costs associated with:**
  - **processing a return?**
  - **refurbishment?**
  - **repackaging?**
  - **getting an item “back on the shelf”?**
  - **inventory carrying costs?**
  - **implementing programs to eliminate returns?**
  - **outsourcing versus in-sourcing RL activities?**

# Categorizing Returns

## ● Product-related

- Resold as is
- Remanufactured or refurbished
- Recycled
- Disposal
- Repackaged and sold as new
- Sent to central processing facility
- Donated
- Sold to broker
- Sold at outlet store

## ● Packaging-related

- Reuse
- Refurbish
- Recycle
- Disposal

# Management of Recoverable Assets

- **Make versus buy** (in-house RL, 3PL's, combination)
- **Who will make decisions?** (gatekeeping, collection, sortation, disposition)
- **Budgeting for RL** (spending level, allocation of resources)

# **Keys to Success**



# ***Factors Critical to Successful RL Strategies and Programs***



- **Sufficient resources (time, personnel, budget) must be allocated to RL and environmental initiatives.**
- **RL process must be mapped or flow charted in order to understand the components and their interrelationships.**



# ***Factors Critical to Successful RL Strategies and Programs***



- **Educational programs are needed for customers, employees, suppliers, vendors, etc. in the firm's supply chain.**
- **Economies of scale are important in order to make some RL and environmental programs more viable.**

# ***Factors Critical to Successful RL Strategies and Programs***

- **Because multiple organizations must be involved in RL and environmental programs, partnerships or alliances are necessary to achieve optimal results.**
- **Measurement systems must be developed and implemented to determine if program performance is acceptable.**

# **Learning to Track, Monitor and Arrange the Return of Recoverable Assets**

- **Use of technology** (bar codes, computerized return tracking, radio frequency, EDI, Internet)
- **Centralization vs. decentralization of the returns process**
- **Inclusion of returns in the firm's MIS**

# Best Practices



# **Reverse Logistics Successes**



- **3M generated over \$60 million in positive cash flow in 1999, which included \$42 million in outside sales and \$18 million in savings from internal reuse.**

# Reverse Logistics Successes



- **With an investment of \$1.3 million in 1998, Estee Lauder developed a RL system that allowed them to evaluate 24% more returned products, redistribute 150% more of its returns, and save \$475,000 a year in labor costs.**

# **NKL -- Reverse Distribution Across the Supply Chain**

- **Few examples of supply chain integration of RL exist in practice**
- **Identification of participants in the RL process and securing their involvement in problem solving and solution**
- **Company savings of 800,000 NOK per year for one SKU (approximately US \$90,000)**

# **Volvo (Sweden)**

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- **Source reduction programs**
  - **product redesign (logistics and engineering partnership)**
- **Reuse strategies for automobile parts and components**
  - **dismantlers**
  - **information systems**
  - **parts storage**



# Opportunities in Reverse Logistics

- **Lower costs**
- **Potential revenues**
- **Better asset utilization rates**
- **Minimize regulatory compliance costs**
- **New market opportunities**
- **Environmental aspects of quality initiatives (e.g., European Quality Award, ISO 14000)**

# ***Skate Ahead of the Puck***

**Leadership, by the best management thinking, requires a vision of what the future should be and the ability to influence others to achieve excellence. But is a passion for excellence enough? You have to have the passion, but you also need the system, the tools to achieve your vision.**

**When asked what made him a better player than others with similar abilities, Wayne Gretzky replied that: *“he skates to where the puck is going to be, not where it has been.”***

***Source: T&D, December 1988***