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Reverse Logistics magazine

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Successful
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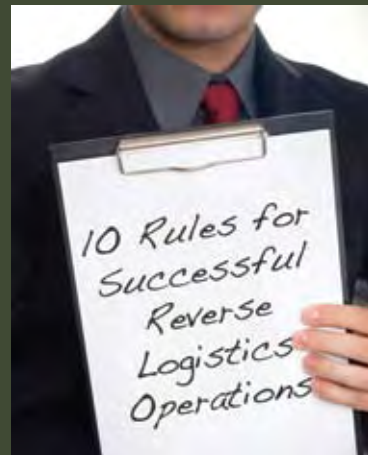
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CONTENTS

On the Cover



Page 22

by William K. Pollock, *Strategies For Growth*SM

In the course of running our own businesses, we have all recognized the importance of dividing our time effectively between managing the day-to-day operations, and planning for the future (although the reality of running the business often forces us to divide our time less than optimally on many of the planning aspects). Whatever business segments we serve, we typically find ourselves relying more heavily over time on various tools and disciplines such as Total Quality Management (TQM), Continuous Quality Improvement (CQI), Customer Relationship Management (CRM), etc., or just plain old common business sense, to barely make it from quarter-to-quarter, or year-to-year.

Articles



Page 12

Reducing Returns, Maximizing Loss Prevention and Validating Warranty Entitlement in the Retail Industry

by Michael R. Blumberg, *Blumberg Advisory Group, Inc.*

Product returns are an inherent part of the cost of doing business within the retail sector. Market studies indicate that returns of consumer electronics products sold through the retail channel account for as much as 26% of products shipped to these channels.



Page 16

How to Avoid the Risks of Donating Used Computers (and Still Enjoy the Rewards)

by Jeff Zeigler, *Tech Turn*

What are you going to do with your old computers when you don't need them anymore? If you're like a lot of people, one idea that might occur to you is donating them to a worthy cause.



Page 28

Extended Producer Responsibility by Cradle2Cradle?

by dr ir H.R. Krikke, *CentER Applied Research, Tilburg University*

The environment is keeping us busy. Since Al Gore's "Inconvenient Truth" it is impossible not to know about the greenhouse effect and its main cause: carbon dioxide. Although sustainability involves many more aspects (such as hazardous materials, resource depletion, etc.), it certainly has made a tremendous impact.



Page 35

Replacement Parts Supply: Opportunities for Vehicle Manufacturers and Customers

by Karsten Platz, *TEQPORT Services GmbH*

In Part One of this article, we explained that European manufacturers of railway vehicles cannot count on their new vehicle business to sustain long-term growth in the future. In this second of a 2-part series, we will outline the ways in which vehicle operators can benefit from Vendor Managed Inventory agreements with their customers in the field of spare-parts.

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Articles



Page 44

Reverse Logistics Financial Model

by John Mehrmann, *Data Exchange Corporation*

It has been said that a boat is a hole in the water in which to pour money. The same may be said of some Reverse Logistics financial models. Failure to track the true costs and chart a safe course may result in titanic losses. Far too often the most reported metrics only reflect the tip of the iceberg.



Page 50

Recalls—When the Worst Happens

by Hannah Kain, *ALOM*

Managing risk when quality control procedures fail and can be a nightmare, especially when there is no recall contingency plan in place. Forethought and a streamlined customer interaction plan are essential to minimize both short- and long-term damage that results from recalls.

Features

To Our Readers - Letter from the Editor	6	Industry Events	43
Wireless News	7	Technology Spotlight	49
Message from the President	8	Read the Press	53
Industry Committees	11	Site Visits	54
On the Move in Reverse Logistics	34	Returning Thoughts	58
Money Talks	39	Advertiser Index	58
Technical Trends	40		

To Our Readers

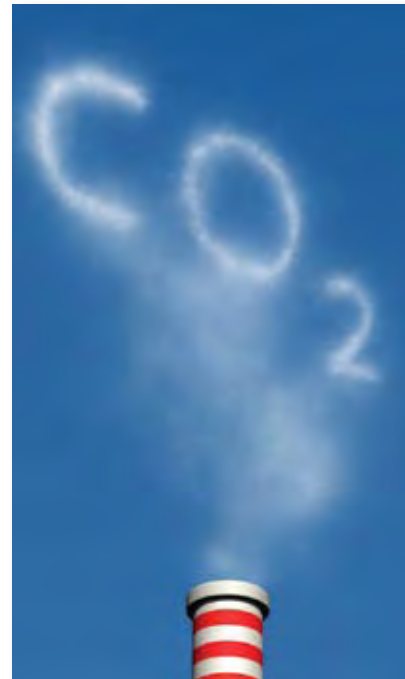
A Letter from the Editor

There's much talk these days about global warming and the effects of greenhouse gases. I've been aware that manufacturing operations are a major contributor to CO2 and that many are taking steps to decrease or eliminate their carbon footprint.

We've reported how many of our members are addressing this issue: Wal-Mart is known for their company-wide initiatives focused on waste-reduction, renewable energy and sustainable products; also how HP, Microsoft, Dell, Ericsson, Philips and Cisco have joined a United Nations initiative "that aims to harmonize world policy and legislative approaches to electronic recycling and to standardize recycling processes." And we applaud their efforts.

In a recent column, I talked about the efforts RLA takes to utilize "green meeting" tactics to minimize our own carbon footprint – including paperless technology for online registration,

confirmation and advertising. Also by ensuring that venues where we hold events, fully support recycle efforts,



use of reusable dishware, cutlery and linens and to the fullest extent allowable, donate leftover food to local



charities. I thought we were doing a pretty good job.

What I didn't realize until I started research for this column, is that the paper industry — which includes magazines, newspapers, catalogs and writing paper — due to its consumption of energy, emits the fourth-highest level of carbon dioxide among manufacturers .

So here we are, very pleased that our circulation is rapidly growing, when at the same time we are contributing to one of the global problems that RL aims to contain.

I don't have the answers... yet; however, I understand that awareness is the first step. I do know that if we're going to "talk the talk" we need to "walk the walk." Future columns will include further investigation findings and RL Magazine steps toward reducing our carbon footprint.

Reverse Logistics Association Mission

Our mission is to educate and inform Reverse Logistics professionals around the world. RLA focuses on all industries in the reverse logistics process. No matter what industry, High Tech, Automotive, Medical/Pharmaceutical, Publishing, Apparel, or Consumer, our goal is to provide RL process knowledge to all industries. We want to educate everyone about the Reverse Logistics Processes that are common to all industries. We have been and will continue to provide our services at a moderate price to our members.

Managing the latest information in repair, customer service, parts management, end-of-life manufacturing, service logistics, field service, returns processing and order fulfillment (just to name a few) can be a little intimidating, to say the least. Yet, that is exactly what the Reverse Logistics Association provides with our membership services. We serve manufacturers and retailers in a variety of settings while offering ongoing updates on market trends, mergers and acquisitions and potential outsourcing opportunities to 3PSPs. We have

gained the attention of 3PLs like FedEx, DHL, USPS and UPS. 3PSPs like Teleplan, Foxconn, Solectron, Canon, Sony and Jabil, along with small service providers have found that the RLA resources help advertise their services. OEMs like Microsoft, HP, Palm, and Sony, along with Retailers like Wal-Mart, Canadian Tire, Tesco and Best Buy all participate at our events. Our online RL Magazine and Weekly News Clippings help OEM, Branded and Retail companies find service partners that were unknown to them.

Wireless News

Full articles available from:
RLA News Center

Why Learn Another Language - Download the Translator

Japanese electronics giant NEC Corp said Friday it has created a world-first real-time translator on a cellphone, which can instantly turn Japanese travelers' words into English.

Solar and Cells Save Lives After Cyclone

Mobile phone communication and solar panel power are literally saving many lives in the remote cyclone hit areas, and greatly helping rescue and relief operations.

When Roads Are a Luxury Mobile Phones Are Required

In a country where roads are often impassable, travel is fraught with danger and recent history recalls many Afghans taking the long road to Pakistan just to make a call, the mobile phone is king.

Celebrate the Birth, This December-NPN & PNP Are 60 Years Old

Sixty years ago, three scientists came up with the solid state transistor, the mechanism at the heart of all computer chips and digital processors.

Reverse Logistics Association Membership

Reverse Logistics Association Membership Benefits

RLA Membership has its benefits!
RL Quote, Publication Subscriptions, Exhibit/Sponsorship Discounts and much, much more.

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Message from President and Founder of RLA

Change is inevitable—so our staff here at the Reverse Logistics Association is use to it. Since we started this trade association in 2002, there hasn't been one week without some of our members asking for another solution, which always results in change. Today, over five years later, the RLA team consist of ten professionals that work around the clock to meet the demands placed upon our shoulders.

We continue to grow our services as requests are made—take a look at where we are today.

One area of focus is our commitment to sponsor research with Universities and Colleges that have a Supply Chain Management Department focusing strongly on Reverse Logistics. We like to partner with these departments for our long-term RL research.

Yes we fund research, but only if the institution has a solid RL platform. We have and will continue to fund research. It is important to the members of our association and for educating industry on this important process in the reverse supply chain.

Our research team is spearheaded by Philip Danielson (Director of Research).

We are happy to welcome three new Advisory Board members who also know the importance of research: Hartmut Liebel of Jabil, Doug Schmitt of Dell and Dr. Dale Rogers of the University of Nevada, Reno. They will help RLA focus on solutions that are important to the RL Process.

Gailen Vick
President

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Board of Advisors

A Board of Advisors comprised of industry experts has been set up to monitor and assist the Reverse Logistics Association management team in making informed decisions. Advisors include:



John Benardino – Hewlett-Packard Company

John Benardino is currently a Director of Reverse Logistics for HP's Imaging and Printing Group. In his position, John is responsible for credit issuance, engineering, remanufacturing, and all return related costs. His product responsibilities cover printing, digital imaging, supplies, scanners, and shared printing.



Dan Gilbert— Cisco Systems

Dan Gilbert is Vice President of Worldwide Reverse Logistics at Cisco Systems, Inc. His charter when joining Cisco in 2005 was to define and create a world-class reverse logistics organization. Dan's global team is responsible for driving excellence in product recovery, receiving, inventory, and recycling operations, and for transforming returned product into value for Cisco shareholders.



Jose Garcia— Microsoft Corporation

Jose Garcia is Director – Repair and Refurbishing at Microsoft Corporation. Jose joined Microsoft 4 years ago to establish World Wide Repair of X-box console from the ground up. Building a world class team, he integrated systems, processes and partnerships with expert service partners.



Charles Johnston – WAL-MART Stores, Inc.

Charles Johnston is

General Manager at the Bentonville Return Center, WAL-MART Stores, Inc. Chuck has been with WAL-MART for the past 13 years and his responsibilities include Returns, Imports, Exports, Tires and Printing and Mailing Distribution.



Steve Jones – FedEx Corporation

Managing Director Supply Chain Services & Reverse Logistics.

He is a 22-year veteran

of the transportation industry, with extensive experience in sales and sales management of transportation and logistics services to corporate accounts. Steve was selected to lead the Supply Chain Services and Reverse Logistics sales organization with responsibility for new business development, base business growth and supply chain integration across all the FedEx operating companies.



Hartmut Liebel—Jabil Global Services

Hartmut Liebel was named President, Jabil Global Services (JGS), in October 2004.

He joined Jabil as Executive Vice President in July 2002 and was named Chief Operating Officer in October 2003.



Larry Maye – Palm Global

Larry Maye is currently serving as the Sr. Director of Palm Global Reverse Logistics. In

this capacity he is responsible for the global repair and logistics for Palm to include repair operations, customer service fulfillment, vendor

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Board of Advisors, Continued

management, returns processing and global strategy.



Dale Rogers is the Director of the Center for Logistics Management and a Professor of

Supply Chain Management at the University of Nevada. Dr. Rogers is a frequent speaker, a consultant to several leading firms, has been published in several logistics journals and has published several books on logistics and reverse logistics. His current research interests are focused on the following: reverse logistics and returns, supply chain technologies, e-business supply chain management, and supply chain management.



Howard Rosenberg – eBay, Inc.

Howard has been with eBay for over 4 years and runs the Company's Trading Platforms business serving companies interested in maximizing their recovery rates on excess and refurbished inventory through the Reseller Marketplace or through their own, private-label auction marketplaces. He has 14 years of experience in various capacities, including operating, advising and investing in, companies in the consumer product, consumer services and business services sectors.



Doug Schmitt serves as VP of Dell's Global Field Delivery organization with international

responsibility for global break/fix field engineers, same day service delivery, spare parts depots, parts planning, service logistics, repair,

reverse logistics and Dell's global command centers. In addition to Doug's role as VP Global Field Delivery he has responsibility for Americas Support Services. Previously, Doug held executive and senior management positions in service and finance at Dell, Inc.

Doug came to Dell in 1997 from Sequent Computer Systems where he held various senior level finance positions. Before Sequent, Doug worked in the banking sector.



Tony Sciarrotta – Philips Consumer Electronics

Tony is Director of Returns Management

at Philips Consumer Electronics North America. In this position, Tony leads returns reduction and entitlement initiatives for mainstream consumer electronics, and is also currently concerned with further driving the implementation of electronic registration for Philips products at leading retailers. Working with Philips Sales, Service, Marketing, and the Philips Business Excellence Group, Tony is helping drive several teams to improve the consumer experience and subsequently reduce the high rates of products returned with no defect found.

Complete biographies of Advisory Board Members are available from the RLA site at

www.reverselogisticstrends.com/company_advisory.php.

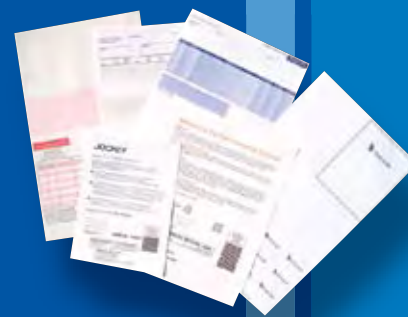
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Reverse Logistics Association Focus & Industry Committees



Focus Sub-Committees were set up to provide a standing forum for Reverse Logistics Professionals to meet on a regional and global basis and discuss common Reverse Logistics issues at the RLTS Conferences & Expos. Focus Sub-Committees educate the industry on reverse logistics:

- "Best Practices"
- Consumer Satisfaction Issues
- Regulations on a Worldwide & Regional Basis
- Processes that can reduce costs

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Automotive

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by Michael R. Blumberg

Overview & Current Situation

Product returns are an inherent part of the cost of doing business within the retail sector. Market studies indicate that returns of consumer electronics products sold through the retail channel account for as much as 26% of products shipped to these channels (Figure 1). A significant portion of returns are due simply to customers who no longer feel the product is right for them either because of remorse, dissatisfaction or any myriad of reasons. The amount of money tied up in returned products is significant. Research indicates return of computer products, alone, account for as much as \$22.5 billion a year¹. As such, anything that a retailer and manufacturer can do to offset the costs of returns can have a dramatic impact on bottom line profitability.

Surveys of retailer return experiences (Figure 2) suggest that, the more willing the retailer is to support their products after the sale, the more likely the customer will

Reducing Returns, Maximizing Loss Prevention and Validating Warranty Entitlement In the Retail Industry

be to return the product for repair or

replacement.²

The retailer's return policy, particularly if it's a liberal policy, and customer remorse with respect to product feature functionality, are identified as the second most important factors impacting product returns. These facts suggest that manufacturers and retailers have conditioned consumers to expect that returns are a normal part of the customer buyer experience, thus creating the current status quo with respect to the volume and cost of returns.

Costs & Challenges Associated with Returns

There are three product shipments for every product that is returned and replaced with a new one; the shipment of the original sold product, the replacement product, and the returned product. Many products are returned by the consumer, both knowingly and unknowingly, after the return and/or warranty period expires. A retailer who accepts return products for

exchange or reimbursement after the warranty or return period has ended incurs additional costs, as identified above, as well as lost sales opportunities for itself and the OEM. A segment of the consumer population has learned how to take advantage of the return policy and in effect engage in fraudulent and unscrupulous practices. In essence, these individuals have learned how to conceal old, stolen, or broken products as new and exchange for cash or new products which costs OEMs and Retailers millions of dollars a year.

Everyone has at one time purchased a gift for someone only to find the person had received a similar gift from someone else. In this situation the consumer needs to have a proof of purchase receipt in order to return the product and receive cash back. Without such receipt, the retailer has no way to determine if the product was actually purchased at his or her store. The store can accept the return and provide cash back. However, the product may not have been purchased at that particular store in the first place in which case it will cost the store money. The store could refuse to accept the product without a proper

receipt. However, the store risks offending a customer and loses a stream of revenue from repeated sales if the customer actually did purchase the product but simply lost the receipt. Most consumers would be dissatisfied with this type of treatment.

With respect to defective products, the OEM is responsible for repair during the warranty period. The retailer and OEM need to have good information on when the product was purchased in order to determine if it is still covered under warranty. Without this information, a judgment call must be made. This could result in unnecessary repair and logistics costs for the OEM. The OEM also risks the possibility of not setting aside enough cash reserves to cover the warranty period if the warranty policies continued to be overlooked by the retail channel. Overestimating

Figure 1. Consumer Goods Returns Experience

Causes of Returns		Annual Percent Returns	
		Consumer Electronics (Brown)	Consumer Appliances (White)
Defective	Failure	9.4%	1.5%
	Shipment Damage & Other Causes	2.3%	1.2%
Non-Defective	Stock Balancing & Store Returns	3.6%	.5%
	Shipping Errors	3.2%	.3%
	Customer Returns & Non Satisfaction	7.5%	1%
Total		26%	4.5%

warranty reserves can be perceived as poor financial management on the part of the OEM's warranty administrator. Ideally, the OEM would want to be as precise as possible in order to cover costs and minimize risks of cost overruns.

Another practical problem for OEMs is when retailers observe a trend of an inherently large number of No Trouble Found Returns (NTF) within a specified period of time. This type of situation is commonly associated with a phenomenon

described as "free rentals" by retail industry participants. They occur when consumers buy a product for an immediate or short term need, knowing that they won't be keeping it; when they return it, they receive full credit for the original purchase and in effect, get a free rental of that item. This practice can occur with items that are seasonal or periodic in their usage such as portable air-conditioning units and space heaters used during extreme weather conditions. The retailer often can't sell the used

Customer satisfaction.

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Figure 2. Factors Affecting Consumer Brown & White Goods Product Returns

Factors	Estimated Impact	Comment
PRODUCT RETURN POLICY	7	LIBERAL POLICY CREATES HIGHEST RETURN RATE
RETAILER/DEALER COMMITMENT TO SERVICE/SERVICE RESPONSE	8	LEVEL OF RETAIL SERVICE AND SUPPORT WILL DIRECTLY INFLUENCE PRODUCT RETURNS, BUT MAY INCREASE PART AND SUBASSEMBLY ACTION
PHYSICAL FACTORS (SIZE, WEIGHT, COMPLEXITY)	5	LARGE AND HEAVY WHITE GOODS ARE RETURNED LESS THAN CONSUMER ELECTRONICS
PRODUCT RELIABILITY	4	INCREASING MOVE TO DIGITAL AND MODULAR DESIGN HAS INCREASED RELIABILITY
BUYING FACTORS (EASE OF USE, CONNECTIVITY, USER FRIENDLINESS OF INSTRUCTIONS, ETC.)	7	USER UNHAPPINESS AND "REMORSE" INCREASING IN IMPORTANCE
PRICE	4	HIGHER PRICED UNITS ARE RETURNED MORE FREQUENTLY

product, and must either liquidate it at a loss or attempt to return it to the manufacturer for some sort of credit. The manufacturer is then faced with additional costs associated with shipping, testing, repairing, and refurbishing a unit which the consumer essentially rented for free. Not only do "free rentals" create an enormous cost burden for retailers and manufacturers, it creates a trickle down effect for other consumers. It is the consumer who pays the "ultimate price" in the long term when return policies are abused, as retail prices need to be raised to cover losses.

Returns for fraudulent reasons don't always involve a matter of breaking the law. However, there are instances where the intent to "steal" is obvious. There have been reported incidences where a product is returned for credit or exchanged for a replacement product. Upon further inspection it is revealed that the item in the box is not the same one as originally purchased. The person or persons who participate in these schemes have committed a crime by stealing a new product. Unfortunately, the

crime is not detected until days, weeks, or months later when the return product is inspected by the OEM or Retail Returns Distribution Center. Worse, if the product was returned to the sales floor and re-sold, it is discovered later by the next customer. By this time, the perpetrators are long gone. Retailers in 2006 lost \$9.6 billion due to fraudulent returns. (Source: National Retail Federation).

New Developments & Implications

A common factor in all these situations is a lack of real time data regarding when a specific product is purchased, from which location, and the length of the warranty period. With this type of information a retailer could effectively monitor product returns and take the guesswork out of interpreting and enforcing return policies. Access to information on product purchase information can allow a retailer to "positively ID" a return. By doing so, a retailer can discourage fraudulent returns and better control costs. This type of a solution would also provide an enormous financial benefit to OEMs since it will result in the reduction of overall returns, thus a reduction of unit transaction

costs associated with the entire product return and replenishment process. More importantly, such an approach could also have a positive impact on customer satisfaction because it facilitates the return process in instances when a customer does not have his or her sales receipt.

The key technical element required to deploy this type of system is an online database which can scan and track all product sales by date of purchase and correlate this information with the store's return policy as well an OEM's warranty policy. The amount of investment in computer hardware, software and programming required to develop such a system would discourage a single OEM or Retailer from building it on their own. It is likely that an OEM or Retailer would want to optimize the solution to fit their own reporting requirements and IT infrastructure. "Going at it alone" could create a serious risk in infringing on proprietary intellectual property rights and in the sense that the solution would not be compatible with the Enterprise Systems of every retailer and OEM unless a significant amount of planning, resources and capital were

allocated to the development effort. It is also questionable as to whether every participant could agree on the right solution and if an ROI of significant justification could be achieved. The ideal system would need to be open and transparent, and in effect function as a utility so that it can be utilized by multiple retailers and manufacturers to track returns and cross-retailer returns without bearing high development and ongoing support costs for individual users.

During the 1990's, product return rates were at an extremely high rate in the U.S. and Nintendo of America, Inc. found that it was losing millions of dollars due to fraudulent returns, free rentals, and poor implementation of retailer and vendor return policies. To counter this situation, the company developed an Electronic Registration program that provided a systematic method for recording POS data then regulating returns and a complementary, easy to use, gate-keeping tool at the retail store level. This technology proved so successful, that Nintendo patented the business methodology as Point of Sale (POS) Electronic Registration and founded SIRAS.com®, as an independent subsidiary, to expand the application and to commercially develop the process and make it available to all retailers and OEMs across multiple product lines. In essence, to create an industry wide "Utility" for managing product returns across brands at a fraction of the cost of deploying a system on a standalone basis.

By commercializing the technology vis-à-vis an independent subsidiary, Nintendo obtained a return on their investment in the Electronic Registration methodology while providing a significant benefit to

the industry, measured in both quantitative and qualitative terms. The SIRAS POS Electronic Registration methodology provides a complete audit trail for managing all aspects of a retail product's return lifecycle. SIRAS does not collect or store any customer information whatsoever: Because the program captures information about only the product, the returns process can be factually based and totally automated through POS. This solution offers retailers and manufacturers an extremely valuable benefit, the ability to verify a product's purchase history and warranty eligibility by serial number. Retailers can track a product's purchase history to confirm with absolute certainty that product and warranty returns conform to the retailer and manufacturer policies. This application has enabled retailers

and manufacturers to place greater controls over the return process resulting in a significant reduction in the volume of returns, protecting their assets, and saving millions of dollars per year. ^{RLM}



Michael R. Blumberg is a Certified Management Consultant (CMC) and President & CEO of Blumberg Advisory Group, Inc. His firm focuses on providing strategic and tactical

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How to Avoid the Risks of Donating Used Computers (and Still Enjoy the Rewards)

by Jeff Zeigler

What are you going to do with your old computers when you don't need them anymore? If you're like a lot of people, one idea that might occur to you is donating them to a worthy cause. In fact, Computerworld recently reported (March 26, 2007) on a 2006 Gartner study indicating that 19% of companies that had a policy for disposing of unwanted PCs donated them to schools or nonprofit organizations. That's more than the percentage that put them in storage, traded them in or sold them to employees.

"Good intention; bad policy," according to the Computerworld article. The problem is that there are serious risks associated with donating used computer systems directly to charities – that they won't be used as you intended, for example, or that sensitive information remaining on them could be compromised. On the other hand, there are also rewards, ranging from the satisfaction of helping a worthy cause to the tax savings associated with making a charitable contribution.

The question is, how can you enjoy the rewards without subjecting your company to risk? This article will examine:

- the reasons people donate computers
- the risks of donating directly to a charity or a school

- the option to use electronics recycling to reduce risk

There's nothing wrong with wanting to donate used computers. The important thing is to do it right.

The Drivers for Donating Unwanted Computers

What makes donation one of the top methods companies choose for disposing of old computer assets? There are three main reasons.

Enable a deserving organization to re-use them

It can be extremely satisfying to do your part to close the "digital divide" by giving your old computers to schools or charities. And the idea that the computers could actually be doing some good somewhere instead of gathering dust in a closet or possibly even releasing toxins in a landfill makes it even more satisfying. Ironically, though, those undesirable fates may be exactly what await the systems you donate. Read on to find out more.

Enjoy a tax break for donating them

Of course, it's great to get a tax break. And that used to be a simple

matter of telling your accountant how many PCs you gave away and to whom. Since 2006, though, the IRS has set forth strict rules about the condition and value of the computers you donate, as you'll learn in the next section of this article.

Free up the space where you're storing them

There's no argument about that – storing computers is a waste of space that you could be using for something more productive. The issue is whether donating them is the best way to accomplish that goal.

The Risks of Donating Directly

How can you go wrong giving away your unwanted computers? Let us count the ways.

1. The systems won't be re-used after all.

If your main goal in donating systems is to provide an organization in need with technology it can use, keep in mind that there's a good chance it won't be able to do so. The systems may not be right for that particular group, because of the way they're configured or because they're in less-than-good condition. So you may not even be able to meet your main objective for donating the systems in the first place.

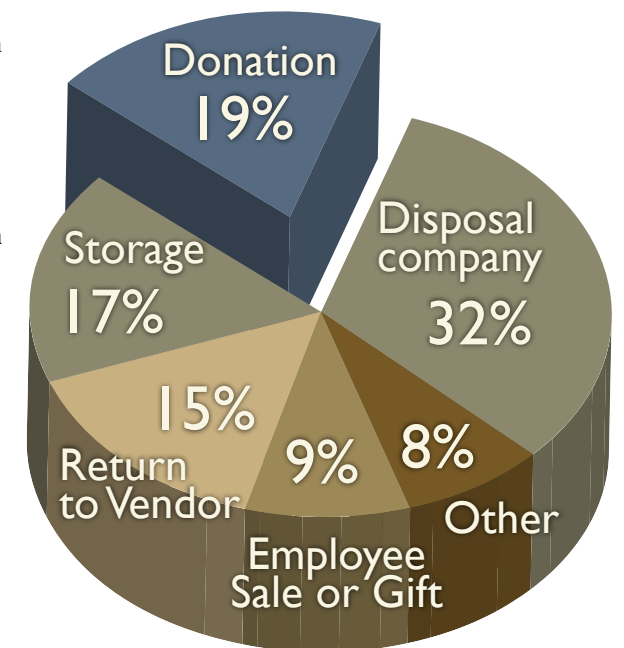
Even worse, if the organization can't use them, it's likely to dispose of them in a manner in which you have no control. And that can cause major headaches, if they still have data on them that could be compromised or if they end up going to a landfill. Let's take a look at what could happen then.

2. The data on the computers will be compromised.

Of course, you would never hand over used systems to anyone without taking steps to remove any proprietary or otherwise sensitive information on the hard drives. But even if you have been careful to use disk wiping software to remove the data, there's always a chance that it may be recoverable – not necessarily by the organization to which you donated the computers, but by whomever ends up with them if the organization doesn't need them. Consider these facts:

- Testing by a German technology firm of hard drives bought on eBay revealed that seven of every ten tested still bore readable information (CNET News.com, 04/24/2005).
- An investigation into computer equipment disposal in the UK discovered that only two of more than 100 hard drives from computers bought online, at computer fairs, or from traders contained no recoverable data. (The Register, 02/17/2005).

Think about what could be found on your old computer drives: Client



*Based on information in Tech Trash: Still Stinking up the Landscape," Computerworld, 03/26/2007

information? Company financial records? Employee social security numbers? If you don't want to risk this kind of data ending up in the



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wrong hands, think twice about donating your computers.

3. The computers will end up in a landfill.

If your business is like many today, being green is becoming an increasingly important priority. The options you might consider for disposing of old computers would certainly not include sending them off to the dump or shipping them out to a third-world country with lax environmental standards. But that's exactly where they could wind up. Here are just a couple of examples.

- A computer discarded by the city of San Antonio in 2005 ended up in a garbage dump in Nigeria. At the time, the city typically sold its old computers on an Internet auction site (San Antonio Express-News, 02/12/07).
- Photographs taken by the Basel Action Network in Lagos show scrapped electronics lying in wetlands, along roadsides, being examined by curious children and burning in uncontained landfills ("Where Computers Go to Die – and Kill," salon.com, 04/10/06).

It's irresponsible to ship equipment with potentially toxic content overseas, and it's just plain illegal to dump it in a landfill – which leads us to the next risk of donating computers.

4. Your company could be liable for inappropriate disposal.

If the EPA finds old computers illegally dumped in a landfill,

and the asset tags still have your company's name on them, who do you think is going to be held responsible? If old computers associated with your company end up polluting a river in China, whose name gets dragged through the mud in the media?

The environmental consequences may be hair-raising, but that's not even half the story. If sensitive customer information on your computers ends up being reused after the systems are sold on eBay, you could be sued for any damage that results. Not only that, there are dozens of local, federal, and international laws today that govern the privacy of electronic data. If you are found in violation of one of these laws because your company's name is on computers that have sensitive data on them, you could end up paying a hefty fine.

That's the problem with donating computers directly to an organization. When you don't have a bill of sale or other official transfer of ownership, those systems still technically belong to you. So even though you have no control over what happens to them, you may still be held accountable.

5. That tax deduction may not come as easily as it used to.

In 2006, the Internal Revenue Service issued new rules relating to charitable contributions. According to a story in the El Paso Times (April 30, 2007), for noncash donations, the following rules apply.

- Noncash contributions, including computers, need to be in good condition for you to claim a tax deduction.
- For noncash contributions totaling \$500 or more, you must include a detailed list with your tax return that states exactly what you gave and to which charity.
- If a single item such a computer is worth \$500 or more, you will have to get an appraisal and include a summary of it with your return.

By the time you put together all the documentation and get the systems appraised, your tax deduction is likely going to be worth less to you than it might have been in the past.

A Better Way to Donate

If you want to see your old computers go to a good cause, there's a better way than just handing them over to a charitable organization. This alternative entails working with a reputable electronics recycler to participate in a formal program for donating to charity. TechTurn, for example, works with Operation Homelink to provide used computers to the families of U.S. service men and women so they can stay in touch by email with soldiers who are overseas. Or, as an alternative, you can sell your used systems to an electronics recycler outright and then donate the money to the charity of your choice to use as it sees fit.

But how does adding a third party to the mix affect your risk of data security breaches, environmental violations, and potential legal liability

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When you use a reputable electronics recycler to dispose of your assets, you transfer ownership of the assets to that company, so that there is no risk that you will continue to be liable for them.

or regulatory noncompliance? The answer lies in choosing a recycler with proven best practices for handling used equipment. Choose one who provides the following services to reduce your risk.

Stringent Data Erasure Procedures

We referred earlier to the risk of using disk wiping software to erase data from your hard drive. Because that approach may not always be successful, reputable electronics asset recovery companies will have the capabilities to go far beyond simple

disk wiping to ensure that sensitive data is erased. Ensure that the electronics recycler you choose employs multiple sophisticated data wiping programs and then follows up with a variety of diagnostic tools to visually inspect every hard drive that has

been processed. Finally, the company should manually verify that all data has been successfully eradicated.

Formal Transfer of Ownership

When you use a reputable electronics recycler to dispose of your assets, you transfer ownership of the assets to that company, so that there is no risk that you will continue to be liable for them. In addition, the company should provide a detailed accounting of the disposition of your assets and documented indemnification of your company.

Stated Asset Disposition Policy

The recycler should also have a formal policy for disposition of used assets that addresses the following issues.

- If the systems will be donated to charity, the recycler should be able to demonstrate relationships with organizations whose mission is charitable donations such as Operation Homelink or the National Cristina Foundation, which matches used computer assets with those in need.
- If the systems will be resold rather than donated to charity, the recycler should have a formal resale program with established standards for the refurbishment and sale of reconditioned systems.
- If the systems can't be resold for some reason – because they cannot be restored to sound operating condition, for example – the company should have the resources to destroy them in an

environmentally sound fashion. Methods for doing this may include degaussing, which eradicates the data on hard drives by exposure to strong magnetic fields (and renders the drives unusable), and shredding, whereby the hard drive is physically smashed into pieces.

Achieving the Risk/Reward Balance

Donating used computer equipment is not as simple as it sounds; there are a number of risks associated with this practice. But it also comes with the rewards of knowing your old systems are being put to good use. The key to reducing the risks and realizing the rewards is to work with a reputable electronics recycler. Such a company can help you turn equipment into cash for charitable donations or to contribute systems through a safe, formal program designed especially for that purpose. RLM



Jeff Zeigler founded TechTurn in 1999, and was selected as Entrepreneur of the Year by Ernst & Young in 2007. Prior to founding TechTurn, he worked in the

computer services industry for eight years where he developed programs domestically and internationally for manufacturers and service providers in the IT industry, focusing on returns management and asset recovery programs.

TechTurn is the trusted industry leader for technology recovery, refurbishing and remarketing. Through world-class facilities and processes, TechTurn helps to build the foundation for sustainable technology, providing enterprises with an economically smart, environmentally friendly and risk-free method for the transportation, refurbishment and reselling of used technology—so it can continue to benefit others. For its Sustainability effort, the company was recognized as one of the Going Green Top 100 companies in 2007.

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10 Rules for Successful Reverse Logistics Operations

by William K. Pollock

In the course of running our own businesses, we have all recognized the importance of dividing our time effectively between managing the day-to-day operations, and planning for the future (although the reality of running the business often forces us to divide our time less than optimally on many of the planning aspects). Whatever business segments we serve, we typically find ourselves relying more heavily over time on various tools and disciplines such as Total Quality Management (TQM), Continuous Quality Improvement (CQI), Customer Relationship Management (CRM), etc., or just plain old common business sense, to barely make it from quarter-to-quarter, or year-to-year.

However, regardless of which tools we use, or names we give them, everything comes down to the same basic principal: we need to be able to offer the right products and services to our customers; deliver them in a timely fashion, and at a competitive price; and be able to handle customer support and returns quickly and efficiently in order to maintain the desired levels of customer satisfaction (and margins) that will support the future growth of the

business. This is what reverse logistics is all about.

Each of the components that comprise the overall process is equally important, and each requires our full attention on an ongoing basis. This means that we must continually focus on meeting (and exceeding) our customers' needs; managing our business processes and logistics operations; providing our personnel with the most appropriate tools to support the customer; and last, but not least, fostering the ability to effectively manage growth to ensure that we are always able to attain the desired business results (Figure 1).

In assisting our clients over the years, we have identified the following 10 critical success factors that must be addressed to ensure successful reverse logistics operations (Figure 2):

1. Up-to-Date Support Offerings

It sounds obvious, but keeping your reverse logistics offerings up-to-date in today's ever-evolving service economy is a challenge. The changing market requirements and expectations, intensifying competition, and continual advances in new technology are all drivers that lead toward both the need, and the ability, to embed commensurate change in all of our products, services and solution offerings in order to remain responsive to our customers' total needs. Regardless of which industry segments we serve, product life cycles have declined dramatically over the last couple of decades. The

implication of this trend is that we will need to maintain a continuous effort to improve and upgrade our support products over time to ensure that we consistently meet our customers' expectations. However, in order to do this effectively, we will also need to be able to anticipate what our customers' expectations will be at the end of the product life cycle—and this may be difficult, as the general rule of thumb is “the longer the cycle, the more difficult it will be to anticipate your customers' expectations.”

2. Value-Added Services

Most products, especially the higher-priced or more complicated ones, neither sell nor operate by themselves, and require supplemental levels of service and support in order for customers to benefit from their full use and application. This may include anything from routine maintenance and customer technical support; to customization and application training; to real-time inventory management and state-of-the-art channel support. This trend in the high-tech services industry is decades old, and yet, many organizations have not yet made a complete transition to the “new” way of providing “cradle-to-grave” customer support. Thus, an organization's value-added services need to be focused on the total needs of its customers, and not merely initial installation and ongoing technical support. This requires a full focus on all of the pre- and post-sales-related activities



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that contribute to overall customer satisfaction.

3. Integrated Solutions

In most cases, it may be assumed that customers are not so much interested in the technical nature of the products or services they use, but rather in the breadth of the solutions they use to support their day-to-day business operations. As a result, ongoing customer support throughout the entire life cycle of the products they use has become a common requirement nowadays, typically involving a variety of post-sales service and support offerings including remote diagnostics and self-service via the Internet; consulting, training and engineering services; and a full array of customer support offerings. For these reasons, providers have to make sure that their customers' total requirements are always considered in the final specifications of the products and services they sell, and are fully integrated into the systems they use to support their customers.

4. Effective Business Processes

In order to be able to effectively deliver the products, services and solutions that our customers need, we also need to ensure that the business processes we utilize are appropriate, up-to-date, and that they get the job done. If they are not, then we may need to upgrade and/or re-engineer them where necessary to meet our customers' growing expectations without creating an overly-costly

Ensure that Your Reverse Logistics Products, Services, Solutions and People Focus Squarely on the Customer



Figure 1

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solution that effectively eats into our targeted profit margins. As our service and support offerings continue to be enhanced in order to provide customers with more comprehensive solutions, the processes required to support them will also need to change, and that may require more sophisticated skills and tools.

5. Empowerment and Accountability

As internal solutions and processes become more complex, it also becomes more likely that multiple personnel will get involved at different stages along the way. Although technology can help manage this to some extent, there is still a big risk that something may go wrong, or may fall "between the cracks." To avoid these possibilities requires a different approach and, more importantly, a different attitude. The presence of a "not my job" attitude among existing personnel would be devastating in this

kind of environment. The best way to ensure success is to actively promote teamwork, empowerment and accountability. Many businesses have already successfully implemented empowered team efforts, with fully articulated accountability dedicated to "taking care of the customer" vs. merely "taking care of the problem."

6. Customer-Focused Front-Line Organization

Since the customer should always be the main focus of the business, we all need to make certain that the organization is structured appropriately to provide this focus. The most important interfaces with the customer are typically made by the sales and services components of the organization, as these personnel are in direct contact with the customer virtually all the time, either in person, by phone, or via the Internet. The way they interact with customers will ultimately determine the customers' perceptions of the organization as a whole. This means that the skill sets that are required must not only cover the technical aspects of customer support, but also the communications and interpersonal skills that let customers know they are being cared for properly. By creating (or refining) a companywide set of customer-focused, integrated processes, we can ensure that the organization will always be focusing squarely on the needs and expectations of the customer, thereby greatly increasing its chances for success.

7. Flexible and Responsive Back-End Organization

However, in order to allow front-line personnel to focus directly and effectively on customers, the organization will also require a flexible and responsive back-end organization. This part of the organization needs to be able to support its front-line personnel through the development of the tools and methods that enable the proper execution of all required service and customer support activities. This includes the formal documentation of the technologies utilized, and the instructions and guidance for applying them; the development of effective sales and support tools; and, last but not least, a documented set of escalation procedures. As such,

the back-end organization will be responsible for setting the stage by creating an infrastructure that allows the front-line organization to perform its tasks without any undo hassle or interference.

8. State-of-the-Art Technology

Technology is one of the key drivers for change, and can provide most of the tools needed to improve business performance, as well as lowering the operational costs of the organization as a whole. We all know the rallying call to "do more with less"; and in most cases, technology, if applied correctly, is the principal tool that allows us to do so. The real challenge, however, is to determine what is realistically available, and how we can use it to our

greatest advantage. With the nearly continuous flow of new technology at our disposal, the potential is there to improve all aspects of the business, as well as our ability to more effectively, and profitably, support the multitude of products, services and solutions we offer, as well as the specific business processes that are required to deliver them.

9. Applying the Right Technology

The availability and proliferation of technology solutions can be very confusing, and sometimes even misleading. The old saying that "you should never apply technology merely for technology's sake" is still very true. For this reason, we still

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Critical Rules for Success

- Up-to-date support offerings*
- Value-added services*
- Integrated solutions*
- Effective business processes*
- Empowerment & accountability*
- Customer-focused front-line organization*
- Flexible & responsive back-end organization*
- State-of-the-art technology*
- Apply the right technology*
- Managing continuous change*

10. Managing Continuous Change

This last rule might actually be the most important one: how to manage and control the continuous change (and growth) process. We have seen many businesses develop and deploy initiatives for change that have been very

designed and implemented, and the existing business processes can be carefully adapted to meet the new requirements.

Reverse logistics is not an end unto itself; it is part of a much larger, all-encompassing, process dedicated to taking care of the customer. As such, "how goes reverse logistics, also goes customer satisfaction" is the name of the game. Therefore, we believe that while following these 10 rules will not unconditionally guarantee success, it will certainly help to increase the chances. However, as we have seen time and time again, businesses that embrace only some of these rules for success typically only see some improvements. The maximum effect can only be achieved if all 10 rules are embraced, and executed, collectively, as they will all ultimately build upon one another, empowering your organization to support its customers the way they expect to be supported throughout the entire product/service life cycle experience. RLM



William K. Pollock is president of Strategies For GrowthSM (SFGSM), the Westtown, Pennsylvania-based services consulting firm specializing in strategic business

planning, services marketing, CRM consulting, market/survey research, and customer satisfaction measurement and tracking programs. During the past 25-plus years, Bill has conducted more than 250 strategic planning, customer survey and market research studies for clients all over the world. He is a frequent speaker at trade conferences, and has published more than 120 articles covering a wide range of services-related topics. He may be reached at 610-399-9717 or via e-mail at wkp@s4growth.com. SFGSM's website is accessible at www.s4growth.com.

need to carefully investigate alternative technologies, as well as their applications to our specific business situations. The best way to do this is to design our business processes and infrastructure around the most realistic technology solutions, and only focus on the ones that will directly help us in achieving our business objectives. Technology should be the means by which we may attain our business goals, but not the primary objective. As such, we will need to accept that not all technology will provide us with the benefits we are looking to gain—it is simply a tool to assist us in meeting our overall business objectives.

successful; however, even more have turned into disasters or are abandoned halfway through the implementation. From our experience, it is critical that senior management always has a clear vision of the future of the company. This requires forward thinking, supported by market research and customer surveys that need to be translated into a clear vision and strategy. Once the vision and strategy are in place, an assessment can be made to determine a baseline for change, and a plan can be developed to make it all happen. Based on this comprehensive internal assessment, a change management plan can be



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Extended Producer Responsibility by Cradle2Cradle?

by dr ir H.R. Krikke

The environment is keeping us busy. Since Al Gore's "Inconvenient Truth" it is impossible not to know about the greenhouse effect and its main cause: carbon dioxide. Although sustainability involves many more aspects (such as hazardous materials, resource depletion, etc.), it certainly has made a tremendous impact.

Most companies however, are still concerned with their bottom line. Businesses are expanding into international markets, requiring the ability to manage manufacturing and distribution on a global basis. (Out-) sourcing strategies have led to complex supply chain networks, with different locations for different activities.

Globalization increases energy use and hence CO2 emissions, and causes many other inefficiencies as well. The manufacturing boom in China, for example, creates a volume imbalance in the global transport system. From European mainports, 41 percent of the containers return empty to Asia. Not only are the volumes of returned empty containers a problem, also the number of products and packaging returned, continue to grow. Reverse Logistics is becoming a strategic issue because returns costs are staggering, materials and energy become scarcer and customers demand green policies. Now the environment is everybody's problem. So, politics joins in. Legislators increasingly hold Original Equipment Manufacturers (OEMs) responsible for greening their products and supply chains. This is often referred to as Extended Producer

Responsibility or EPR for short. Its implementation is found worldwide, but mostly within the European Union. One of the most important industries is Electronics, both for professional and consumer markets.

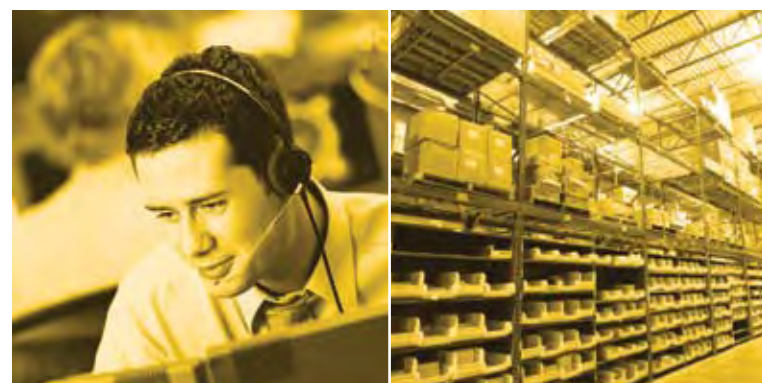
The European Union was the first to tackle the fast increasing Waste stream of Electrical and Electronic Equipment (WEEE) in order to prevent growing quantities of equipment from being incinerated or land-filled and to reduce environmental pollution as a result of the uncontrolled release of toxic materials. Also Norway and Switzerland and some Asian countries, like South Korea, Japan, and Taiwan are adopting similar though not as far reaching legislation.

Other areas of the world, for instance China, are also opting for EPR as a policy tool. In the USA, on a voluntary basis and under the influence of

various mandatory state regulations, e-waste is subject to national recovery and recycling targets.

Directives that apply to EEE-industry include the WEEE-Directive, the RoHS directive, packaging directive, REACH, and the battery act. This generates volumes of returns flows, possibly destined for Far-East production. To regulate exports of (hazardous) European waste we find more directives, in particular (EVOA, 1994/2007). More recently, the EU has discovered the carbon footprint and develops policies driven by energy concerns.

Many comments have been put forward on their environmental effectiveness as well as economic impact. Rebound effects include increased energy use through mandatory recycling, illegal exports to developing countries, conflicting objectives of directives, no level



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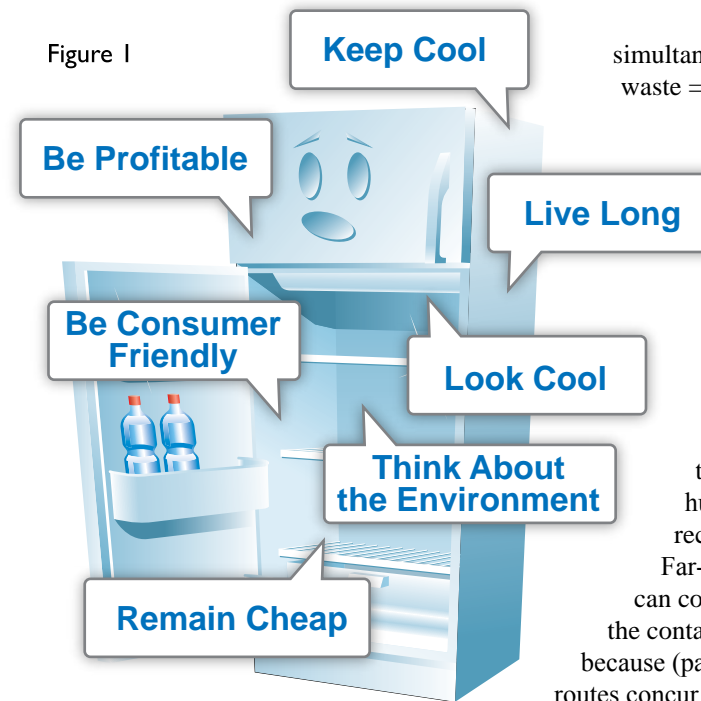
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Figure 1



playing field for business and little effective conservation of natural resources. Moreover, perceived high cost create reluctance with industry.

In response, industry is adopting Cradle-to-cradle or C2C approaches, aiming for optimal customer service, low cost and environmental friendliness (read carbon footprint)

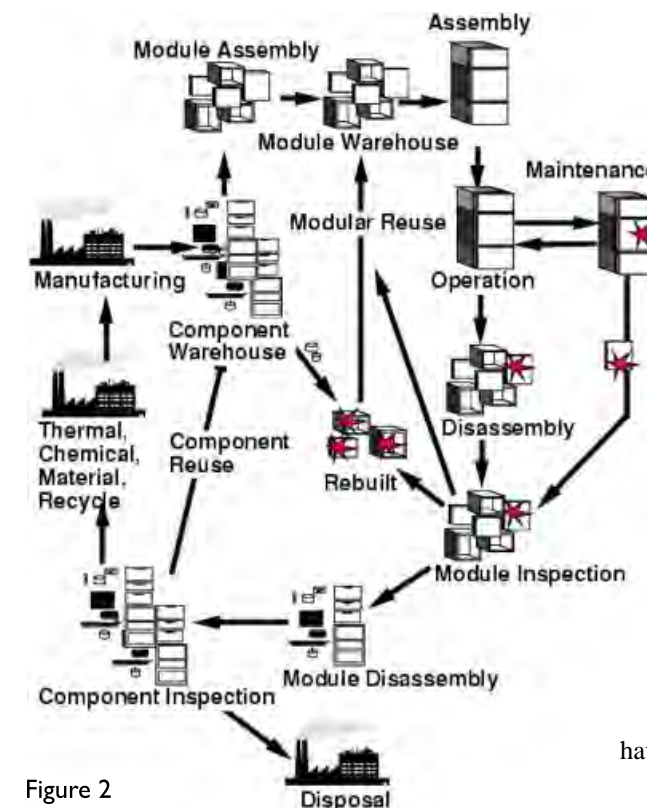


Figure 2

simultaneously. Now if waste = food then it might as well be raw material. In fact this is what Baumgart and McDonough are claiming.

It is common knowledge that there is a huge market for recyclables in the Far-East. This flow can contribute to solving the container imbalance because (part of) the logistics routes concur. The efficiency can be improved, resulting in fewer (empty) container miles and henceforth lower emissions to the environment and lower energy use. The application of recovery (i.e. reuse and recycling) can in many cases improve the energy profile through the so-called substitution effect. Capacity constraints in global main-ports can be relaxed, lowering prices. Staggering energy prices also emphasize economic aspects.

In conclusion, if well managed, economy and environment go hand-in-hand. As one knows the perpetuum mobile does not exist, and we don't believe a closed loop supply chain can be fully autarkic –and that would be C2C n'est pas? But energy and material savings up to 25% can be achieved.

In the ECO project of Transumo, we have done a number of

Continues on Page 33 ▶

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The 5th Annual RLA Las Vegas Conference and Expo will be held on February 4-6, 2008 at the Planet Hollywood Resort & Casino. Reverse Logistics Association is offering three full days of Reverse Logistics immersion starting with RLA Workshops and Industry Focus Committee meetings followed by two days of sessions and exhibition.

USA. Afternoon sessions and panel discussions by RL professionals and leading academics will focus on cutting edge reverse logistics practices. Check the schedule available at www.rltshows.com for session topics. The day concludes with roundtable discussions with each of the speakers.

The Wednesday keynote will be presented by Bernie Schaeffer, Corporate Vice President, Global Repair & Reverse Logistics Integrated Supply Chain, Motorola, Inc. More sessions and panels will follow.

Arrive early to have some fun before the conference starts on Monday. Super Bowl Sunday in Las Vegas – no other city generates as much excitement surrounding this all-American spectacle. Entertain your clients with the parties and celebrations at the Planet Hollywood Resort & Casino.

“RLA has done an amazing job in creating a focal point for the Reverse Logistics Industry that simply didn't exist before. The trade show has given us entree to companies that we would probably never have reached, and the VIP program has been a tremendous tool for building relationships with prospects and clients.”
 Shawn Stockman, Business Development, OnePack

The RLA conference kicks off on Monday with a number of activities including RL Workshops, RL Industry Focus Committee meetings and the opening of the Exhibit Hall. For those who like one-on-one time with their clients, join us at the RLA Golf Tournament.

Be sure to visit the Exhibition Hall where ODMs and OEMs will be looking for 3PSPs that can manage Reverse Logistics in the Americas, along with identifying solutions for Europe and the Far East. There will be many exhibitors showcasing their Reverse Logistics services and solutions. This is a rich opportunity for OEMs and Branded companies to identify future service partners. For more information and complete details, visit www.RLTShows.com.

Tuesday Keynote Address - “Centralization of Reverse Logistics Services”



Joseph Warren, VP and General Manager,

Customer Support Operations, Canon USA, Inc. will deliver the Tuesday Keynote Address.

Joe has more than 40 years of combined experience in manufacturing, logistics, and customer service. Joe is currently responsible for Canon's nationwide customer service and support network as well as the reverse logistics system and recovery processes associated with Canon's consumer product returns.

Wednesday Keynote Address - “Reverse Logistics as an Asset”

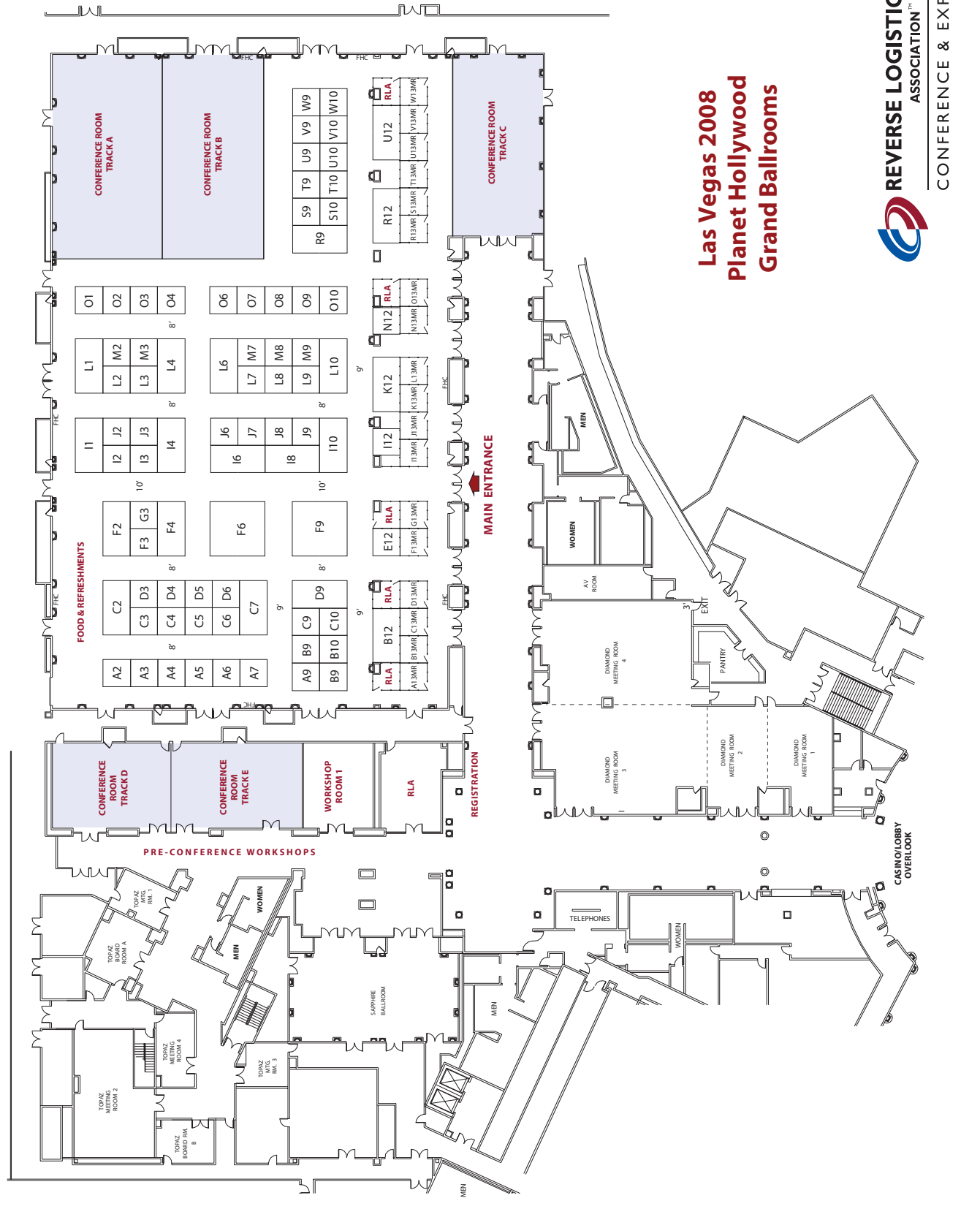


Bernie Schaeffer, Corporate Vice President, Global

Repair & Reverse Logistics Integrated Supply Chain, Motorola, Inc. will deliver the Wednesday Keynote Address.

Bernie's position encompasses the global operations associated with procurement, new product introduction, manufacturing, customer fulfillment and repair. He is responsible for repair and reverse logistics operations across all Motorola businesses worldwide.

Expo Floorplan



Las Vegas 2008
 Planet Hollywood
 Grand Ballrooms



REVERSE LOGISTICS ASSOCIATION CONFERENCE & EXPO

SUNDAY - FEBRUARY 3, 2008				
3:00PM-7:00PM	RLA FOOTBALL PARTY			
MONDAY - FEBRUARY 4, 2008				
8:00AM-1:00PM	RLA ANNUAL GOLF TOURNAMENT (Sponsorships Available)			
8:00AM-5:00PM	Workshops			
1:00PM	EXHIBIT HALL OPENS			
1:00PM-2:00PM	RLA Focus Committees - Open Discussions			
	Track A	Track B	Track C	
	Wireless Communications Focus Committee Discussion	Data Storage Focus Committee Discussion	Information Technology Solutions Focus Committee Discussion	
2:00PM-3:00PM	Retail Consumer Products Committee Discussion Spare Parts Management Committee Discussion	Standards Focus Committee Discussion Medical/Pharmaceutical Industry Committee Discussion		
6:00-9:00PM	EXHIBITOR, SPONSOR & SPEAKER RECEPTION - EXHIBIT HALL (Sponsorship Available)			
TUESDAY - FEBRUARY 5, 2008				
8:30AM	CONTINENTAL BREAKFAST - EXHIBIT HALL (Sponsorship Available)			
9:30AM	Welcome Address: Industry Overview, Size and Forecast, Gailen Vick - President & CEO, Reverse Logistics Association. Forward AND Reverse Logistics: The Importance of End-to-End Integration, Micky Long, Research Director, Aberdeen Group.			
10:30AM	Industry Keynote Address: Centralization of Reverse Logistics Services, Joe Warren, VP & General Manager, Customer Support Operations, Canon USA			
11:30AM-12:30PM	BUFFET LUNCH - EXHIBIT HALL (Sponsorship Available)			
	Track A	Track B	Track C	Track D
12:30PM	Panel Discussion: Diamonds in the Rough: Maximizing Secondary Market Revenue Opportunities	Pretty Good Practices in Retail Reverse Logistics	Technology Providers and 3PSP Outsourcing	Environmental Supply Chain Planning: Taking the Environment Seriously
1:30PM	Measuring and Driving the Return of Service Parts - Best Practices and Methodologies	Completing the Shipping Circle	Wireless Future Trends	Repeat-Use Packaging For Supply Chain Management and How It Can Reduce Packaging Costs and Landfill Waste
2:30-3:00PM	AFTERNOON BREAK - EXHIBIT HALL (Sponsorship Available)			
3:00PM	Panel Discussion: Online Auctions - Changing The Way We Do Business	Reverse Logistics: Extended Enterprise Perspectives	Environmental Compliance Scene	Maximizing Reverse Logistics and Asset Recovery
4:00PM	Panel Discussion: Reverse Logistics Issues in the Storage Industry	Supply Chain Sustainability - Integration of Forward and Reverse Value Chains	Wireless Carriers, OEMs & 3PSPs - Working Together for Customer Support	Returns Management Maturity Model
5:00-8:00PM	EVENING RECEPTION (Sponsorship Available)			
WEDNESDAY - FEBRUARY 6, 2008				
8:00AM	CONTINENTAL BREAKFAST - EXHIBIT HALL (Sponsorship Available)			
9:00AM	Industry Keynote Address: Reverse Logistics as an Asset Bernie Schaeffer, Corporate Vice President, Global Repair & Reverse Logistics Integrated Supply Chain, Motorola, Inc.			
10:00-10:30AM	INTERMISSION - EXHIBIT HALL			
10:30AM	Panel Discussion: Retail Reverse Logistics Issues	The Challenges of IT Asset Lifecycle Management in Global Companies	Cellular Telephone Reverse Logistics and Repair Market - Market Size, Competition and Forecast	Loss Prevention Strategies and Analysis
11:30AM	Panel Discussion: Reverse Logistics Issues in the Food & Beverage Industry	Managing Complexity Under Duress: A Proactive Global Approach to Product Recall and Replacement	Improving End-to-End Reverse Logistics Operations	How to Build a Business Case for Returns and Reverse Logistics
12:30-1:30PM	BUFFET LUNCH - EXHIBIT HALL (Sponsorship Available)			
1:30PM	Using Reverse Logistics to Enhance Customer Service and Competitive Performance	Cradle to Cradle; Product Re-birth, The True Goal of Recycling	Transportation Management in the Reverse Logistics Model	Cost-effective On-Demand Solution for Merchants: Return Labels to Consumers Through the US Postal Service
2:30PM	Panel Discussion: Retail Consumer Products - Early Defect Detection	Managing Global Asset Recovery Partnerships in an Ever Increasingly Regulated Landscape	Panel Discussion: RL Shared Costs Between Carriers and Manufacturers	Returns and Asset Protection Strategies: New Applications for Retailers and Suppliers
3:30PM	Closing Remarks: Gailen Vick, President & CEO, Reverse Logistics Association			
4:00PM	LUCKY DRAWING for iPods, DVD RW, Portable DVD Players, External Hard Drives, Digital Cameras (must be present during the drawing to win)			

Continued from page 29

cases with multinational companies in amongst others automotive, copier, electronics and aviation. Below we discuss the case of an industrial fridge, which was published in 2003.

Industrial refrigerators are used in slaughter houses, warehouses, hospitals and laboratories. The firm already had done a study in product design for life cycle, in corporation with Tokyo Metro University. Product modularity was optimized for three alternative product designs: Two of them are specifically designed for maintenance and recovery, 'PMPP' is an intermediate design. The Bills of Material consist of modules, components and materials (in decreasing order of hierarchy). The designs are equal in terms of quality and functionality and utilize the same 25 components (see Figure 1) and the same materials. However, because the products have different modular structures, they have different costs and environmental impact functions (measured by energy and mass balances), and have different feasibility for recovery and disposal options at various degrees of disassembly. Figure 2 represents the closed loop supply chain. One can see that it actually implements the C2C concept since reuse on the original supply chain is enabled by product reuse, component and module remanufacturing and material recycling. If this is not wanted for

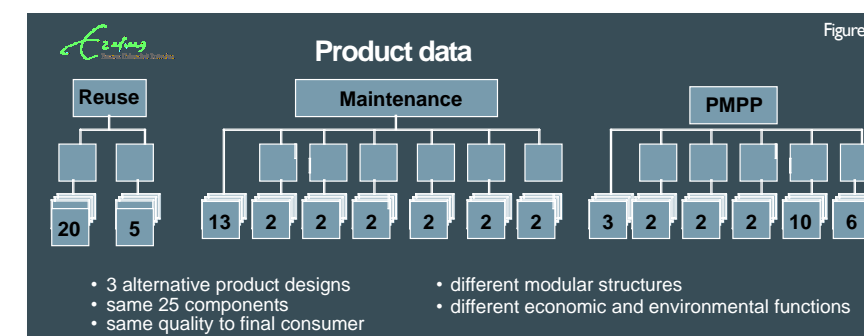
As a follow up to ECO, we are in the process of setting up the REBOUND project. Starting point is that Extended Producer Responsibility in itself is a good concept but its implementation needs to be based on C2C principles.

The project focuses on the optimal closed loop supply chain, with three focal points. (i) optimal use of empty return legs to improve efficiency of international (secondary) goods transportation, (ii) the application of reuse and recycling to save material and energy resources and (iii) determining an optimal global supply chain design, including (out) sourcing and location decisions. All contribute to improving the carbon footprint, but have other spin-offs such as lower cost, good customer responsiveness, better/cleaner job opportunities, increased material reuse and reduction of illegal waste transports.

Project REBOUND is actively seeking OEMs from the EEE industry to participate in this project. Companies interested in the REBOUND project may contact Harold Krikke at krikke@uvt.nl.

some reason there is still the option of energy recovery.

We optimized closed loop supply chain network for each product design within the EU. It should be noted that neither customers nor suppliers were present outside the EU in this case.



Continues on Page 34 ▶



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Continued from page 33

Clearly, the EPR applies to this case by means of the WEEE directive, RoHS was not an issue at the time. Supply chain decisions involve number, capacities and locations for supply chain process facilities combined with allocation of goods flows in the system. Goods flows represent intermediate flows between facilities, inbound supply flows, outbound market deliveries, inbound return flows and outbound disposal/thermal disposal flows. Inbound and outbound flows relate to supply points (i.e., suppliers of raw materials), market locations and disposal/thermal disposal locations. The supply chain network structure has most impact on costs, whereas the product design has most impact on energy and waste. We applied a Mixed Integer Linear

Programming model to support solving this optimization model. A centralized supply chain network by far outperforms a decentralized supply chain network in terms of costs. Product design, using modularity as the main instrument, can reduce opposing behavior of costs, energy use and waste functions. Overall, it appears that intermediate design PMPP is best as it is most flexible. Figure 3 compares results on cost, energy use and waste for all three supply chains, specifically designed for the three product designs and compared with a traditional design (where all is disposed). A suggested management strategy would be a centralized chain network in Eastern Europe combined with the PMPP product design. Figure 3

shows that the application of reuse and recycling not only improves material balance but also energy and hence carbon footprints. Next to optimizing the supply chain design, the impact of recovery targets based on EPR-based EU-legislation was put to the test. They proved to be ambivalent. On the one hand it reduced waste but on the other hand it increases energy use and costs. In other studies, amongst which for Auto Recycling Nederland, a national Dutch automotive recycler, we showed that in achieving eco-effectiveness, optimal recycling is not equal to maximal. In other words, in some cases energy recovery is to be preferred. We also showed in several studies that universal quota (e.g. 70% recycling for brown goods) work out completely differently in

various product categories or even branches and in different geographic areas. The method used in optimizing closed loop supply chains should be standardized rather than the desired outcomes. In global networks, this argument applies even stronger. ^{RLM}



Harold Krikke is the head of the operations research team of CentER Applied

Research of Tilburg University. He and his team develop advanced planning tools for supply chain optimisation and reverse logistics. Clients of CentER Applied Research include large industrial corporations, training institutes and government bodies. Dr. Krikke may be reached at krikke@uvt.nl



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articles

Mutually beneficial?

Replacement parts supply: opportunities for vehicle manufacturers and customers

In Part One of this article (RL Magazine November/December 2007), we explained that European manufacturers of railway vehicles cannot count on their new vehicle business to sustain long term growth in the future. We showed that establishing Vendor Managed Inventory agreements with their customers in the field of spare-parts sourcing may be a feasible strategy to ensure that manufacturers receive a substantial share of the spare-parts business. In this second of a 2-part series we will outline the ways in which vehicle operators can benefit from such a scheme.

by Karsten Platz

VMI cooperation reduces the vehicle operator's capital tie-up costs

To answer this question it should be noted the material prices represent only one component in the overall cost of supplying replacement parts. As another cost pool, there are first of all the capital tie-up costs for the replacement parts held. To calculate these



costs, the value of the average stockholding of replacement parts to ensure the operability of the vehicles in question must first be determined. The capital tied up in these replacement parts is no longer available for other investments. Therefore, the value of the replacement parts held must be evaluated using an imputed rate of interest geared to the minimum return on investment required within the company. It should be noted that these imputed costs are incurred over the entire service life of the vehicles in question. If the vehicle manufacturer takes over the stockage of the replacement parts, the operator no longer needs to finance the required pool of replacement parts. The capital required for this purpose is freed up for other uses. This effect can be felt as soon as a VMI project comes into force if it is agreed that the vehicle manufacturer buys back from the customer the replacement parts which the latter has procured prior to the VMI.

The vehicle manufacturer takes on the material demand planning risk

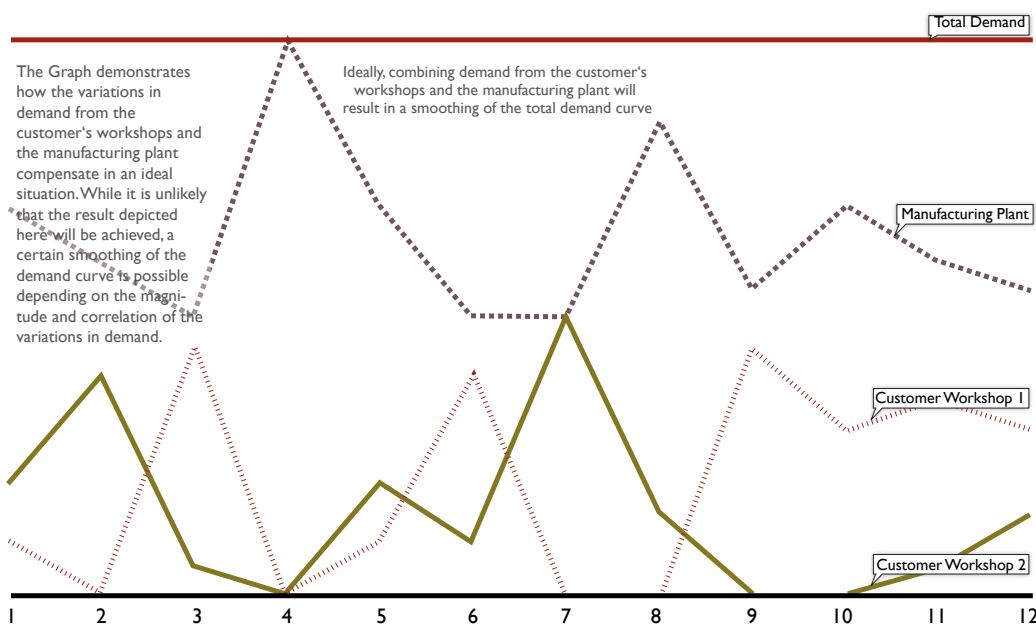
If he is obliged to stock replacement parts, the vehicle operator faces the attendant risk of material demand planning

whereby he attempts to ensure a certain material availability. Whether this is successful depends on the quality of the operator's material planning. If this is less than optimum, the operator faces the problem of material bottlenecks and their consequential costs even if replacement part stocks are high.

In the best case scenario, in the event of bottlenecks at one storage location the operator will be able to circumvent the problem by transferring stock from other locations. However, this entails costs for transportation and materials handling, as well as for the accounting processes involved.

If material transfer is not possible, the bottleneck must be overcome by express orders which are more expensive than regular orders. Further costs accrue in this case due to the disruption of vehicle maintenance associated with the bottleneck. Here it is necessary to consider in particular the reduced workload of the employees who cannot continue working on the vehicle as planned and must be deployed elsewhere. If an express order cannot be fulfilled quickly enough, in some cases the vehicle affected by the bottleneck must be taken down and removed from

Continues ►



Combining demand from the customer's workshops and the manufacturing plant can result in a smoothing of the total demand curve

the maintenance shop because the assembly stand blocked by it is needed for other vehicles. The VMI concept, on the other hand, guarantees the vehicle operator a contractually defined material availability. Within these availability requirements, material bottlenecks remain the manufacturer's responsibility and are subject to the agreed contractual penalties. In turn, the vehicle operator must provide the manufacturer with details of his medium-term planning for vehicle maintenance and overhaul and notify him promptly of any changes. With the aid of the known parts list structure and the operator's medium-term planning, the manufacturer can take a combined planning approach based on past consumption and planned estimates.

Guaranteed availability allows the vehicle operator to predict vehicle maintenance delays caused by supply bottlenecks more precisely, which means that vehicle availability also can be more accurately planned. Under a VMI arrangement, the vehicle operator can therefore reduce

his fleet of standby vehicles by the number of vehicles currently required to compensate for variations in the downtimes due to supply bottlenecks. If a level of availability greater than that already existing is agreed, a further reduction in the standby fleet is possible. This means that vehicles can perhaps be decommissioned or not even ordered at all. For this reason it is advisable to take the material supply concept into account even when ordering new vehicles.

Vehicle operator saves obsolescence costs

As the vehicle operator does not need to manage the replacement parts covered by the cooperation agreement, he is also exempt from the risk of these parts becoming unusable. Conventional shelf life problems are naturally somewhat rare in the case of railroad spares (with the possible exception of rubber seals). Nevertheless, it is possible that parts which, because of the requirements planning difficulties, have been purchased and stored in large quantities, may not be used within the service life of the relevant vehicle. In the best

case scenario, the vehicle operator is able to sell these obsolete stocks at a slight loss or otherwise dispose of them. However, if problem materials are involved, additional costs may even be incurred for their disposal. This cost saving must likewise be taken into account when assessing a VMI project.

Vendor Managed Inventory defers the start of the warranty period and simplifies warranty management

A possible saving that is perhaps less obvious at first sight is the deferred commencement of the warranty period for the replacement parts supplied. The warranty period normally begins with the delivery of a part to the vehicle operator. However, the part now often remains in storage until it is required. When it finally comes to be used, part or all of the warranty period will have pointlessly elapsed. If the part is then found to be defective when installed, the supplier of the part can no longer be held responsible. The operator of the vehicle is therefore faced with additional costs of procuring a new part and

also for disposing of the defective part.

With the VMI concept, the replacement parts remain the property of the vehicle manufacturer until they are used, i.e. the warranty period does not commence until they are actually installed.

In many cases it is only through a VMI model that warranty claims can be exercised, as the storage date of a particular replacement part (identified by its serial number) is only rarely documented. If under these circumstances a replacement part is found to be defective when being installed or fails shortly after installation, it is difficult to know whether a warranty claim in respect of the replacement part is possible or whether the warranty has already run out. With the VMI concept, the storage date of the replacement part is immaterial to the exercise of warranty claims: if a part removed from storage is defective, it is automatically covered by warranty.

The extra charges for the cooperation must be financed by savings

From the rail operator's point of view, the difference between the additional costs arising from the service premium payable to the vehicle manufacturer and the abovementioned savings is critical for the profitability of a VMI project. The premium charged by the manufacturer is therefore the most important point of discussion when negotiating a VMI.

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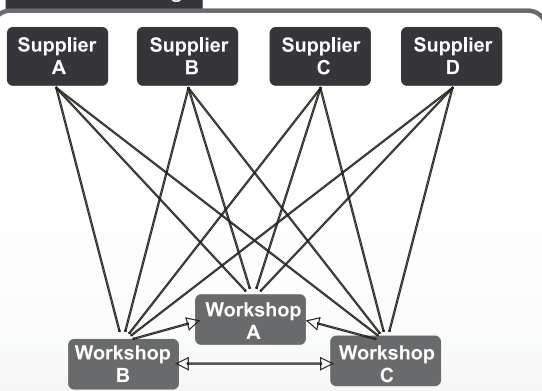
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The size of the premium depends on the guaranteed material availability and on the agreed contractual penalties for noncompliance. Also critically important is the question of which materials must in the customer's opinion be kept continuously available, and in what quantity, at the place of consumption. This factor affects in large measure the vehicle manufacturer's scope for reducing the costs he incurs in providing the material: in the optimum case, the manufacturer is able to store most of the material destined for the customer at a central location, together with the materials for the production of new vehicles and for maintaining

the leasing machines. Only the function-critical materials are then stored at the place of consumption, and in a quantity commensurate with one day's requirement including a small safety margin. This approach, also known as "geographic postponement" enables the manufacturer to combine the material requirements of the place of consumption with his own requirements. In the case of correspondingly low demand correlation, combining the individual demands results in a smoothing of the overall demand, as the variations in the individual demands cancel each other out (see graphic). Consequently, the safety

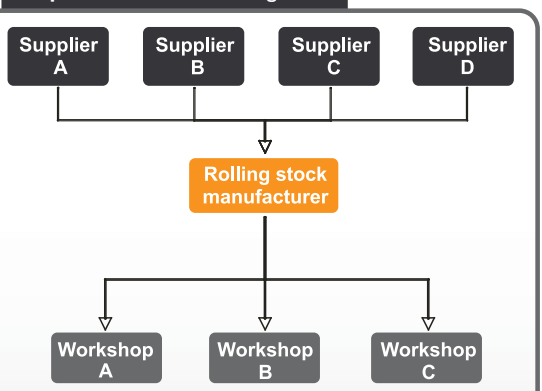
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"Classic" Sourcing



- Decentralized storage at railway-operator's workshops
- Railway operator is responsible for availability of spares
- Workshops are supplied individually by all relevant suppliers
- Cross-transportation between workshops or emergency deliveries from suppliers in case of stock-outs
- Parts are owned by railway-operator

Cooperative Materials Management



- Parts are stored centrally at the manufacturers warehouse
- Manufacturer is responsible for availability of spares
- Stock at workshops covers only short term demand
- Continuous stock replenishment by manufacturer, express deliveries in case of unplanned excess demand
- Suppliers deliver to central warehouse
- Parts are owned by rolling stock manufacturer

Combining demand from the customer's workshops and the manufacturing plant can result in a smoothing of the total demand curve

margin maintained to ensure the desired material availability can be selected lower than the sum of the safety margins necessary for individually safeguarding the demand functions.

A large part of the possible savings relates to the guaranteed material availability. To calculate these savings, it is therefore necessary to calculate simulatively the inventories with which the rail operator would have to work in order to achieve, with his own resources, the material availability guaranteed by the manufacturer. In this context the material availability indicators to be used must also be agreed.

The evaluation of the replacement part inventories to be taken over by the manufacturer at the start of the VMI project generally constitutes another contentious issue.

In addition to the financial topics mentioned, there is also a need for clarification in organizational areas. For example, a physical separation

between the materials managed by the manufacturer and the customer's other replacement parts must be organized. It is necessary to clarify which employees are responsible locally for issuing materials and for booking out materials removed and in which form such consignment stocks are to be shown in the vehicle operator's ERP system (Enterprise Resource Planning). The question of preventing procurement elsewhere of the materials managed by the manufacturer must also be addressed.

It is on resolving the above questions that the success of a cooperation project depends. In the interest of all parties, the VMI premium must be pitched in such a way that the vehicle operator can make reasonable savings, while the vehicle manufacturer generates substantial additional business. Lastly, in concluding a VMI agreement the vehicle operator enters into a certain dependence on the vehicle manufacturer. Due to a lack of own stocks for important

replacement parts, the supplier could massively disrupt the railroad transportation company's operations if he should fail to meet his supply obligations. If the forecast savings on the part of the customer do not allow an adequate margin to be generated for the manufacturer, the project should not be entered into. RLM



Karsten Platz is employed as Manager Business Development at TEQPORT Services GmbH, a Munich based ICT business solution provider. TEQPORT specializes

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Karsten studied business administration at Mannheim and Swansea University and served various internships, predominantly within the rail industry. Prior to joining TEQPORT, Karsten worked as a consultant on various railway-related projects at Barkawi Management Consultants. You can contact Karsten at Karsten.Platz@teqport.com.

Money Talks

Full articles available from: RLA News Center

Xerox Dividend another Milestone for CEO

Xerox Corp.'s announcement Monday that it will reinstate its dividend after a six-year hiatus marks another success for Chief Executive Anne Mulcahy, who reached the copier company's top spot in 2001 when it was reeling under \$17 billion in debt, shrinking market share and an accounting scandal.

Target Logistics, Inc. Announces Completion of Definitive Merger with Mainfreight Limited

Target Logistics, Inc., a domestic and international freight forwarder and logistics provider, recently announced that the definitive

merger agreement announced on September 17, 2007, for Target to be acquired by Mainfreight Limited has been completed. As a result of the merger, Target Logistics, Inc. is now a wholly owned subsidiary of Mainfreight Limited.

Matsushita Results Burdened by Battery Woes

Having bit hit hard by recent instances of global financial turbulence and the fallout from a swath of battery recalls, Matsushita Electric Industrial Co. Ltd., the Japan-based electronics company best known by its Panasonic brand name, today reported lackluster consolidated financial results for its fiscal Q2 and first half of the fiscal 2008 ended September 30.



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Be sure to search the "Publications" section of the RLA web site <http://www.ReverseLogisticsAssociation.org> — there are many white papers, research reports and conference presentations available. If you don't see what you want, let us know.

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Technical Trends

L. B. Underwood



Disruptive Changes Around the Corner?

RL is unique in business. In almost every case RL Service and Repair is at best an afterthought during a new product development cycle or change in market planning. Anyone with much time in this business has been faced with at least once, an immense challenge from new product launches or some other last minute change. In this ultra-competitive marketplace this is an understandable behavior. It comes from the need to protect new products, their features and designs. Nonetheless, surprises are still tough for RL operations to manage. Because this is how it is, I spent at least some time trying to map out the key drivers for the RL market to ensure we are prepared to provide our Clients with the best possible service options. For 2008, I have identified three interesting emerging trends that have the strong potential to drive disruptive change in RL service.

The End of the Bulk Repair Model?

The trend is clearly, Yes—at least for the main user of the model—cell phone carriers. The first signs were from Google's push for the FCC to require Open-Access in the 700 MHz spectrum auctions. Other hints came from Verizon opening up their network to product not specifically approved by Verizon. But mostly, this will be change based on cost. Bulk repair is a very expensive RL model. There are costs for logistics and inventory in addition to the costs of the repair and

refurbishment. Previous thinking was that these costs would just be pushed back onto the OEMs as a warranty charge. However, for the OEMs warranty is a cost that is just loaded into the product price. So ultimately the Wireless Carrier and End Users pay regardless. It is also a process that generates huge amounts of waste from the plastics discarded during refurbishment. This is a large direct cost as well as a growing environmental concern. Plus the warehousing of these parts to support the service channel often creates supply chain issues in manufacturing and shortages in new product for the Carriers to sell. There is also the increasing anxiety over Media/SW Licensing, ID-Theft and Objectionable Content remaining on the phones that are swapped out in the market place. This is a difficult and complex liability problem to solve. However, with same unit repair the majority of these issues just go away.

But the main reason that the bulk RL model will decline is that the usefulness for it has passed. The bulk repair model grew out of the need to ensure End Users had product to generate air time and billing. Having functioning product for what was primarily a business market was the requirement that made bulk repair the solution of choice. That's not the case today. Most/all service plans are flat rate with structures to promote sharing of airtime minutes. The business market is still a major player, but now we have

wireless market segmentation any number of demographics including 'tweens.' With the consumers pushing for more freedom and Wireless Carriers looking for more margin, there will be a growing shift to same unit repair.

Form Factor Compression and the Black Hole of Convergence:

The phrase 'Killer Product' never had so much meaning as the one it carries for cell phones. Consider for a moment what cell phones have affected or outright devoured;

- Pay Phone
- Land Line Phone
- Pager
- 2-Way Radio
- PDA
- Media Player
- Camera
- Web Browser
- Gaming
- Wallet/Banking

Many are now predicating that GPS and navigation systems are next. And what a tasty market this is. Data from big box retailers show two major product offerings with double digit year-on-year growth; DLP/LCD/Plasma TVs and Nav Systems. So will GPS go the way of the pager? Maybe—maybe not. One group of thinking sees cell phones as the black hole that will just eat GPS like any other product it has consumed in the past. There are clearly elements of that school of thought that are valid. Just look at the efforts Nokia

and Garmin are making to enter cross markets as they expand the capabilities of their products. However, there are barriers to this 'black-hole' strategy.

Form Factor. The big resistance to PDAs being digested into cell phones was the general discomfort people felt with holding what looked like a calculator up to their ears. Then the Bluetooth headset and the proliferation of crack-berry addicts made that an acceptable form factor. However, it is unlikely that cell phones will threaten console gaming. The gaming experience is fully integral to the form factor of the console (at least for now). There is a similar gap with set top boxes and cable receivers. Cell phones already have TV and are delivering content for 'info-tainment snacking.' But it is doubtful that these types of fixed TV installations for homes will be integrated into the cell phone product.

Then there is the case for GPS. Clearly the plurality of the next-gen cell phones will be GPS enabled. But will that kill off the GPS navigation market? It may kill a segment. But the core of navigation has way too much traction to die, but it will change scope. The way it will survive is to become "integrated navigation." In effect resurrecting what many declared a dead product segment—telematics. A current product example gives us insight as to how this segment stays separate from cell phone convergence.

A major automotive manufacturer has in their auto lineup a car with a fully integrated Nav/Braking/Radio/Cruise Control system. The Nav system uses LIDAR (or Radar for some OEMs) to help the other systems make highway travel easier and safer. In one mode you can set the distance to follow a car in front. The system will then monitor traffic data on the broadcast band sub-carrier and control throttle and braking

to maintain the distance with margins built in for road/traffic conditions gathered from the Nav system. In one mode if you brake manually to avoid the car in front, the system will monitor the cars behind you and modulate the braking in a way that ensures you are not hit from the front or rear. There are already plans in place to have these systems use road traffic data to not just raise comfort or safety but to improve fuel mileage and reduce emissions. So no, GPS/Nav will not be completely taken over by the mobile form factor but to survive it will become integrated in ways that produce whole new classes of products and service models.

Open Source Hardware:

There was a press report from a major US wireless carrier regarding the openness of their wireless networks; when asked about their intent in allowing more 'open-access' to their network, the representative stated that even 'basement built' phones would be allowed on their network. No doubt that there was a great deal of tongue-in-cheek in that statement. The reality however is that there is a growing trend

loosely described as proponents of open-source hardware or "Makers." These folks are a very fast growing demographic that are altering and driving significant change in products and the entire service market place. One of the best examples of this, are the various wireless routers intended for home networks. Any number of these routers have a huge range of open source firmware (usually on Linux) ported to them to increase the control and functionality the owner has over the device's function. Some manufactures have recognized this and now have produced routers with optimized memory and ports to allow easy

The phrase "Killer Product" never had so much meaning as the one it carries for cell phones.

modification. Some have even released source code for their devices to aid the open source development community. The result is that product has much longer presence in the marketplace as an independent user community works to advance and update the product free of charge.

OK, you say that's great for WiFi but things like this do not go on with cellular networks and products—right? Not true. There are several major efforts at developing



hardware and software for open source cell phones. The most recent example is Google's Android SDK. A project that even has millions of dollars in prize money for the best developer of phone functionality using Android. Google is not alone. All the other OEMs have similar SDKs that are usually freely available to help drive application development. I have even dabbled in this myself. My daughter uses an electric wheelchair and this year she went off to college. Her mom and I were concerned that she may get her chair stuck or have some type of trouble and not be able to get to her cell phone. So as any dad would, I built a telematics system for her wheelchair. What you see below is the main board as I was finishing the final testing and the device as mounted on her chair.



I took a standard GSM phone, got a pre-paid SIM and connected a micro-controller and two wireless remotes. One on her chair and one she keeps in her purse. If there is a problem she can push the buttons on the remotes and the device will call a local health care provider, then my mobile and then

our home, or with another sequence of button presses it will call campus police. When anyone is reached, the unit acts like a standard speakerphone. The joy for me is that it's always on and I never have to worry. With a lot of the documentation that was already on the web it was assembled over a weekend including the time for coding and de-bugging. So in a very short time, at home I was able to develop and deploy a one of a kind wireless product that exactly fit my needs.

Summary:

The value of this kind of strategic thinking is not just in the planning, but in the competence it brings to your organization. In addition, as you work with your Clients, it's knowledge like this that brings the relationship closer and you

become a true solution partner. From this outline consider some possible actions:

- Greater end user repair can require significant changes to shop floor control systems
 - Customer master configuration.
 - You may need a small call center for out of warranty estimate units.
 - The accounting team will need to research tax law and nexus issues.
 - The reduction in materials cost could dramatically improve your ROIC.
- Ensure you are prepared for the logistics requirements for differing form factors.
 - Some industries like transportation are tough to penetrate, build relationships now.
 - Work to identify key form factors of products and build logistics solutions that solve Client's needs.
 - Gauge and anticipate a Client's position in the market and build solutions to solve not just today's problems but the ones coming up.
- For Clients that promote differing product configurations and mass customization;
 - Develop IT strategies that collect the needed information to support the Client's needs.
 - Be aware of ways to automate testing and management processes to support handling complex product configurations.

All of this is just part of providing good service and enabling success. Change is always coming, are you ready? RLM



L. Bryant Underwood is Director, North Americas Service at Foxconn Technology Group. Bryant's past positions include GM, Director and VP level assignments in support of Operations, CRM, Materials and IT.

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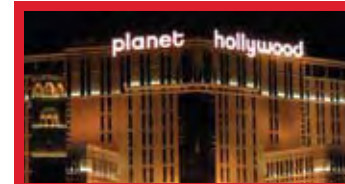
Industry Events

The Reverse Logistics Association staff takes advantage of every opportunity to evangelize the reverse logistics message, thus raising awareness of the process and increasing visibility for our association and its members.

If you would like to have RLA present at an event or if you have an event you would like to publicize in RL Magazine, please send an email to editor@RLmagazine.com.



Upcoming Events



RLA Conference & Expo Las Vegas
Planet Hollywood
February 4, 2008
Conference & Expo: February 5-6, 2008
www.rltshows.com/vegas.php

RFID Smart Labels USA 2008 - Boston
February 20-21, 2008
rfid.idtechex.com/rfidusa08/en/

Warranty Chain Management Conference - San Diego, CA
March 4-6, 2008
www.algassociates.com/wcm/

RL Seminar - Hong Kong
April 16, 2008
www.rltshows.com/hkg08_event.php

WERC Annual Conference - Chicago
May 4-7, 2008
www.werc.org

RLA Seminar - Chicago
May 7, 2008
www.rltshows.com/chi08_event.php

Green West - Los Angeles
May 20-22, 2008
www.greenwestexpo.com

Investment Recovery Association Spring '08 Seminar & Tradeshow - Houston, TX
May 19-21
www.invrecovery.org/conftrade.html

RLA Conference & Expo Amsterdam
Dorint Hotel Amsterdam Airport
Workshops: June 16, 2008
Conference & Expo: June 17-18, 2008
www.rltshows.com/amsterdam.php

Plastics Recycling Conference & Trade Show - Chicago
June 22-24, 2008
plasticsrecyclingconference.com

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Reverse Logistics Magazine • January/February 2008 43

RL Job Center



If you are a job seeker or a hiring manager looking to staff positions with a Reverse Logistics focus, the Reverse Logistics Association Job Center is the place for you. Posting positions on the site is a member* benefit. Let us help you find the staff you seek - posting is quick and easy. Position posting is generally approved and posted within 24 business hours. Check out the positions currently posted at the RLA Job Center. For more information, contact RLA at info@RLTinc.com.

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Reverse Logistics Financial Model

by John Mehrmann

It has been said that a boat is a hole in the water in which to pour money. The same may be said of some Reverse Logistics financial models. Failure to track the true costs and chart a safe course may result in titanic losses. Far too often the most reported metrics only reflect the tip of the iceberg. It is only by looking below the surface, planning for changes in currents beyond the horizon, and planning a blue ocean strategy, that executives can chart a safe course. Let's take a look below deck on the HMS Reverse Logistics.

In measuring the cost effectiveness of processing returns, it is common practice to compare the cost of refurbishment in contrast to the potential resale value of the product. This is not only common practice, but it is also common sense. However, measuring the cost of returns and refurbishment is anything but common. The methods of measurement are as unique as they are diverse, and the contributing factors are as complex as the intricate links in the supply chain.

To measure the full impact of returns, it is necessary to begin with an understanding of the real value of the product. From the very beginning of the financial model, it is important to recognize that

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product value can be measured as a single unit, and also as a sum of the individual parts. Typically, the rate of price erosion for a whole unit is at a much more rapid pace than the depreciation of the parts. This is especially true when mass manufacturing is complete, and as customer service drives demand for replacement spare parts. A complete complex financial model tracks trends and adjusts refurbishment, repair, and parts harvesting accordingly with the passage of time.

All product and all sales channels are not created equal.

All product and all sales channels are not created equal. When measuring the overall financial impact of returns, it is important to recognize that some sales channels or specific partners have significantly lower rates of returns than the average. Some sales partners have programs to discourage returns, or remarketing solutions that significantly reduce the quantity and expense of returns. Sales to enterprise customers and business-to-business (B2B) typically have very different results than business-to-consumer (B2C) and end-user retail channel returns. Marketing discretionary funds to support sales efforts may also be significantly different for each channel or partner. Manufacturers should track and compare these costs, just as retail and sales channel partners should track the return ratio by product. Of course, there are sales strategies, relationships, and profits to protect when making overall

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business decisions. The first step in avoiding non-value-added cost is to recognize it.

The next step in the financial model is to measure the cost of returns and refurbishment. Many years ago, it was sufficient to compare vendors based exclusively on labor rates. As we have become more sophisticated in analyzing the supply chain, we realize that labor is only the tip of the iceberg. Typically 1/8 of an iceberg is visible, and 7/8 is submerged

below the surface. While it is very easy to see that portion on the surface, it is the

bigger mass that lies beneath the waterline that could sink the ship. What contributing factors impact labor? Location – location – location, labor rate is often a result of the geographic location. The cost of labor may vary dramatically from one region to another. While this may be very appealing on the surface, it is necessary to investigate the rest of the iceberg. Take time to investigate the historical trend of quality as it relates to the lower cost of manpower. Does the transfer to another geographic region also require an investment in freight and fuel surcharges? Far too often the proposed benefits of lower labor rates in other regions are consumed with the burden of freight, import or export, duties, and taxes. To add insult to injury, crossing borders may also result in delays for customs, paperwork, or even different holidays and work schedules. Be prepared to measure

Continues ▶

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It is only by looking below the surface, planning for changes in currents beyond the horizon, and planning a blue ocean strategy, that executives can chart a safe course.

and document all of these hidden costs when developing a financial model.

But wait, there's more—if you are planning to process returns and refurbishment in another geographic region, consider the impact of accumulating product and the freight method. Accumulating and consolidating product can reduce freight carrier expense, but the product is also depreciating while it waits on dock. Cargo and rail options may be less costly than truck and air, but once again there is rapid erosion of the product resale value while it remains in a transport container. There is no single right or wrong answer to this dilemma, the proper answer is to diligently investigate your own costs and act accordingly.

It is also important to consider changes in the regional economic conditions, and the potential for dramatic changes. Labor rates in a geographic region may be desirable at the time of negotiation, but what happens if the currency exchange rate changes, or cost of living increase? It may have seemed inconsequential several years ago, but competition for employment in a region, median income levels, and the currency exchange rate, have all impacted business decisions and strategies. These are important factors to monitor and evaluate regularly.

Moving beyond the focus on labor, a growing concern that no longer lurks beneath the surface is the cost of freight. There is a potential for many legs of freight

Every time that someone handles the product, it adds cost to the entire chain, and that cost is put back into future product. Every time that someone handles the product, it is risk for damage and it is a delay to complete the return to resale.

in the complete reverse logistics cycle. Each leg of freight also has an inherent risk of the dynamic application of fuel surcharges. The amazing and adjustable fuel surcharges are typically overlooked in budget planning processes, much to the dismay of executives who must find a place to absorb the expense later on.

The question remains, “who pays the freight?” At first, you might be tempted to respond with the simple answer of freight related to a product return. However, if the product is accumulated and shipped to another location for refurbishment, then that is another leg of freight and possible fuel surcharge. If the product must be forwarded to a location for distribution after completion of refurbishment, then that is yet another cost of freight. If spare parts or accessories need to be moved from a separate inventory position, this introduces even more risk for freight related expense. To avoid potential for wasted freight costs, all units should be received, processed, refurbished, and shipped, all from under one roof. Parts and accessories should be in

the same facility as the product. Any unnecessary movement of parts or product is an exposure to non-value added cost.

Is there a warranty on the product or on key components? Are you leveraging the warranty that you paid for? Can you get credit? These are also critical questions that can impact the financial model. When calculating the value of returning product or parts for credit or warranty work, it is important to minimize freight and maximize the warranty coverage. If there is only a small percentage that is actually covered as a result of defect in material or workmanship, then it may be more expensive to implement process delays and freight to take advantage of the warranty. As with all of these examples, identify the frequency and the severity of the costs to make good business decisions.

How many times is the product being touched along the way? Every time that someone handles the product, it adds cost to the entire chain, and that cost is put back into future product. Every time that someone handles the product, it is risk for damage and it is a delay to complete the return to resale. Collaboration and honest discussions are necessary between retail, sales channel partners, manufacturers, and vendors. Steps in the process must be measured, assigned cost and time metrics, evaluated, consolidated, or removed. Boxes should be opened one time only. Product should be inspected, tested, and processed one time only. Every extra step

in the supply chain places you one step behind your competition in time and costs. Remove unnecessary steps and handling. You can build a reverse logistics model that is better, faster, and stronger. Make a determination immediately as product enters this reverse pipeline, “how much time and expense to process it. What will it sell for when it is done?” Is the resale value of the product still more than the value of the sum of the parts? Can you use the product to exchange for a customer? Can you harvest parts to satisfy customer demands elsewhere? Does the resale value of the product exceed the purchase price of the sum of the spare parts? When considering this option, it is very important to understand the

language of the original limited warranty, and the classification of the product. Refurbished parts can not be used to repair New Class A grade product. Use of refurbished parts to repair used or B Class products must be explicitly cited in the limited warranty terms and conditions. This article is not intended to provide legal advice, just a friendly reminder that you should seek legal advice before embarking on this cost saving course.

Do you really have duplicate inventory? Are you holding spare parts to support field service and also holding parts for refurbishing activities? Do you have more than one inventory of spare parts? Can whole units be used for parts harvesting? Are you tracking the

value of the parts recovered in comparison to the value of the product that is disposed? Are you doing all of this under one roof, or are you also paying for shipping charges to get your parts to and from the units for refurbishment or

Do you really have duplicate inventory? Are you holding spare parts to support field service and also holding parts for refurbishing activities?

repair? Freight on moving parts is a common hidden cost, but it is a cost nonetheless.

Continues ▶

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There are other forgotten costs to manage reverse logistics.

As you evaluate your expenses for refurbishment and repair of return products, consider the recovery or replacement costs of accessories, boxes, manuals, cables, etc. These costs may be minimal in comparison to the potential value of the product, but there are many pennies to be saved by careful management of these seemingly small costs. Every penny saved is a penny earned.

Are the resale value and volume as robust as the refurbishment? Warehouse and storage costs apply for the space to receive, process, and warehouse, the product.

and sometimes the real cost for warehouse management or storage is buried inside an aggregate rate. Regardless if the cost is clearly itemized or buried in a total rate, the cost is passed on from vendor to client, and eventually back through the entire supply chain to future products. By working together, all parties can identify true cost, eliminate the handling, and reduce the rent on slow moving processes or products. It is all about velocity.

A new and rapidly growing area of cost consciousness is recycling and

Sometimes this cost is a clearly defined line item on the vendor invoice,

e-waste disposal. The industry will either drive change or be driven by it when it comes to restrictions, regulations, fines, and compliance. Regions that have adopted compliance and regulations have also introduced a small variety of new charges, and in some cases new revenue, associated with recycling and e-waste management. Costs or revenue streams must be accurately documented and archived for cost analysis and for applicable compliance. There is enormous opportunity to work together for cost effective tracking of part and product compliance in cost effective managements systems, and it begins with each organization recognizing both responsibility and expense. There are other forgotten costs to

manage reverse logistics. How many people in your organization are required to manage this process? How many to administer the credits, logistics, accounting, and IT? Are you systematically tracking your inventory, receipts, shipments, and your true costs as they occur? Can you rapidly identify anomalies before they get out of control? It may be that only a portion of the time is devoted to these activities, or it could be many full time personnel. When looking for ways to reduce costs and eliminate steps in the process, be careful not to achieve this goal by accidentally transferring the burden to internal personnel as an accidental byproduct of an otherwise excellent strategy.

Time is money. Determine the fiscal value of depreciation as it applies to product and parts. Identify the rate of price erosion, the cost to procure replacement parts in comparison to back-orders and refund checks, and delays in the process due to extra handling steps. Identify the monetary value of depreciation as assigned to each day, and then measure the total time from RMA request to resale, recycle, parts harvest, or rent and disposal. This will illuminate the dark corners where hidden costs lurk in shadows and prey on your profits.

Take some time to build your financial model. Look for best practices and identify hidden costs by collaborating with partners and peers. The result is continuous contribution to the profitability of your organization, avoiding disastrous decisions with hidden costs, and charting a clear course

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for success. To get this exposure and interaction with partners and peers, you need look no further than the Reverse Logistics Conference and Expo at Planet Hollywood Resort and Casino, in Las Vegas, Nevada. Similar events are in Amsterdam in June and Singapore in October. These events provide an opportunity to meet, collaborate, and learn from peers in a friendly and non-competitive environment. We look forward to seeing you there. RLM



About the Author: John Mehrmann has more than 20 years of management experience that spans logistics, operations, e-commerce, finance, customer relations, marketing, training and consulting. John has served the business community as Regional Sales Director at Data Exchange Corp. and Director of Service Operations for Toshiba. John is co-author of The Trusted Advocate, a powerful and refreshing new book on relationship sales, it is full of entertaining and hard-hitting perspectives to accelerate sales with authenticity and integrity.

Technology Spotlight

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Zebra Technologies to Offer Direct Communication Capabilities between Thermal Printers and Oracle(R) XML Publisher

Zebra Technologies Corporation, a global leader in specialty printing and automatic identification solutions, today announced that its line of Zebra ZPL-based thermal printers communicate directly and seamlessly with Oracle® XML Publisher. Now, Zebra ZPL-based printers—the first in the industry with this capability—can receive and process XML output from any Oracle application more quickly to eliminate printing delays, save customers valuable time and money, and improve operational efficiencies.

Savi Technology Taps Solar Energy to Power RFID Asset Tracking Systems

As many companies are now investigating “green” practices for their supply chains, Savi Technology, a Lockheed Martin company, has recently begun deploying solar-powered radio frequency identification (RFID) readers and signposts, enabling customers in the defense and commercial sectors to conserve energy and reduce costs while tracking supplies in real-time.

Cyber Spying Set to Explode

Organized criminal activity will continue to be a big risk on the Internet next year, but the growing rumors of cyber espionage and cyber warfare could metastasize, suggests security firm McAfee.

Reverse Logistics Magazine • January/February 2008 49

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Recalls—When the Worst Happens

by Hannah Kain

Managing risk when quality control procedures fail and can be a nightmare, especially when there is no recall contingency plan in place. Forethought and a streamlined customer interaction plan are essential to minimize both short- and long-term damage that results from recalls.

The mere word “recall” can send a shudder all the way through a company, from receptionist to the executive team, to the boardroom and shareholders. Recalls are costly and risky and can threaten the existence of a company.

How a company reacts to a recall can determine whether the company gets through the incident fairly unscathed—or even not at all. It is all about minimizing corporate exposure and maintaining customer satisfaction.

Prevention and Preparedness

As with any such incident, prevention and preparedness are key elements. While this is scant consolation to the companies subjected to a recall, this article would not be complete without mentioning these two aspects.

Prevention is, of course, related to quality control, failure analysis and supply chain management. Strict

control from the design stages of a product to delivery would have prevented most recalls. Product recalls are frequently caused by the product being designed without proper consideration for the use and the dangers it may pose. In a rush to market, the product is not properly tested or evaluated. However, as is commonly seen today, a recall can be caused by even one small failure in the supply chain.

As supply chains become increasingly complex, the risk of failure goes up exponentially. Raw materials from subcontractors to a subcontractor to a subcontractor can be consolidated in one part of the world, used in another part of the world for a subcomponent, then stored and shipped to a third continent before being used in the final product—eliminating the likelihood that the buyer of the final component has a chance to review the supply chain risks. A risk assessment of the supply chain is a major aspect of recall prevention.

But even if recalls cannot be prevented, being prepared with a contingency plan is absolutely crucial (for a free contingency plan template, please contact ALOM or see other sources at the end of this article). The contingency plan includes: vendors; legal advisors; compliance team members; a

PR agency; call centers; the web design team; the executive team; and information and authority levels to guide the recall team to move ahead in a fast, controlled manner.

However, most companies simply are doing business without a recall contingency plan in place.

Forced or Voluntary Recalls

Recalls can be initiated and implemented by authorities as a forced recall or by a company as a proactive step to prevent authorities from issuing a forced recall or just to ensure that customers have a working, safe product. Authorities that can force a recall in the U.S. include the Consumer Products Safety Commission (CPSC), the FDA, the National Highway Traffic Safety Administration, the U.S. Environmental Safety Protection Agency, the USDA Food Safety and Inspection Service and the United States Coast Guard. The forced recalls mainly take place when the hazards are both serious and fairly likely to happen. Several agencies have a Fast Track program for companies that issue a voluntary recall, cutting down on the required paperwork. The Fast Track programs typically allow a company to complete the recall in an easier, less bureaucratic manner. The CPSC, Office of Compliance, has issued an excellent booklet about recalls.

Recall Impact and Cost

The impact and cost of a recall can be broken into several groups:

- Cost of customer dissatisfaction/avoidance
- Long-term impact on brand



- Operational cost of recall
- Potential litigation cost

The following will outline these impacts/costs as well as how the cost can be contained.

Cost of Customer Dissatisfaction/Avoidance

For most companies, customer satisfaction and customer retention are key to running a profitable business. Any situation where the customer believes they received and paid for a substandard product represents a significant threat to customer satisfaction. The key - that many executives do not realize - is the perceived injustice by the customer. The product may be functionally sound, but if it is perceived to have a significant flaw, it can certainly impact the satisfaction or experience. In addition, during a recall a company typically asks a customer to respond with their own time when getting the product fixed. This can be as simple as returning the product for a new replacement or having the customer re-install a component. The replacement product may furthermore be cumbersome to reinstall, as is typically the case with technology products. Several steps can be taken to improve the customer

experience and lessen the impact of a recall:

React fast

As customers hear about the recall, they get concerned and frustrated about what to do with their potentially unsafe product. Reaction speed is critical.

Make it easy for your customers

Make the return or the replacement easy. This includes both the logistics part and the reporting part. This is not a good time to question the honesty or to test the relationship with the customers. Avoid anything that could further enrage the customer. Prevent: long holds on toll-free-numbers; confusing information on your website; poor customer interface for online reporting or troubleshooting; cumbersome

forms to fill out; and putting the burden of proof on the customer.

Instead, review what a great customer experience would entail. For instance, companies can consider sending customers a replacement unit before receiving the original product back instead of waiting to receive the customer's unit prior to shipping a replacement unit. This tactic allows the company to include the return packaging and prepaid label with the replacement unit, making them return very convenient and free for the customer.

Make sure that it is done right

A recall is not a good time to make errors since the customer relationship is already fragile. The order must ship right, work correctly and arrive in perfect condition. Any refund must be

Continues ▶



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The product may be functionally sound, but if it is perceived to have a significant flaw, it can certainly impact the satisfaction or experience.

prompt and correct. Impeccable quality of customer interaction becomes a must. This is especially hard for companies where customer interaction is usually not prompt, not very efficient or generally not of high quality. Internal staff is not trained to provide the high quality interaction needed, and the vendors used are mostly selected for cheaper price. Now is not the time to cut corners with a cheaper, inexperienced vendor.

Understand emotions

Customers feel that the contract has been broken. They paid for a good product, and they either received a bad product, a potentially defective product or - worst case - a dangerous product that may even be life-threatening. This is not - obviously - a normal business transaction. It is a transaction

where the recalling company has broken trust, and the company must work hard to reestablish the trust. This attitude must permeate everyone who is involved in the recall.

Next issue: Recalls—When the Worst Happens, Part II by Hannah Kain will cover operational responses, communication strategies, long-term brand impact, and the costs associated with various recall options.

Other sources:

CSCP - Consumer Products Safety Commission (www.spsc.gov)
 FDA - Food and Drug Administration (www.fda.gov), for policies, see vm.cfsan.fda.gov/~lrd/recall2.html
 Reverse Logistics Association (www.reverselogisticstrends.com/index.php)
 Center for Business Intelligence, Recall Conference (www.cbinet.com/conferences.cfm)

American Society for Quality Control, The Product Safety and Liability Prevention Technical Committee (PS&LPTC), (www.asq.org) has published a book www.asq.org/qic/display-item/index.html?item=10181 RLM



Hannah Kain is President and CEO of ALOM, a leading package assembly and fulfillment company headquartered in Fremont, California. Kain, who founded

ALOM in 1997, has extensive experience in the packaging industry. She has three university degrees and has won numerous awards, including ABWA, NAWBO and Women's Fund, and has been featured in books and articles, including "CEO Chronicles" and "Women Who Paved the Way."

Catastrophic Failure and Recalls

RL Quote provides OEMs, ODMs and Retailers a way to connect with 3PSPs. With RL Quote, a manufacturer or retailer can send out RFIs anonymously to our worldwide database of companies that specialize in recalls, screen through the responses and narrow down the prospects.

Product Liability and Recalls

Product liability and recalls create a challenge of crisis management, if not handled properly, the effects can be catastrophic. Public safety is at stake. Corporate reputation and corporate responsibility are at stake. Product liability and recalls can lead directly to massive litigation, from both consumers and the government.

Missteps and poor communication can have a catastrophic impact on the brand, stock price, and reputation. Choosing the ideal 3PSPs for best practices in handling product liability and recalls, can seem to be a near impossible task given the short time allowed by government regulations. The RL Quote program can help find 3PSPs fast. For more information please visit www.rlquote.com



Read the Press

Full articles available from: RLA News Center

Target Tests Electronics 'Recycling' Program

Way down at the bottom of the electronics section on Target.com is something you'd miss if you weren't looking for it: a tab called "Pre-owned Electronics." The retailer has been testing out selling some gadgets on its Web site only that have been returned to stores for the past month, but the company finally called attention to the experiment during its quarterly earnings call Tuesday, as Reuters reported.

Costco Will Buy Your Electronics

Bulk retailer Costco has partnered with Greensight to take unwanted electronics off your hands. Seeing the need for proper disposal of obsolete or unwanted products has driven the two companies to collect goods and resell or disassemble them for recycling. They'll even pay for shipping.

DEX Receives ISO 14001 Certification

DEX (Data Exchange Corporation), a leading supply chain solutions provider for high-tech industries, announced today that its Dublin, Ireland facility, supporting Europe, the Middle East and Africa (EMEA) has received ISO 14001 certification. The ISO 14001 standards specify an environmental management system (EMS) and include requirements for establishing an environmental policy.

FreeFlow Expands Channel Strategy for Excess Inventory With Andlor Partnership

FreeFlow, a recognized global leader in inventory asset management services, today announced a strategic channel partnership with Andlor, a provider of reverse logistics software for manufacturers, distributors and third party logistics providers. The partnership pairs FreeFlow's award-winning solution for dispositioning returned, excess and obsolete inventory with Andlor's... growing roster of customers that depend on its technology to manage the end-to-end process for returned products in the reverse logistics pipeline.

Cisco Keen to be Seen as Green in China

The three- to five-year plan is "in alignment with [China's] long-term economic, societal and environmental goals," according to a statement from Cisco. The company began investing in China in 1994 and already employs more than 2,300 staff there, in divisions ranging from sales to research and development and manufacturing.

IBM Recycles Silicon Wafers for Solar Cell Use

To repurpose scrap semiconductor wafers for use in silicon-based solar panel manufacturing, IBM Corp. today detailed a reclamation process that was developed at its Burlington, Vermont manufacturing facility which uses a specialized pattern removal technique.

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OnProcess

Gailen Vick, President of the Reverse Logistics Association, recently met with OnProcess executives at their headquarters in Ashland, Massachusetts, outside of Boston. OnProcess CEO and founder Ed Barry; William Kenney, Executive Vice President, Business Development; and Dan Gettens, Vice President, Managed Services provided the history of OnProcess and shared some of its expansion plans, including the opening of a second OnProcess office in Fall River, Massachusetts.

Philips, Comcast and DIRECTV with a variety of reverse logistics needs.

Since its first day, OnProcess has pioneered the development of outsourced reverse logistics programs using advanced methods and technologies that are customized to meet the specific performance goals of its clients. Using its proprietary asset retrieval system, RL360SM, OnProcess Technology helps companies reduce service inventory

and increase the velocity of inventory returns while building customer satisfaction and retention. OnProcess Technology has specialized program expertise in Advanced Exchange Inventory Recovery, Sales Demo and Evaluation Inventory Management, End of Life Cycle Inventory Recovery, Product Upgrades and Trade In Management, Product Recalls and Logistics.

The idea for OnProcess originated in 1998 when the company accepted the challenge of building a more efficient reverse logistics management system for a Fortune 500 client. Today, OnProcess Technology conducts business in six languages for multi-nationals in the Americas, Europe and Asia. Directed by an experienced management team, OnProcess helps clients in the telecommunications, business and consumer electronics, wireless services, medical products, and cable / entertainment industries, among others, including clients such as Dell, HP, AT&T, Cisco, Juniper Networks, T-Mobile, AT&T, NetApp,



Gailen stated, "OnProcess should be credited for proactively anticipating client needs with a unique, practical approach to managing the customer experience."

Gailen also previewed OnProcess' latest offering, CE360SM, which provides clients with proactive management of the entire life cycle of the customer experience. Gailen stated, "OnProcess should be credited for proactively anticipating client needs with a unique, practical approach to managing the customer experience." Clients can use CE360SM to increase their customers' awareness and understanding of current product solutions and to inform eligible customers about product and service upgrades. CE360SM helps clients create a more positive customer experience and strengthen loyalty to their brand.

Both RL360SM and CE360SM enable clients to:

- Gain visibility into the customer experience
- Positively manage that customer experience—that is, to take a potentially negative customer experience and turn it into a positive one
- Generate measurable, predictable, sustainable profit improvements

Visit www.onprocess.com for more information on OnProcess Technology, CE360 SM, and RL360SM.

5th Annual RLA Conference & Expo Amsterdam

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Reverse Logistics Association is offering three full days of RL immersion starting with RL Workshops and Focus Committee Discussions followed by two days of sessions and exhibition.

Workshops are offered on Monday, June 16 on a variety of topics including Successful Outsourcing—RFQs, Contracts and SOW and Reverse Logistics Self Assessment and Performance Improvement Toolkit.

The RLA conference kicks off on Tuesday with a Keynote address followed by sessions presented by RL professionals, leading academics and also includes panel discussions.

Session topics include field service, RMA, support and help desk/call centers. A wide range of Reverse Logistics companies will be in attendance from repair/refurbishing to recycling/e-waste and transportation logistics.

Be sure to visit the Exhibition Hall where ODMs and OEMs will be looking for Third Party Service Providers (3PSPs) that can manage Reverse Logistics in Europe, along with identifying solutions for Asia and the Americas. There will be many exhibitors showcasing their Reverse Logistics services and solutions. This is a rich opportunity for OEMs and Branded companies to identify future service partners.

For more information, visit: <http://www.rltshows.com>.

If you are a Reverse Logistics professional – don't miss this event!



Site Visits



Sydcor's new stakeholder-owners are Damien Matherne, Kuykendall Coburn, Darryl Kelinske, Henry Heil and Keith Jacoby

Recently, Jeremy Vick, RLA VP of Worldwide Business Development, visited Sydcor's new Austin headquarters.

Located on the north side of the city, the corporate office handles packaging solutions, supply chain and fulfillment management and after-market services projects. Greeted by CEO, Darryl Kelinske, Jeremy learned that Sydcor manages all of the needs a company may have to service a product once it comes off the production line. Sydcor's operations are strategically divided between an large hub in Fairfield, Ohio and operational facilities in Austin, Nashville and High Point, North Carolina.

Sydcor handled the largest consumer electronics safety recall. Within twenty-one days of being tapped, Sydcor designed a plan, built infrastructure, created a reporting and tracking system and launched the recall. Sydcor implemented four synchronized initiatives:

- Built a 16-language Web site--100 million hits in the first several days

- Established an Austin call center--300,000 calls on opening week
- Ramped-up the Ohio facility--capacity to ship 40,000 batteries daily
- Designed a real-time reporting structure--tracked each shipped and received battery

The next room (see label machines) is dedicated to New Product Introduction Services, which allows clients the flexibility to postpone product launches. Here, modified printers and software handle shifts in daily volume caused by unforeseen manufacturing demands.

Jeremy then visited the Service Parts Management area where a team manages warranty parts programs for its customers' enterprise clients--services include order management, CRM, fulfillment, returns management and reporting.

The best is always last. In recent years, there has been a push to use recycled materials; the lab has everything needed to design and test prototypes by simulating real-world conditions. The ISTA lab can test temperature, compression, vibration

and fall durability. Available for contract testing, the lab works with partner-suppliers to create thermal forming, molded pulp and foam packaging.

Sydcor's ISTA Lab has a complete compliment of testing machines:

- Lansmont PDT-56 Shock Tester simulates the damage from multiple drops
- Lansmont Vibration System creates vibration frequencies common in shipping
- L.A.B. Validator Compression System verifies corrugated stacking strength
- Thermotron SM-35C Atmosphere Conditioning Chamber heats to 180°C or cools to -70°C packages for real-world testing
- Data Technology M3000 creates prototype packaging and labels from CAD drawings
- Computer packaging software includes CAD Score! 6, CAPE Systems and AutoCAD
- Prototype assembly line is the last step in a new pack-out process or new packaging designs



Jeremy Vick made the trip to the Lone Star State to visit with Sydcor



Nimble, on-demand solutions can handle volume swings up to 800,000 labels per day



Using customized systems, Sydcor tracks every part, component or finished good that enters or leaves



Sydcor handled the recall, disposal and replacement of millions of portable computer batteries



With an ISTA-certified lab, Henry Heil, VP of design and engineering, can make prototype packages or perform contract testing

On the Move in Reverse Logistics

Andrew Katcher recently joined **FreeFlow** as VP of Business Development. Prior to joining FreeFlow, he was CEO of Rapid Results, a supply chain management consulting company, specializing in Asia-based forward and reverse logistics solutions. Past experience includes Director of World Wide Returns at 3Com Corporation, division-level controller positions in Israel and Europe and Supply Chain management positions in Japan, Korea, Australia, Singapore and the US.

material handling integrator for warehousing and distribution automation.

Liquidity Services Inc. (LSI) has appointed **Rob Caskey** Vice President of Marketing for its Asset Recovery Division and online auction marketplace, Liquidation.com. He will be responsible for developing marketing strategy to drive increased customer acquisition and retention for Liquidation.com and will work closely with the technology department to develop marketplace features, tools, databases and enhanced reporting mechanisms to increase the usability of the marketplace for professional buyers.

.....
TechTurn, a trusted leader in technology recovery, refurbishing and resale, recently announced that **David Wright** has joined the executive team as VP of Product Sales and E-Commerce. Wright brings to TechTurn extensive leadership experience in the equipment leasing, computer and service industries. Wright will be responsible for expanding and maintaining channel development to optimize and diversify TechTurn's product availability. The Numina Group recently announced the appointment of Ken Carnes as Director of Logistics Automation Services. Ken will focus on the reverse logistics market for The Numina Group, a leading

.....
Lulu.com, the premier online marketplace for digital content on the Internet recently named **Bryce (Skip) Boothby Jr.** as President and COO of Lulu Enterprises. Boothby will oversee all finance, engineering, and business at Lulu.com as well as Gnack, the Lulu Enterprises company that provides support and services for open media businesses. Past positions include Vice President, Services at Celestica International, President and CEO of SalesLink and Vice President, Market Development for Quebecor Printing.



Returning thoughts...

Key Performance Indicators Used by Philips to Manage Reverse Logistics

As reverse logistics evolves within your company, you will want to start developing or improving the Key Performance Indicators (KPIs) used to measure and monitor the performance of your Returns Management and Reverse Logistics. To help develop KPIs, Tony Sciarrotta shared some of his insights and important KPIs he uses as the Director of Returns Management at Philips Consumer Electronics, North America.

Tony brings a great deal of experience and industry expertise to the Reverse Logistics requirements for Philips, its supply chain partners and its returns processing partners. "Gate keeping, Product Data and Asset Recovery are three of the key areas I monitor closely," says Sciarrotta as he outlined some of the KPIs he uses to help manage each of these areas.

Gate Keeping

Philips works closely with its Retail partners to monitor and manage returns. To do this, Philips shares and reviews regular reports with the retailers to outline the data related to recent product returns. These reports help everyone work together in order to reduce returns and become critical in the arrangements that Philips negotiates with its retail partners.

Philips also monitors statistics about the condition of the returning goods upon arrival. "Flat Panel TV's can be very expensive if they are not handled properly in the return process." Working with Retail partners to avoid damage is of major importance.

Discrepancies are also an area monitored closely to ensure that all returning units have been authorized. Recently, Philips has been experiencing very few discrepancies.



Product Data

Philips outsources its Reverse Logistics processing and repair. The Philips team works closely with its Reverse Logistics partners to monitor No Trouble Found, Repair with Parts, Repair without Parts and the Scrap levels. This important data is forwarded to manufacturing and to the product design groups. "Consumer electronics products are becoming more and more complex. If a product is experiencing a high "No Trouble Found" rate, the data is sent to manufacturing to seek product or user experience improvements to reduce the return rate"

Asset Recovery

"We always try to achieve the highest asset recovery rate possible" says Sciarrotta. To monitor this, Philips tracks the Asset Recovery rate. Also tracked are returned goods that are sold "as is" and the returned goods that are sold with a warranty. In addition, Philips tracks the performance of the refurbished products to ensure quality standards are maintained.

Improve Your KPIs

Gate keep to ensure only authorized returns are handled. . Obtain good product data to find out why goods are being returned. Get the highest Asset Recovery rate possible. These are the three key areas and some of the related Reverse Logistics Key Performance Indicators that Tony Sciarrotta uses at Philips to help organize, monitor and manage product returns. Use his insights to get started with improvements to your KPIs.

Good Luck!

Paul Rupnow shares Reverse Logistics best practices, insights and strategies at ReverseLogisticsProfessional.com

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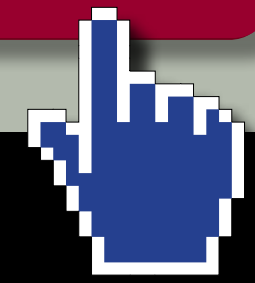
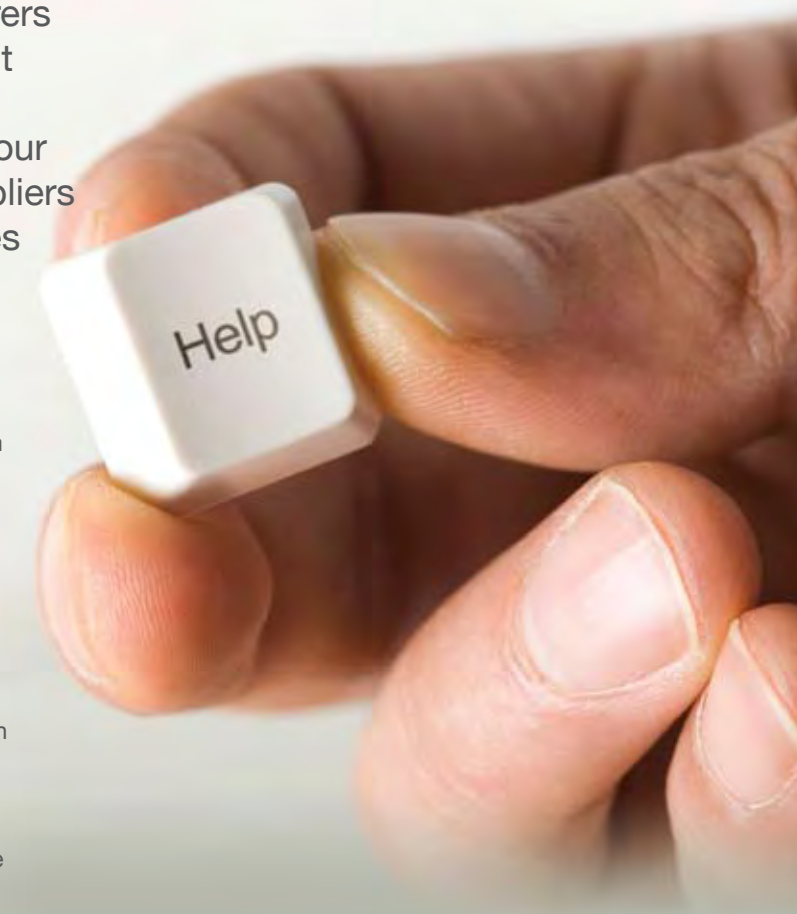
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CompuVest	www.compuvest.com	21
Comtek	www.comtekcomsys.com	43
Craters and Freighters	www.cratersandfreighters.com	2
Cycleon	www.cycleon.eu	37
DEX	www.dex.com	23
Freeflow	www.freeflow.com	20
FRS Europe BV	www.frs-europe.nl	45
Intechra	www.intechra.com	34
Jabil	www.jabil.com	51
Li Tong Group	www.litong.com	39
Marketing Alternatives	www.mktalt.com	28
Metech	www.metechgroup.com	17
Montech	www.montechinc.com	53
NVC	www.mynvc.com	13
Pelican	www.PelicanOEM.com/rlo	47
RT Outsourcing Services Ltd.	www.RTOutsourcing.com	29
Teleplan	www.teleplan.com	3
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