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# Reverse Logistics magazine



**Running Your Reverse  
Logistics Operations  
at the “Velocity of  
Business”**

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**May/June 2008**

# 5th Annual RLA Conference & Expo Amsterdam

At the Dorint Amsterdam Airport Hotel

## June 16-18, 2008

Over 500 RL Professionals



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 Managing Reverse Logistics To Improve Performance.

The Reverse Logistics Association Conference & Expo 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, returns management authorization, repair 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: [www.RLASHows.com](http://www.RLASHows.com).



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## On the Cover



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### Running Your Reverse Logistics Operations at the "Velocity of Business"

by Zack Bergreen, Astea International  
The gradient of success in today's global services economy is based to a large extent on our respective abilities to make certain that all of the tools and resources we have at our disposal are focused squarely on increasing the "velocity of business." Regardless of which segments we serve, or however large or small our geographic coverage areas are, the market expects us to support our customers' total product and services requirements better and faster than ever before. The irony is that any service organization can benefit from adopting an increased "velocity of business," not just the large companies or the market leaders. All that's required is access to the same tools and resources that the leaders use to support their customers—and the wherewithal to manage our own customer accounts in line with their respective needs, requirements and expectations.

## Articles



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### Turning Returns into Revenue: Why Leaving Your Reverse Logistics to the Experts Puts More Cash in Your Pocket

by Ron Cain, TMSi Logistics

Every manufacturer understands the priority of getting their product to market. For over 20 years, the logistics industry has worked to improve, streamline, and rationalize supply chains in order to deliver products as effectively and cost-efficiently as possible.



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### The Globalization of Reverse Logistics Operations

by William K. Pollock, Strategies For Growth<sup>SM</sup>

Over the past dozen years or so, an increasing number of businesses have recognized the need to ramp up their reverse logistics operations to a global capability. Most probably felt that if they were historically local in terms of geographic coverage, the next step would be regional; if they were regional, the next step would be national; and if they were national, certainly, the next step would be international.



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### Cost Avoidance

by John Mehrmann, ZSL Inc.

Returns were once considered an ugly little secret, shrouded in mystery, documented in bloody red ink, relegated to the back pages of ledgers and dark shadows of the warehouse. Today, Reverse Logistics is a booming industry. It is the critical path between retail, refurbishing, remarketing, recycling, and recognizable revenue. Following the trends in business, universities are beginning to offer courses that train future professionals on the complex supply chain management issues associated with returns, and the financial factors that impact each constituent in the process.



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### Stopping the WEEE Chain Reaction

by Graham Davy, Sims Recycling Solutions

Much has been said in the media about how the high price of metal is driving a rise in scrap metal thefts across the UK – something the British Transport Police has been quoted as saying is the second biggest problem in the UK after terrorism. Now this issue seems to be moving into the Waste Electrical and Electronic Equipment (WEEE) marketplace, with organisations that operate in the more established European WEEE obligated countries seeing valuable materials being removed from the waste stream.

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Reverse Logistics Magazine welcomes articles and abstracts. Please send to: [editor@RLmagazine.com](mailto:editor@RLmagazine.com)



Complete the RLA Survey for a chance to win great prizes including an iPod Nano and a Digital Camera. This short survey will help us learn more about your RL processes, so that we may serve you better. Go to the RLA homepage at [www.ReverseLogisticsAssociation.org](http://www.ReverseLogisticsAssociation.org) and click the RLA Survey link

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## Articles



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### Building an Optimized Return Solution from Logistic Network Commodities

by Eelco Meenhorst, Cycleon

The logistics market in Europe today is characterized by a multitude of high-quality logistics networks ranging from national postal networks to express networks and long-haul road logistics. There is really no need for additional networks, although there is a continued need for increased connectivity amongst these systems to optimize capacity usage, traffic and volumes. Reverse logistics is growing rapidly but, given its relatively small size in comparison to regular express and postal services, is reliant on existing logistics infrastructure.

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# To Our Readers

## A Letter from the Editor



I've long been a staunch supporter of recycle – cans, bottles, paper, plastic. And I'm certainly an advocate of reuse – spring at our house brings on a major purge – no closet or cupboard is spared.

My son who is a student at San Jose State University recently moved into an apartment near campus with several friends. Naturally, when he left home, he left behind more than he took.

After patiently waiting several months for him to clean up the remnants of his life, now it's my turn. "Call out the army" – the Salvation Army, that is. Clothing, CDs, videos, bedding -- I'd have a garage sale, but it's too much work. Just bring a truck and haul it away.

Here at RLA, we've recently had Gifts In Kind International join as a member. GIKI is non-profit

organization in the corporate giving arena whose mission is to link donor resources to people in need.

They work with Fortune 100 technology, consumer, and retail product corporations as well as many smaller companies to create, implement and manage their product donation programs. Donations to GIKI include a wide variety of technology, education supplies, clothing and shoes, appliances, toys, and much more. They pick up these items then quickly move them to the communities and people where the



need is greatest. This is an example of how companies can take advantage of materials which no longer have value, other than recycling.

Reverse logistics, works for us all.

Chris Morrow  
Editor, Reverse Logistics Magazine

## 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, Flextronics, 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.

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## Reverse Logistics Association Membership

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RL Quote - Submit RFIs*	✓	✓	✓	✓	✓	
Corporate Logo and Home Page Link from Data Base Profile	✓	✓	✓	✓		
News clipping services (weekly)	✓	✓	✓	✓	✓	✓
Posting Approved member's white papers	✓	✓	✓	✓	✓	✓
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Industry Job Posting	✓	✓	✓	✓		
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Join today and start to take advantage of all RLA has to offer!





Message from President and Founder of RLA

I constantly visit with manufacturers, retailers and third party service providers around the globe who are in the process of implementing sophisticated new processes, computer systems and scanning devices. When I ask why the new processes and systems, the story is always the same. "We have to become more efficient and improve our process times in order to reduce our cost." Where is the pressure coming from to make all these changes, I ask? "The world is very competitive and if we don't serve our customers with constant improvements and cost reductions it will be just a matter of time before we're out of business."

We are no different here at RLA, we are constantly reviewing our systems and processes to determine if there's a better way to improve our efficiencies in order to lower cost and get more done. On that point of getting more things done, there are a couple ways to accomplish that objective;

- Improve processes through training and implementing best practices
- Outsource processes to partners that are trained and have best practices



RLA Staff

Since RLA is only six years old, we had the advantage of implementing new technologies that were not available just a few years ago. There are no legacy systems found here. What freedom that has given us. Everything here at RLA is web driven. So you will find Internet driven databases and productive application tools.

We have a philosophy that whenever possible, outsource. Even when the upfront costs appear prohibitive, the long-term effect is freedom to make more choices in the future to stay current and agile.

One year ago, I notified all of our employees that we were moving RLA headquarters to another state. Our Director of Technical Services, Luis DeGuzman decided not to move with us. We were disappointed at first because he's been such an invaluable resource over the last three years. But then he came up with a great idea-- he felt it was possible to find a third party to whom he could outsource his responsibilities. Well, Luis completed his search and over the last 2 months has been able to bring this third party up to speed. Both Luis and I are surprised at just how well they have integrated their company into our trade association.

My point is that sometimes your systems, processes and core competencies might not be as mission critical as you think. Be careful and watch out for bad habits and "that's the way we do it" that might overcome your sense of direction. Don't allow your company to be slowed down by legacy systems and limited internal resources.

Our editor, Christine Morrow has now successfully published 12 editions of RL Magazine over the past two years. Some of you might say, "what's the big deal, that's her job." I would agree with you if she had had a staff of five or 10 people, but Christine has outsourced the design, print production, domestic and international mailing, which has freed her up to manage the fast changes while staying away from the expensive infrastructure and legacy systems. Every day of the week she manages six outsourced partners to deliver the results that you have in your hands. With a circulation approaching 80,000, Christine has cultivated unbelievable content from industry thought leaders. These six outsourced partners work hand-in-hand with Christine and appear more employed with us than if they were on the payroll.

**Gailen Vick**  
President.  
[ReverseLogisticsAssociation.org](http://ReverseLogisticsAssociation.org)  
[RLAShow.com](http://RLAShow.com)

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.



**Gurn H. Freeman — FedEx Corporation**  
Gurn Freeman is a Director of Worldwide Services for FedEx Corporation, a \$35

billion company that provides customers and businesses worldwide with a broad portfolio of transportation, e-commerce and business services. In his role, Gurn provides leadership for two Government Sales teams in the revenue-generating division of FedEx Services. These two sales organizations have worldwide revenue responsibility and provide logistics solutions for some of the most influential government and state agencies. Gurn also manages a team of highly skilled sales professionals responsible for logistics services and emerging products.



**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.



**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.

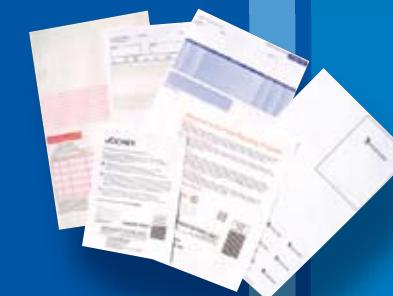
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Board of Advisors, Continued



**Larry Maye – Palm Global**

Larry Maye previously served as the Sr. Director of Global Reverse Logistics at Palm. In this capacity he was responsible for the global repair and logistics for Palm to include repair operations, customer service fulfillment, vendor 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](http://www.reverselogisticstrends.com/company_advisory.php).*



# 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

**Industries we currently monitor are:**

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Chairperson – Sanjeev Kakar, RT Outsourcing Service Limited

# Turning Returns into Revenue:

## Why Leaving Your Reverse Logistics to the Experts Puts More Cash in Your Pocket

by Ron Cain

Every manufacturer understands the priority of getting their product to market. For over 20 years, the logistics industry has worked to improve, streamline, and rationalize supply chains in order to deliver products as effectively and cost-efficiently as possible. When designing supply chain solutions, however, companies rarely put the same priority on planning for returns, items that are faulty, damaged in shipping, or shipped to the wrong client.

The work of handling these returns is called reverse logistics. The Reverse Logistics Association, the industry's leading trade group, defines reverse logistics as "all activity associated with a product/service after the point of sale,

**When designing supply chain solutions, however, companies rarely put the same priority on planning for returns, items that are faulty, damaged in shipping, or shipped to the wrong client.**

the ultimate goal to optimize or make more efficient aftermarket activity, thus saving money and environmental resources."

Progress in this area has been slower than the practical work done in the rest of the logistics industry. It was not until the early nineties that the Council of Logistics Management created a comprehensive definition of reverse logistics, and since then the defining qualities of reverse logistics have continued to prove elusive. Marisa P. de Brito and Rommert Dekker of the Rotterdam School of Economics recently observed that:

"The definition of Reverse Logistics has changed over time, starting with a sense of 'wrong direction,' going through an overemphasis on environmental aspects, coming back to the original pillars of the concept, and coming finally to a widening of its scope." (A Framework for Reverse Logistics, 2004).

The considerable impact that reverse logistics has on a company's bottom line has generated a greater awareness of the importance of reverse logistics. Respected financial and business magazine Forbes estimates that US firms spend \$100 billion annually on returns and that returns represent up to 7% of a company's gross sales. But money isn't the only reason companies should effectively manage their return supply chain. Companies are only as good as the relationships they establish with their clients, and the management of customer returns is a significant contributor to the satisfaction of a company's clientele. One frustrating experience with a

**Respected financial and business magazine Forbes estimates that US firms spend \$100 billion annually on returns and that returns represent up to 7% of a company's gross sales.**

poorly-handled reverse logistics process can result in the loss of a key client, which can significantly hurt a business' bottom-line.

The explosion of internet retail options has also contributed to the increased awareness of the importance of reverse logistics. For example, Home Depot, the number one home and garden e-retail website, joins a growing group of internet retailers who allow customers to return anything for any reason as long as it is "returned within 90 days in unused, like-new condition." Ikea, the Scandinavian furniture and accessories maker, has a similar policy, and popular clothier Land's End offers a lifelong unconditional return policy to their customers. As more and more on-line vendors offer easy, no-fault returns, an ever-greater amount of merchandise ordered online will be sent back, potentially flooding a company's reverse logistics supply chain. ▶



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As a result of the growing demand for effective return logistics operations, it is time that more companies consider outsourcing their reverse logistics to a third-party logistics provider (3PL). Research shows that while most companies recognize the need for third party logistics management of their primary supply chain, many do not recognize the cost of ignoring their reverse logistics operations.

Let's consider an example of how a 3PL would help handle the reverse logistics challenges created by a large flow of returns. Kodak, the venerable camera company, offers nine different, models of disposable or "single-use" cameras, including special models for weddings and underwater use. These cameras, which are used once, taken to a photo finishing shop, and returned to Kodak from the photo processor, represent a huge stream of returns to Kodak. According to Kodak, 80% of the weight of their cameras will be used or recycled. Undoubtedly, a company in this position is motivated to build an effective reverse logistics

supply chain to capitalize on the potential value of its high-volume of returns. In a situation like this, a 3PL will begin by analyzing the existing supply chain for 'low-hanging fruit' or easily-realized costs savings and efficiencies. After a detailed analysis of the current supply chain, a 3PL will begin finding ways to reduce costs at every point in the process. This includes reviewing current trucking costs, warehousing costs, and the price of time spent in transit.

After determining where cost reductions can be achieved, a 3PL will begin retooling the supply chain. This routinely means changing distribution centers (DCs) and warehouse locations as well as making the necessary staff changes. In this case, a 3PL might renegotiate the small package pickup contact that picks up the cameras at photo processing facilities. Then, a 3PL could realign the DC and warehousing system to make long-haul shipping more timely and effective. This can be accomplished by cross-docking plans at DCs, making schedule changes to reduce costly

less-than-truckload (LTL) shipments, and shortening the time spent in warehouse by the single-use cameras.

For some clients, a 3PL may also decide to make aggressive staff changes to improve performance through incentive-based changes in the workplace culture. As an outside firm, a 3PL has the flexibility to make changes that manufacturing firms often find difficult. Consequently, a 3PL is able to reduce costs in the short-term while also delivering consistent cost-savings year after year. The success that a 3PL achieves is often the result of years of

specialized logistics experience. A firm that chooses to outsource their reverse logistics has an opportunity not only to reduce costs and improve service, but to also create a genuine partnership with their service provider that will improve results throughout their operations. By putting a qualified provider in charge of their return supply chain, a company gains the opportunity to focus on its core competencies and stimulate its bottom line. Consequently, any company wishing to achieve excellent service and reduced costs by outsourcing their reverse logistics should consider the experts – third-party logistics providers. RLM



Ron Cain, author of "Turning Returns into Revenue: Why Leaving Your Reverse Logistics to the Experts Puts More Cash in Your Pocket", is the

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**The success that a 3PL achieves is often the result of years of specialized logistics experience. A firm that chooses to outsource their reverse logistics has an opportunity not only to reduce costs and improve service, but to also create a genuine partnership with their service provider that will improve results throughout their operations.**

## Technology Spotlight

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### Craftier Trojan Invades 10,000 Web Sites, Stumps Security Pros

A little more than two weeks into 2008, cyber-criminals are up to their same old tricks — stealing users' private data — but they have concocted a far more advanced and sophisticated method. They are now embedding their malicious code into legitimate Web sites using Web-hosting servers, according to a report released Monday by Finjan Software, a provider of secure web gateway products

### Embed A Cell Phone In Your Contact Lens?

Movie characters from the Terminator to the Bionic Woman use bionic eyes to zoom in on far-off scenes, have useful facts pop into their field of view, or create virtual crosshairs. Off the screen, virtual displays have been proposed for more practical purposes — visual aids to help vision-impaired people, holographic driving control panels and even as a way to surf the Web on the go.

### Scientists Attempt to Spark Battery That Never Needs Recharging

Scientists in Germany are attempting to create a battery that never needs recharging. If successful, the power cell would be ideal for mobile devices like phones and laptops. The team started from a long-known mineral: Argyrodite is a silver, germanium and sulphur-containing mineral discovered near Freiberg, Germany, in 1885.

# The Globalization of Reverse Logistics Operations

by William K. Pollock

Over the past dozen years or so, an increasing number of businesses have recognized the need to ramp up their reverse logistics operations to a global capability. Most probably felt that if they were historically local in terms of geographic coverage, the next step would be regional; if they were regional, the next step would be national; and if they were national, certainly, the next step would be international.

However, many of these organizations were caught totally by surprise, as they were virtually thrust into a global market with no prior warning, generally for singular reasons ranging from the need to support an existing customer that was expanding nationwide; landing a new account that had facilities located both locally and overseas; or developing an Internet sales channel that made it as easy for customers to order parts from across the world as it is from across the street.

Everyday, it seems that more and more businesses are looking to grow their reverse logistics capabilities “global” as an opportunity to both better serve existing customers who are also going global, as well as going after their own slice of the global pie in an attempt to bolster and augment their historical market potentials. However, what most did not initially bargain for are the complexities associated with key issues such as geo-culture, language, and unique local requirements that could potentially make going

global a little less attractive—if not impossible. However, as recent history has shown, this has not really been the case.

## Reverse Logistics is Inevitably Moving toward Globalization

Globalization is already the norm for reverse logistics. Even despite a volatile economy—or, perhaps, in part because of it—globalization is also a business trend that has become a way of life for businesses of all types or sizes.

This trend was first evidenced by a growing number of businesses that had historically operated in

growing customer demand for global Service Level Agreements (SLAs) that would result in greater uniformity in the delivery of service and support to customers regardless of where they are located all around the world. In many cases, some of the otherwise unique local or regional service and support requirements are rapidly disappearing as issues for customers who no longer wish to deal with multiple local organizations anymore but, instead, are looking for a consistent source of global service and support capability (as well as relative uniformity in pricing) across all of their geographic areas. The main benefits resulting from this trend are normally considered to be uniform service and support

Figure 1  
There are a multitude of geographically decentralized functions that will need to fit into a global organization...



more than one country, and who were finally able to “evolve” their business practices—and, in many cases, their overall business model—to embrace a global marketplace. Undoubtedly, the continuing advances in information and communication technology, and the proliferation of empowering software functionality, will facilitate further globalization by removing the last remaining barriers to entry. For example, there has been a

delivery, all based on single contract negotiation at the corporate level. Regardless of whether services providers like it or not, one thing has become increasingly clear—vendors must now also be able to define their SLA value propositions on a global basis if they want to keep their customers happy. Even customers that are not yet global themselves want their providers to at least have the capability to support them should

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they undergo an expansion, acquisition, or any other change that catapults them from out of their safe, historical, microcosm.

However, in order to do so, there are a multitude of geographically decentralized functions that will need to fit into a global capability—for both the providers and their customers. For example, in a typical regional or national organization, many functions may be duplicated and performed independently from each other, typically leading to redundant communication efforts and differing operating processes, policies and procedures. Some organizations may presently be utilizing reverse logistics practices that were originally designed, developed and implemented by two or more regional entities, all working at cross-purposes from one another. For these organizations, moving to a global reverse logistics model will not only allow them to perform efficiently on a global basis—it will also help them to “clean up” an otherwise inefficient way of conducting business back in their own front yard! In any event, ongoing improvements in technology and communications will allow for new opportunities to be created that can permit more businesses to move into global markets, while still maintaining strong—and consistent—control over their historical local and regional markets.

Customer requirements for reverse logistics service and support will never be the same from one country to another, any more than they will be the same from one customer to another. However, one thing remains very clear—the requirements for reverse logistics support are becoming increasingly standardized, both on a local/regional and global basis. More and more businesses are going global each year in terms of sales, marketing and services

**Globalization is already the norm for reverse logistics. Even despite a volatile economy—or, perhaps, in part because of it—globalization is also a business trend that has become a way of life for businesses of all types or sizes.**

capabilities, supported not only by the proliferation of new Internet-based tools and multinational strategic partnering, but also by the increasing demand for global services and support as evidenced by the market as a whole. With new geographic markets opening up all the time (e.g., China, Eastern Europe, etc.), this trend will only continue to grow.

Another factor supporting the inevitability of globalization is the need to improve internal efficiency. The model that comes to mind is the FedEx shipment model, where most FedEx packages find their way through Memphis, Tennessee between 2:00 am and 3:00 am in the morning, ultimately making their way between Point A and Point B—no matter where they were shipped from, or where they are headed. FedEx pioneered in developing a model that works optimally for the aggregate of all of its customers’ shipments, although not necessarily for each individual one. The same model might also apply for any particular business’s global reverse logistics requirements—and the reverse logistics providers of the world will need to step up to the situation in

order to ensure they can give the customers what they want.

A third factor supporting the case for globalization is the ability to systematically reduce costs while maintaining or improving existing levels of service. Perhaps the greatest area of opportunity involves logistics operations (including reverse logistics) where local policies have historically required high investments in inventory—especially for slow moving items. However, by moving toward a global logistics capability, most businesses will, de facto, be able to elevate certain elements of these operations to a more efficient global model that can result in improved capabilities for meeting customer requirements through increased efficiencies and a more consistent operational approach. Of course, the specific circumstances may differ widely by company, but the basic premise will still hold true for virtually any business in the services sector.

**Regional and Local Functions Must Be Carefully Integrated**

Because of key factors such as geo-cultural differences, language barriers and variations in local presence, certain functions may still be best performed at the regional or local level. This may involve the centralization of certain “local” functions within a larger regional area (e.g., Pan-European, ASEAN) as most cultures still require a local presence to do business. The challenge, however, is to determine which front-line functions are absolutely necessary to be performed at the local/regional level, vs. those that can be consolidated at a larger geographic level. Examples of some functions that may still need to be somewhat decentralized on a regional and/or local basis in support of global operations include:

**Sales, Marketing and Business Development**

Although many larger businesses already operate on a global basis, the majority of their Sales, Marketing and Business Development activities still occur at the local or regional level, depending on the specific size and cultural requirements of the geographic market. However, all local/regional sales functions supporting the business’ reverse logistics service and support offerings should remain clearly in sync with the “umbrella” global programs.

**Logistics/Reverse Logistics**

The areas of Logistics and Reverse Logistics probably represent the greatest opportunities for cost savings and are, therefore, among any organization’s most important functions. Historically, whether they were large or small in size, most businesses addressed these areas on a highly decentralized basis, often leading to gross inefficiencies, skyrocketing costs, and correspondingly low levels of customer satisfaction.

However, in recent years, many of these same organizations have found that by doing away with these multiple, independent, logistics systems and creating a new centralized (i.e., global) model, they could substantially reduce their reliance on redundant levels of safety stock, and lessen the percentage of parts that end up being classified as obsolete. Based on our own experience, and supported by information provided by many of our

colleagues, the creation of a Global Logistics System, supported by the right technology and application software, can commonly lead to a reduction in the inventory requirement of between 20% and 30%—without negatively impacting existing levels of customer service and satisfaction.

At the same time, the risk for inventory obsolescence is also reduced which creates additional cash for the business due to lower reserves carried in the books. Once established, many of



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Figure 2  
Some functions may still need to be somewhat decentralized on a regional and/or local basis in support of global operations.

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the specific operational aspects of the global logistics and reverse logistics functions may be outsourced to qualified logistics/reverse logistics service providers, ultimately changing the internal focus of these functions from one primarily of execution, to one essentially of managing the function.

### Field Service

The Field Service function should also be managed on a local or regional level, although continually operating under the umbrella of the business's global model for supporting customers. The principal reasons for this recommended decentralization are that local labor laws and language barriers are still very important issues in most geographies—not only from one country to another, but internally within many countries themselves.

The challenge, however, is how to determine the appropriate levels of service and support from a global perspective (i.e., first-, second-, and third-line support), and adjusting the global model as necessary within each served geography. In most situations a hybrid model can be developed where first-line support is provided at the local level, while the second- and third-line support functions are consolidated at the larger regional, national or global

**A third factor supporting the case for globalization is the ability to systematically reduce costs while maintaining or improving existing levels of service.**

levels. Depending on the availability of new technology, supported by expanding Internet capabilities, there may be many new opportunities for increased operational efficiency in a global environment where the location of the actual support person becomes less and less important.

### Customer Support

The Customer Support function is a front-line function that is very dependent on the local (and

regional) situation. Similar to the field service function, the level of centralization will be highly dependent on the specifics of the local situation and business culture. It remains important, however, to link all of these functions together via global (i.e., centralized) automation systems, and make the most effective information, communications and technology systems available to allow for local optimization.



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### How Do You Finally Get There (Global, that Is)?

The first place to start is to look at each of your existing reverse logistics and related business functions and determine which ones can more effectively and efficiently be performed at a global level. For the most part, all you have to do is simply take a step back and apply some common sense to the situation, as the conclusion is often the same for most businesses—that is, to decentralize on a local/regional or national basis, but make certain that all functions operate under—and adhere to the specific concepts and principles—of the global model.

For some managers who may have only had direct experience in running local or regional operations, the change to a global environment is likely to represent a major adjustment. Not only will there be new operational, organizational, and process-related issues for them to deal with, there will also be many underlying, issues that have to do with the “softer” side of global business, such as geo-centric and political factors, changing roles and responsibilities, new reporting structures, etc. To address these issues effectively, a careful approach will be necessary, and this might take some time.

The transition from a local or regional—or even national—operation to a truly global model is not easy. There will be many roadblocks along the way that will require close attention,

and the sensitivity of certain solutions will require “tender loving care”. Still, the benefits of going global will be many, and the rewards for implementing an effective system for doing so will pay back for years to come. Your customers and channel partners—and your competitors—are already out there, and they’re waiting for you! RLM



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*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.*

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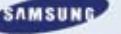

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# Cost Avoidance

by John Mehrmann

Returns were once considered an ugly little secret, shrouded in mystery, documented in bloody red ink, relegated to the back pages of ledgers and dark shadows of the warehouse. Today, Reverse Logistics is openly embraced as the critical process that connects retail, refurbishing, remarketing, recycling, and recognizable revenue. Following the trends in business, universities are beginning to offer courses that train future professionals on the complex supply chain management issues associated with returns, and the financial factors that impact each constituent in the process. The science of reverse is a ballet of engineering, logistics, repair, remarketing, accounting, and magic.

The Reverse Logistics Association has been at the forefront of this development, carefully coordinating the collaboration of competitors for the cumulative progress of the procession. If there was any remaining doubt as to the increasing impact and importance of these costs to business, it was swept away in the staggering tide of attendance at the Reverse Logistics Conference and Expo at Planet Hollywood Resort and Casino, in Las Vegas, Nevada. More than 1,400 attendees, representing 615 different companies, filled the convention center and attended the educational seminars. Speakers and panelists represented such renowned companies as Microsoft, Wal\*Mart, GENCO, Dell, Sharp, Best Buy, DHL, FedEx, Cisco, Circuit City, ARC International and Data Exchange Corporation, just to name a few. The atmosphere created a unique opportunity for introductions, communication, and collaboration. Big and small companies, from manufacturing and retail to packaging and downstream material

handling, the breadth and scope of the challenge filled the air.

That very same vast canopy of breadth and scope that filled the air with excitement at the RLA conference can create suffocating costs for some organizations. As consumers demand higher technology at lower costs, manufacturers study costs with microscopic detail. Every step of the reverse chain is analyzed for competitive cost reductions. 1,400 attendees can't be wrong, reducing and controlling cost of returns is big business!

An alternative to reducing the cost of returns is avoidance.

### “I don't have a carrot, so paint the stick orange.”

There is an old adage about the carrot and the stick. A carrot is used to entice the horse to pull the carriage forward, and the stick is used to beat the horse as an alternative means of motivation. The penalty approach has been tested with very limited success. By using a stick, some manufacturers restricted and limited the amount of returns from retail or dealers based on a percentage of sales. Some limitations based on product age, date of purchase, or product condition determined eligibility. In these instances, the burden of returns was merely shifted from the shoulders of the manufacturers to the backs of the retail partners. When necessary, retail partners unleashed a rather large stick of their own, by simply choosing to buy another brand until artificial returns limitations were temporarily suspended.

Times have changed. Manufacturers and retail partners are collaborating on ideas to reduce returns altogether, as opposed to shifting the burden of costs. Like a powerful river, creating artificial stoppages in the flow of goods will not stop the problem, but only change the course and flow of the products. Therefore,

manufacturers, retailers, dealers, and third partner administrators are becoming far more creative in developing solutions that address the root causes of the returns issues. By working together, cost is reduced for all partners in the process.

### “What is the biggest opportunity to avoid cost?”

The tendency to reduce costs is to begin by investigating the returns process, eliminating steps, reducing freight, and analyzing labor. While these are important and admirable initiatives, each approach bypasses the single most significant and staggering statistic of returns, and that is the number of items that do not need to be returned at all. The

Typically, 70% to 85% of returned product has no defect found.

percentage varies by product category and model, but the volume of “No Trouble Found” is a number that each member of the reverse chain measures and takes to heart. Typically, 70% to 85% of returned product has no defect found. That means that 15% to 30% of the product offers an opportunity to identify potential defects in material or workmanship that could be adjusted at the factory production, if caught in time. However, that 15% defective product is not all new, and production cycles are much shorter now, so the opportunity to identify a defect in time to make changes in current production are slim to none. Studying defects in returns and field service can be used to design future products, but for the most part, this 15% only presents an opportunity to reduce processing costs. The other 85% is an opportunity to avoid costs.

What can we do to minimize returns of the 85% of product that is not defective? To be effective in avoiding costs, it is necessary to think outside

the box, and collaborate with other partners. It is necessary to look upstream in the process, and to embrace the customer.

### “If you constantly find yourself thinking outside the box, then maybe it is time to get a bigger box.”

Embracing the customer can be accomplished with the coordinated efforts of product sales, marketing, customer service, web design, call centers, third party administrators, and affiliated partners. This concept should not be outside the boundaries or scope of reverse logistics. After all, if your goal is to reduce costs, then you should become an advocate for changes that will eliminate those

costs as much as possible. Sometimes, being an advocate for positive change requires cooperation with resources in other areas. Avoiding these costs should include a very careful review of everyone who touches the source of the returns, and that is anyone who has contact with the consumer. Manufacturers, dealers and retail partners have recognizable points of contact with consumers. Third party logistics and return processing centers may be completely sheltered from direct contact with consumers, but can still contribute to the process improvement by providing valuable metrics on the percentage of units returned with no defect found. Leave no stone unturned.

Embracing the customer requires a little more carrot, and a little less stick. The customer needs to feel like 24 carats, good as gold. Enacting strategic initiatives that incentivize consumers to keep product should be calculated as a return on investment through a measured reduction of total returns.

### “The Surprise Inside”

One method, referred to as the Cracker Jack Surprise Inside, is designed to provide consumers with unexpected rewards. The concept is ▶

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to place incentive inside the box with the product. This is not an advertised promotion, but rather, an extra reward to the consumer for a good purchase selection. The reward, or promotion, is most effective when it is associated with a time based offer. For example, a credit for free DVD movie rentals might be included in the box with a DVD player, but the free rentals are not available until 30 days after registration. This gives motivation to register the product, and incentive to keep the product long enough to enjoy the free rentals. After 30 days, the customer is less likely to return the product. The free rentals may be sponsored by a company that would like to invite the consumers to try the rental service, thereby avoiding any cost to the manufacturer. In this example of a virtuous circle, everyone receives potential benefit, without incurring unwanted cost.

The concept of the Cracker Jack Surprise Inside can also be easily applied to Extended Service Plan offerings. By announcing a discount available 60 days after the date of purchase, the customer has motivation to register as a means to receive the access to the discount. The Third Party Administrator can calculate fiduciary responsibility on product after the out-of-box failure period, and the customer is far less likely to return the product after sixty days. There are many ways to work with partners in a manner that discourages returns by rewarding positive consumer behavior.

Another way to embrace your consumers, to reward loyalty, and to introduce incentives to keep the product beyond the normal return period, is to nurture a customer community. Consumers like to be a part of a community. Many people like to be appreciated, and to feel that they belong. This community may be nurtured by web services that offer meaningful personalized data to the consumer. It is not necessary to look any further than a community service that downloads tunes to an

electronic device, to understand the incredible power of such a strategic initiative. The tunes stored on the device are a statement of individual preference, and part of a community experience. This community access is also a place to make important product announcements.

A powerful new tool for achieving the individual customized consumer attention in a community environment is called a PURL. A PURL is a Personalized URL, which is a web site designed for a single user. For example, once a consumer registers a product, the PURL may provide specific information that is only relative to that user and product. No more searching through drivers, downloads, manuals or lists of accessories to find the items that match your product. The PURL lists only those items that match your registered product. The PURL is a powerful communication tool, enabling targeted promotional rewards, announcements, updates and a customer rich environment. Give a string of PURLs to your loyal ring of consumers, and watch your returns drop.

Another point of consumer contact is the call center. Voice and touch tone prompts have enabled our society to herd consumer cattle with little or no actual human intervention. We marvel at this technology when it is used to avoid calls in our own organizations, and curse it when we encounter it in others. How easy it is for us to forget that we are all consumers for someone else. This commentary is not intended to propose abolishing the automated routing of calls, as there is certainly merit to providing robotic direction to a proper destination. However, call centers should be empowered to care for consumers with discretion that allows for resolutions that might prevent a return. If you have done your homework, and you know the cost and losses associated with returned product, then you can quickly calculate the discretionary allowance of a call center agent that could avoid a return

and simultaneously salvage a greater amount of profit. Call center metrics should be tied and bound to returns, even so far as to track serial numbers whenever possible. Managing these costs is a shared responsibility.

Returns can also be used as a positive strategic initiative. Some organizations offer "Technology Upgrade" programs, which provide a small credit for the return of discontinued products. This does not avoid the return of new product, but rather creates a channel for return of old product. The old product may have value for hard to find parts or components. The credit helps to maintain the relationship with the loyal customers. Of course, not all customers are loyal, but shouldn't you be targeting your investments toward the loyal customers who continue to invest in you?

#### "Try it, you'll like it!"

How can you contribute to internal efforts, or benefit your partners and clients in the reverse logistics chain, by avoiding costs? This is a great conversation. It may require reaching out to new contacts in familiar companies, or integration of new technologies. In any case, it is a wonderful way to demonstrate your commitment to clients and consumers. Try it yourself. Reach out and call someone this week, while your ideas are fresh in your mind, and discover how much you can change the industry with a positive approach to avoid costs. RLM



*John Mehrmann is Vice President of Business Development at ZSL Inc. ZSL is an ISO 9001 certified provider of technology services. ZSL leverages specialized knowledge in custom enterprise application development, reporting, data management, administration, and application integration to assist enterprises in raising service levels, while reducing costs. ZSL Inc has extensive experience in mobile, wireless, and web application development.*

## On the Move in Reverse Logistics

**Eelco Meenhorst** was recently promoted to CEO of **Cycleon**. In his previous role as COO, Eelco Meenhorst had a broad range of responsibilities including the development of the Cycleon proprietary IT system. He succeeds Gerben Willems who co-founded Cycleon in 2005 and has managed the transition of Cycleon to Reverse Logistics Group in 2007. Eelco will continue the development of Cycleon and the further integration with RLG.

.....  
**ZSL Inc.**, a leading Technology Solutions Provider, recently announced that **John Mehrmann** has joined the company as Vice President of Business Development. Prior to joining ZSL Inc., John served as a Regional Sales Director for DEX (Data Exchange Corporation), a leading supply chain solutions provider for high tech industries. The tenure at DEX provided perspective as a service provider, reverse logistics and depot services. This augmented John's 20 years of experience with Toshiba, where he was Director of Service Operations for Toshiba America Information Systems, Inc. At SatisFusion, John gained experience in Third Party Administration of Extended Service Programs. This uniquely diverse experience will be appropriately applied to the insightful integration of diverse industry constituents..

.....  
**Pelican™ Products, Inc.**, the global leader in the manufacture of advanced lighting systems and virtually indestructible cases, has appointed retired Marine Corps General **Peter Pace** as its Chairman of the Board. Pace is the former Chairman of the Joint Chiefs of Staff, a four-star general and brings more than four decades of military and defense leadership expertise to Pelican's board. Pace assumes the Chairman of the Board position at Pelican in a non-executive role and will provide additional strategic oversight to Pelican's work in the military, defense and federal government sectors. He succeeds Rob Gluskin, a Behrman Capital operating partner, who will continue to serve Pelican as director.

## Returns Are a Strategic Opportunity



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## RLA Conference & Expo Amsterdam 2008

**Dorint Airport Hotel**  
June 16 - June 18, 2008

Join us for the Fifth Annual RLA Conference & Expo in EMEA. Companies from throughout Europe as well as many other international delegates will be in attendance. ODMs and OEMs will be looking for 3PSPs that can manage Reverse Logistics in Europe, along with identifying solutions for Asia and the Americas.

Third Party Service Providers (3PSPs) will be exhibiting their Reverse Logistics services and solutions at the Dorint Airport Hotel in Amsterdam. The focus of 3PSPs will be to help European OEMs and Branded companies become aware of RL support on a global basis. This is a rich opportunity for companies to identify future service partners. Here is an opportunity for 3PSPs to sit down face-to-face with the key outsourcing decision makers from the major OEMs and Branded Companies.

Pre-conference workshops will be held on Monday, June 16 with topics such as "Using

Reverse Logistics to Enhance Customer Service and Competitive Performance" and "Returns and Recycling of Consumer Electronic Products." Tuesday morning sessions start with Gailen Vick, RLA President, providing Industry Overview Size and Forecast followed by the keynote address. Speaker sessions will commence after lunch and continue throughout the day and also on Wednesday.

Listen to industry leaders and top academics as they share their ideas on such hot topics as returns and loss prevention, revenue opportunities within the reverse logistics process, outsourcing and regulatory requirements. See the conference schedule for a full listing of session topics.

A wide range of reverse logistics companies will be in attendance from recycling/e-waste to repair and transportation logistics. RLA Conference & Expo Amsterdam provides a great opportunity to network and share best practices. Don't miss it.

### RLA C&E Keynote Session

Keynote Address - "The Major Challenges Facing Reverse Logistics" - Amsterdam 2008



**Doug Schmitt**  
serves as Vice

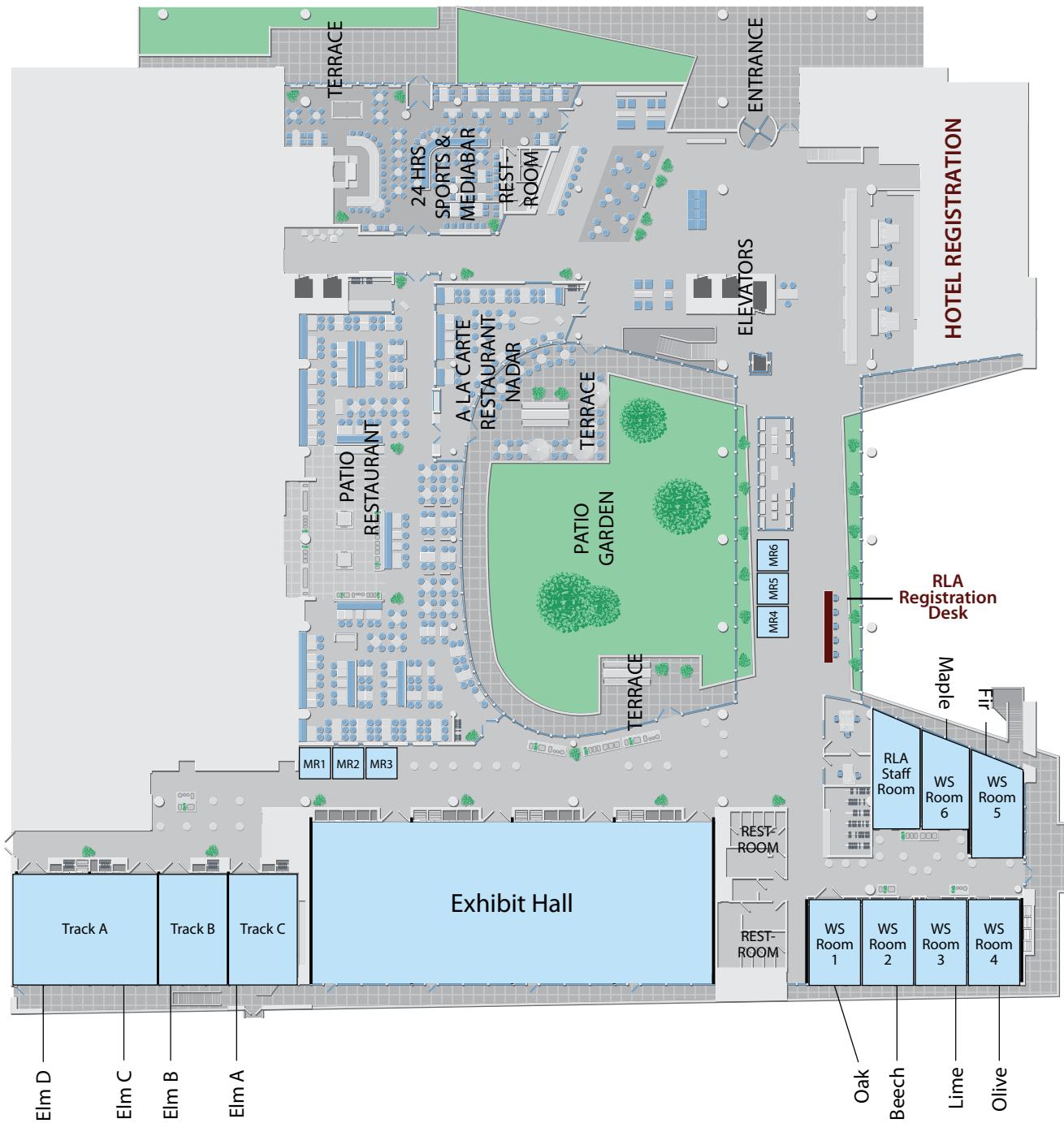
President of Dell's Global Field Delivery organization with international responsibility for global break/fix field engineers, same day service delivery, spare parts depots, parts planning, service logistics, repair, reverse logistics and Dell's global command centers. In addition to Doug's role as VP 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.

MONDAY - JUNE 16, 2008				
9:00AM - 4:30PM	Pre-Conference Workshops			
	Track A	Track B	Track C	Track D
3:00PM-4:30PM	Wireless Communications	Data Storage	Spare Parts Management	Information Technology Solutions
TUESDAY - JUNE 17, 2008				
8:30AM	EXHIBIT HALL OPENS			
10:30AM	Welcome Remarks Industry Overview, Size and Forecast Gailen Vick - President & CEO, Reverse Logistics Association			
11:00AM	Industry Keynote Address: The Major Challenges Facing Reverse Logistics			
12:00-1:30PM	BUFFET LUNCH - EXHIBIT HALL			
	Track A	Track B	Track C	
1:30PM	Reverse Logistics Process Optimization for Efficient Operations, Lower Investments and Higher Customer Service	Case Study: Kiala - Hewlett-Packard Reverse Logistics Model	International Take Back Systems for Workshop Disposal and Warranty Part Management - The Operator's View	
2:30PM	Reverse Supply Chain - The Challenges	Up-Cycling of Packaging Solutions Can Reduce Costs and Enhance RL Practices	Reverse Logistics: Extended Enterprise Perspectives	
3:30-4:00PM	REFRESHMENT BREAK - EXHIBIT HALL			
4:00PM	Panel Discussion: "WEEE & RoHS Impact on OEMs & 3PSPs"	Designing an Integrated Reverse Logistics and Service Support Network	Thinking Forward in Reverse Logistics	
5:00-6:00PM	Round Table Discussions			
6:45-9:00PM	Amsterdam Canal Dinner Cruise			
WEDNESDAY - JUNE 18, 2008				
8:30AM	EXHIBIT HALL OPENS			
	Track A	Track B	Track C	
9:00AM	Unlocking Value in Reverse Logistics	Case Study: Reverse Logistics Challenges with New Product Launch (with Neonode)	Sectorial Differences in the Reverse Logistics Market in Flanders	
10:00-11:00AM	INTERMISSION - REFRESHMENTS - EXHIBIT HALL			
11:00AM	Panel Discussion - New Ways to Streamline Operations, Drive Profits, and Delight Customers	Optimising Reverse Logistics in a Globalised World	After-Sales Service As The Driver For Continuous Business Improvement	
12:00-1:30PM	BUFFET LUNCH - EXHIBIT HALL			
1:30PM	Panel Discussion: Reverse Logistics Issues in the Retail Industry	Reverse Logistics - Extended Enterprise Perspectives	Leveraging Your Reverse Logistics Operations For Competitive Edge and Advantage	
2:30PM	Panel Discussion: Methods of RL Outsourcing	Case Study: Kiala Reverse Logistics Model	Cradle to Cradle; Product Re-birth, The True Goal of Recycling	
3:30PM	Closing Remarks: Gailen Vick, President & CEO, Reverse Logistics Association			
4:00PM	LUCKY DRAWING for MP3 Players, DVD RW, Portable DVD Players, External Hard Drives, Digital Cameras (you must be present during the drawing to win)			

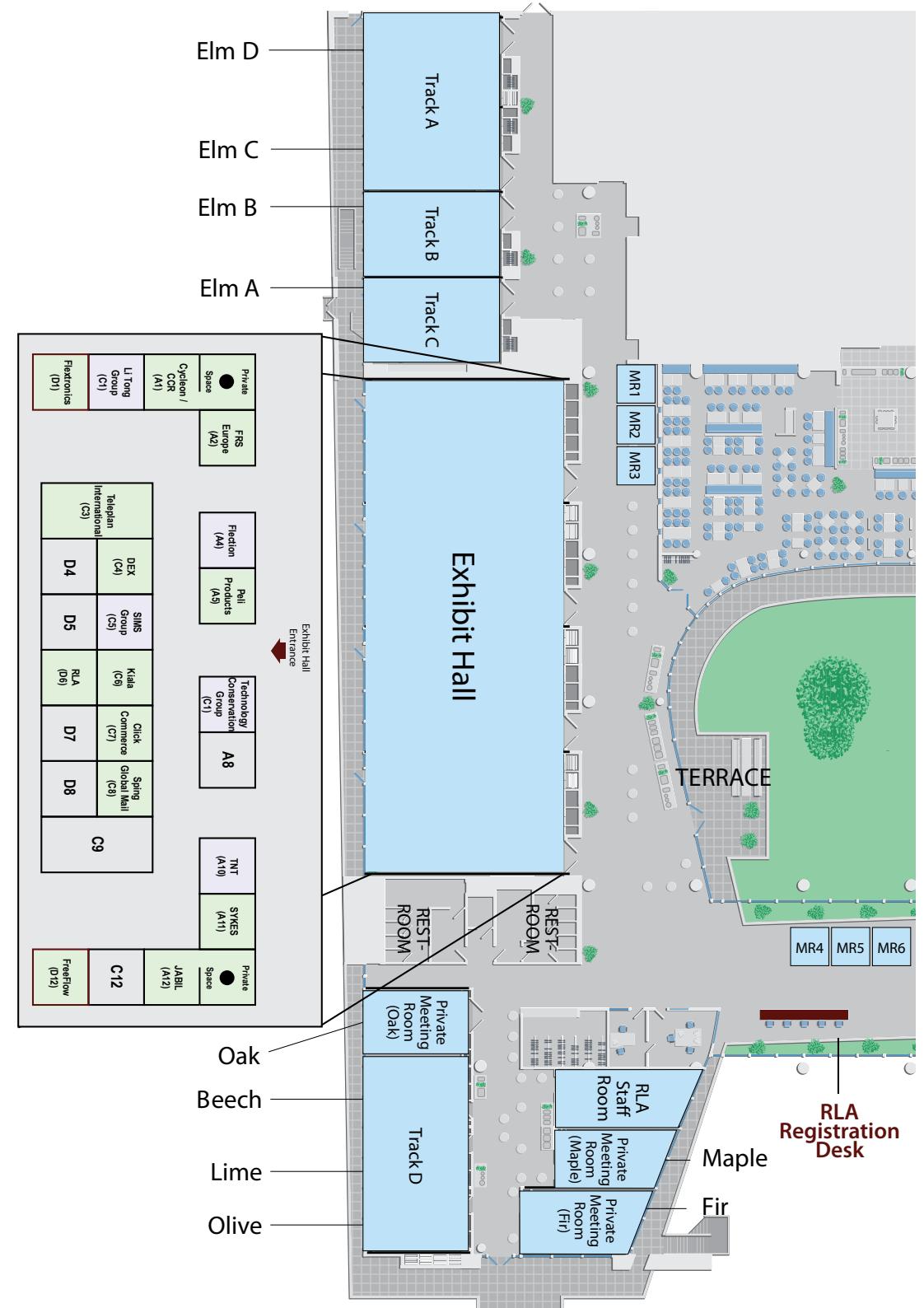
Expo Floorplan - Day One

Dorint Airport Hotel



Expo Floorplan - Day Two

Dorint Airport Hotel



## Stopping the WEEE Chain Reaction

by Graham Davy

Much has been said in the media about how the high price of metal is driving a rise in scrap metal thefts across the UK – something the British Transport Police has been quoted as saying is the second biggest problem in the UK after terrorism. Now this issue seems to be moving into the Waste Electrical and Electronic Equipment (WEEE) marketplace, with organisations that operate in the more established European WEEE obligated countries seeing valuable materials being removed from the waste stream.

Here, we examine the missing WEEE problem and the trouble the removal of WEEE from the supply chain can cause further down the line for logistics companies, their recycling partners and client organisations with material to recycle.

Leakage from waste streams is not new. It is something that nearly all waste-based reverse logistics operations will have experienced over the years—waste with a perceived

value being removed before it is processed, either for personal use or to be sold on. As a company operating across Europe, we have started to notice first-hand that this problem is growing with, in this case, a rise in valuable WEEE being removed from the waste stream.

This isn't as a result of the cherry picking we are used to but rather a large scale, concerted effort by traders and illegal operators to cash in on high prices for materials such as metals. In the Netherlands for example, we are seeing outsiders approaching staff at waste collection centres, asking them to remove high-value items such as computer central processing units (CPUs), servers and cables prior to collection or treatment in return for cash.

Once this untreated waste is removed from the chain, a lot of it gets shipped out of the EU to countries that do not have the same stringent waste regulation, such as the Far East and African nations. Indeed, it is estimated that 500 containers arrive in Nigeria each month with

waste electrical materials. Around half of those containers come from the EU carrying brown waste from virtually every well known brand and two thirds of the imported computer equipment which arrives in the country is no better than junk. This practice isn't just happening in the Netherlands, we see evidence of similar situations in other countries including Belgium and Germany—and we expect cases in the UK to come to light in the very near future.

Looking after the assets To some, the removal of old electronic equipment such as computers and servers is not a big problem, but the theft of untreated WEEE brings with it a number of serious problems—especially in relation to the disposal of B2B electronic assets and waste. While there is an intrinsic value to WEEE in relation to the materials that can be extracted from the waste equipment, for B2B companies the true value for the end of life machinery is much higher due the often sensitive and confidential information held on the equipment or indeed the intrinsic value left in the equipment as a reusable item.

As the business world continues to move to digital formats and more confidential information is held electronically, then ensuring data security when equipment is discarded will become the number one concern for many disposing organisations. Therefore, the end-of-life equipment should still be viewed as assets and treated as such. Indeed, recent research has shown that the majority of equipment discarded by the B2B market has gone through no internal data purge and that many organisations are unaware of the problems that can be caused by the disposal of equipment still containing sensitive information. Therefore, when it comes to the discarding of items such as computer hard drives or servers, secure disposal has to be just that - secure.

Over the last year the effects of the loss of sensitive data have been widely publicized. Furthermore, there are many examples of the unauthorised disclosure or loss of data as a result of inadequate procedures within the disposal process. In such cases, the implications for all involved in the recycling process could be extremely serious. WEEE being stolen from the supply chain before it reaches the recycling partner at the end could lead to the personal details of third parties such as customers and staff falling into the wrong hands, creating an opportunity for identity fraud to be committed.

Should the stolen waste hold sensitive information and subsequently, used to commit fraud, or be found in the wrong hands, then the disposing organisation, the logistics company or the recycling partner could come under the media spotlight and their brand integrity could be compromised. Furthermore, if the information contained on the stolen WEEE is commercially sensitive, then it could cause the disposing organisation to lose market share, potential investors—and paint it in a bad light in front of its industry or sector peers.

It should also be noted that failure to keep such information safe will mean that those in the WEEE supply chain could be breaking a number of laws and legislation, including the data protection laws and official secrets legislation, as well as infringing intellectual property rights and confidentiality agreements. Therefore, it is important that disposing organisations work with a supply chain that can offer a secure solution for the disposal of its sensitive waste.

So how can all parties in the reverse logistics chain work together to minimise the threat of missing assets, information or WEEE? For the organisation disposing of its waste, one way is to reduce the number of 'hands' in the process by cutting out

the middlemen and working directly with the recycling partner at the end of the chain.

Cutting out the middle men Due to the nature of the way material is collected and transported via some compliance schemes, the WEEE passes through a number of different parties before reaching the recycler. This provides a much greater opportunity for WEEE that looks like it might have some value to be being removed from the system.

By working directly with the party at the end of the chain and its retained logistics partner, the likelihood of this is reduced greatly as the waste is only exposed to those companies and is transported securely to the end destination. Also, by working with a recycling partner, the client is able to meet the company overseeing the treatment of their WEEE and can be present when this material is being recycled—giving peace of mind that the equipment has been disposed of correctly.

Those organisations with equipment to dispose of also need to consider the services on offer and if they conform to government standards. In general, sensitive data can be removed in one of two ways. This can be done by electronic means, data-wiping the disk using specialist, high-strength software, thereby making the hard drive available for re-use, extending the lifespan of the equipment and perhaps reducing IT costs.

The other option is to physically destroy the disk and thus the data, but eliminating the potential for re-use. There are a number of ways of doing this including the use of acid baths but the most popular method is via shredding which breaks the hard drive down into pieces six millimetres or smaller. This will ensure that the disk and the information will be rendered useless. In certain highly sensitive cases both the software option and physical destruction option are used. ▶

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### Planning is the key

3PL can help combat the removal of electronic equipment from the supply chain by tightening up on their own processes—and this begins before logistics firms come into contact with the waste, with security being a prime consideration. This should cover the whole of the reverse logistics chain, including looking at the vehicles being used to transport the waste to ensure they are secure enough to do so. For example trucks, with an open top or flexible side panels may not be the best option when looking to ensure the security of the WEEE cargo.



Clear and easy reporting procedures should be established for staff to highlight approaches encountered from outsiders asking them to remove WEEE from the waste stream. Such procedures will show staff the serious nature of the problem, while improving security right along the logistics chain. Hiring the right staff is also key—Sims waste collections, for example, are undertaken by staff that has undergone security checks.



Route planning is another area that should be considered by those involved in the transportation of WEEE. By reducing the number of stops or pick-ups made on each journey, it will limit the number of people or places that the waste comes into contact, reducing the risk. Wherever possible, journeys should be made in one day, avoiding situations like overnight stops where the waste may be left unguarded in places such as service stations or lay-bys. Un-scheduled stops by drivers should be discouraged, within the transport laws and regulations, to reduce the opportunity for the extraction of valuable waste.

Route planning is another area that should be considered by those involved in the transportation of electronic equipment. By reducing the number of stops or pick-ups made on each journey, it will limit the number

of people or places that the redundant equipment comes into contact, thus reducing the risk. Wherever possible, journeys should be made in one day, avoiding situations like overnight stops where the waste may be left unguarded in places such as service stations or lay-bys. Un-scheduled stops by drivers should be discouraged, within the transport laws and regulations, to reduce the

opportunity for the extraction of valuable waste. The varying of routes should also be encouraged as part of the planning stage, with a number of route options available.

Should waste be left at a centralised depot for future collection then the security of the facility or site will need to be considered. 3PL companies need to give careful thought to where the waste will be stored. Other considerations include whether the waste will be locked away or if it be in a place that is easily accessed, or in an area with high footfall.

The removal and transfer stage when using a central depot or facility is another facet of the process that needs careful consideration and monitoring. The option is often cheaper and subsequently desirable but this should be balanced against security requirements. As the waste will be removed from the vehicle and moved around, it will come into contacts with extra hands and as such, the risk of extraction is higher.

Finally, on collecting the waste it is imperative that a full inventory is taken of each item and the quantity should be recorded—this record-taking process is key. This should then be tallied against the records of the disposing organisation before the consignment leaves their premises and any irregularities ironed out before transportation.

### Pulling together

It is important to note that those organisations involved in the WEEE supply chain cannot do it all by themselves. We need stronger and swifter direction from central government, both in the UK and at the European Union level. There is a lack of focus upon enforcement. The powers that be need to act strongly to put an end to illegal local practices and exports—ensuring that all countries involved in the WEEE Directive are enforcing the rules in a pan-European, consistent manner.

Obligated countries need to be putting the same level of resource and manpower into policing the directive, ensuring that waste cannot be stolen and moved across borders, something that is not happening at present. For example, one EU member has only dedicated 200 man-hours per year to enforcing the rules on the export of illegal WEEE, which is woefully low.

Experience also shows us that each country has its own domestic responsibilities and enforcement schemes and this just adds to the confusion, as each country will have its own interpretation of the ruling. Understanding of the seriousness of this issue is currently low and due to this, internal communication and co-operation processes still need to be improved amongst the many different bodies domestically. In many countries, such as the UK, the detection and enforcement role is handled by a number of Government agencies such as the police, customs and port authorities. If the communication process and resources between these parties isn't what it should be then the loopholes will gradually grow and failings will appear, making it easier for the illegal operators to work illegally. By tightening controls and having stronger punishment for illegal operators—it narrows the field of play for those operating outside of the rules and reduces the opportunity for illegal operators to cash in.

As both businesses and consumers continue to adapt their processes and lifestyles to become more environmental, then the volume of WEEE will grow dramatically, making the problem of missing WEEE more prevalent. Therefore,

it is now the ideal time for all those organisations involved in the WEEE reverse logistic chain to realise what is happening and put in place controls to ensure the material does not leak from the WEEE chain.

“By deploying stricter monitoring systems, reducing the number of people involved in the supply chain and educating 3PL staff about the dangers of untreated waste being removed from the chain, then the threat can be stamped out before it becomes an even bigger problem.

While this may seem like a negative topic for 3PL organisations to be highlighting, it offers the industry and other organisations involved in the waste supply chain a positive opportunity. By educating clients and partners, it will demonstrate that the

industry is taking the threat seriously, placing logistics organisations as leaders and experts while also showing those disposing organisations at the start of the chain that their reputation is valued. Such activity will also act as a show of strength to those outside forces that are involved in the theft of WEEE that the practice will not be tolerated.” RLM



Graham Davy is Global Chief Executive of Sims Recycling Solutions, a division of the Sims Group. Sims is the world's largest

listed metal recycler with over 200 operations globally. For further information on Sims, its operations and its services, please visit [www.sims-group.com](http://www.sims-group.com)

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*Service Lifecycle Management (SLM), is an integral part of Reverse logistics and while there are many areas of functionality that today's SLM solutions can support, only the "best-in-class" offering provide users with all of the tools they need to increase their "velocity of business." Part 1 of this two-part article outlines the key components of a "best-in-class" SLM solution, and provides detailed descriptions of the features and benefits of the first three major components. Part 2, which will appear in the July/August 2008 issue of Reverse Logistics Magazine, will focus on the remaining three components, and summarize how all six work together toward the common goal of meeting—and exceeding—the total reverse logistics needs and requirements of your customers.*

*by Zack Bergreen*

The gradient of success in today's global services economy is based to a large extent on our respective abilities to make certain that all of the tools and resources we have at our disposal are focused

is that any service organization can benefit from adopting an increased "velocity of business," not just the large companies or the market leaders. All that's required is access to the same tools and resources that the leaders use to support their customers—and the wherewithal to manage our own customer accounts in line with their respective needs, requirements and expectations.

According to industry analyst, William K. Pollock, president of Strategies For Growth<sup>SM</sup>, "The most successful services organizations are typically those that have already recognized the importance of implementing comprehensive enterprise solutions such as Service Lifecycle Management (SLM) or Customer Relationship Management (CRM) to support their workforce, while also allowing them to build commensurate levels of asset management". In the services sector, we no longer live in a "shrink-wrapped" world—in fact, we never did! However, in order to attain the desired levels of operational performance, most

Research has shown that the key drivers that define the various types of enterprise solutions that service organizations are seeking to carry them through the next technology cycle are the ability to:

- Streamline and automate their business processes;
- Compress the contract-to-cash cycle;
- Identify incremental sales opportunities and improve revenue recovery;
- Collapse non-value-added workflows;
- Enhance resource utilization and reduce downtime;
- Coordinate efforts of the sales, marketing and services organizations;
- Improve compliance with Service Level Agreements (SLAs), contracts, and warranties; and
- Synchronize every customer touch point for increased customer satisfaction.

However, while most service managers will agree that this list represents the principal outcomes they would like to see, the degree of success they may have in actually achieving them may differ widely from one company, or even one manager, to another. What they all should really be looking for is an end-to-end solution that addresses all facets of Service Lifecycle Management; that is, a solution that delivers the functionality they need to address the specific challenges and unique business opportunities that exist in their own relevant market segments.

But, how do they get there? Actually, that's the easy part!

### **How Do You Increase the "Velocity of Business?"**

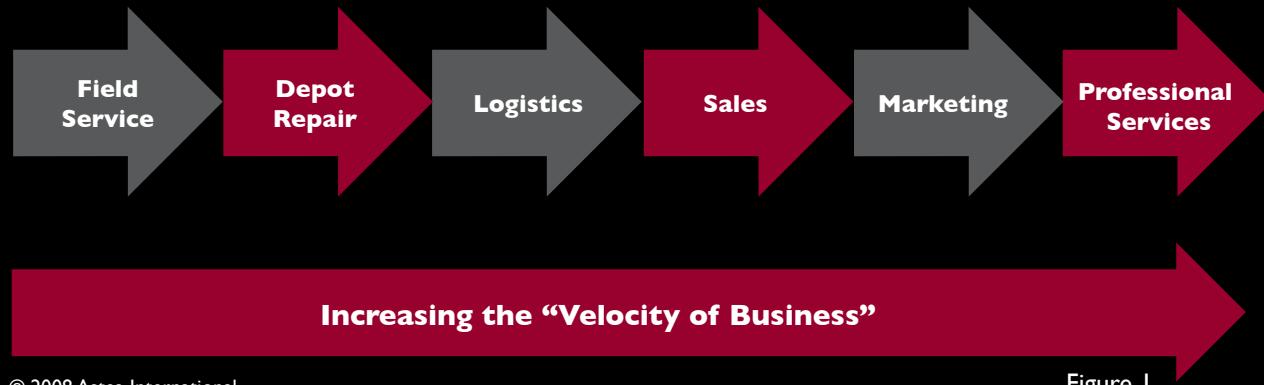
What most service managers are looking for is an effective way to increase existing levels of customer

## **Running Your Reverse Logistics Operation at the "Velocity of Business"**

squarely on increasing the "velocity of business." Regardless of which segments we serve, or however large or small our geographic coverage areas are, the market expects us to support our customers' total product and services requirements better and faster than ever before. The irony

businesses today have found that they are becoming increasingly dependent on the rich and robust, "out-of-the-box" functionality that only comes from the use of state-of-the-art software designed both to increase the "velocity of business," as well as to contribute directly to the bottom line.

## The Six Areas of Functionality that Can Help Your Organization increase its “Velocity of Business”



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Figure 1

satisfaction and retention while, at the same time, lowering their overall operating costs through call avoidance, higher revenue recovery, and increased asset utilization. In the past, these capabilities did not really exist, at least not in a particularly accessible manner. In fact, many managers were forced to decide between either increasing customer satisfaction or decreasing costs, as these two outcomes were rarely achievable together. In fact, the general rule of thumb was that in order to increase customer satisfaction, it almost always involved increasing costs as well.

However, there is new software functionality that allows companies to truly take control over all aspects of their reverse logistics operations, including the ability to increase their “velocity of business.” This functionality allows companies to improve all key components of their service business, including:

1. Field Service
2. Depot Repair
3. Logistics

4. Sales
5. Marketing
6. Professional Services

### 1. Field Service

For Field Service operations, today’s software functionality truly links the field to the front office. Through the use of this type of software:

**There is new software functionality that allows companies to truly take control over all aspects of their reverse logistics operations, including the ability to increase their “velocity of business.” This functionality allows companies to improve all key components of their reverse logistics.**

- Field technicians are enabled to arrive at their service calls completely armed with both customer- and product-specific

information, as well as the parts inventory and documentation they need to resolve most customers’ issues on the first call.

- A self-refreshing task queue indicates prioritized open jobs, with click-through access to greater detail, and seamless integration to knowledge stores for workload management.
- Real-time visibility to warranties, contracts, and service histories ensures capture of billable time and materials as well as the identification of potential sales leads.
- Status and priorities of open calls are constantly monitored to enable exception management based on specific user-defined triggers.

Basically, what this functionality brings to the table is better service performance, reduced cost-to-serve (i.e., pre-empting unnecessary calls), increased asset utilization and, as a result, happier customers.

The beauty of the software functionality is that it supports all field service categories including equipment installations, break/fix, planned maintenance, meter reading and so on. These applications can also be integrated with equipment diagnostic systems for fully

automated solutions that initiate and prioritize service requests and dispatch assignments directly to the field technicians’ PDAs without the need for any human intervention.

The addition of global time zone support also empowers geographically dispersed organizations to allocate, track and transfer issues while maintaining comprehensive call history and satisfying service level commitments. Embedded mobile tools can also be used to enable field forces to work electronically with respect to receiving, documenting, and reporting assignments; and eliminating manual procedures, service delays and paper reporting—in other words, no more handwritten transcription errors, since everything is done electronically.

The principal features users should consider in reviewing and evaluating alternative types of Field Service software should include:

- A universal view of customers, including service histories and state-of-the-art tools for problem solving.
- Automatic assignment, location, and requisition of parts according to requirements for call fulfillment.
- Interactive graphics, calendars, drag-and-drop scheduling, and hierarchical configuration views diagrams.
- Intra-system escalation that alerts staff and customers based on user-specific tolerances (e.g., order status, contracted SLAs, duration in queue, etc.)
- Response times and dispatch prioritization reflecting open calls, contracts, and technician capabilities.

The principal benefits that can be realized through the use of Field Service software should include:

- Elimination of inefficiencies in workflow, redundant databases, multiple service calls, and duplicate data entry.
- Improvement in the visibility to and, therefore, management of, spare parts and inventory levels.
- Unification of activities in a comprehensive management system, synchronized with real-time events.
- Customization to unique business environments so that best and current practices can be harmonized.
- Ability to match assets to needs to minimize service disruption, balance workloads, and maximize first-call resolution.

### 2. Depot Repair

Depot Repair support is also an important functionality for any

organization that offers customers off-site repair, but also wants to keep them apprised with up-to-the-minute repair status. For many customers, depot repair already takes too long compared with on-site support. However, by providing them with up-to-the-minute repair status, some of the “sting” is taken out of the customer’s wait.

A robust depot repair component will also aid the company’s cash flow, by helping to reduce inventory carrying costs. Through this module the company’s operations gain real-time visibility of the overall repair cycle, and management can base its decisions on better qualified repair center information, including more accurate cost accounting. The information gained from monitoring repeat repairs can also provide



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valuable input for improving product quality.

By automating the tracking of goods through the entire repair process, and providing real-time data on location, status, warranty and ownership, depot repair functionality can help organizations improve both productivity and cost containment. The availability of up-to-date information enables better decision-making and prioritization, and limits the risk of overstocking or shorting parts. Further, it reduces costs for unnecessary expediting when standard flows are acceptable.

Return Material Authorizations (RMAs) can be issued from either the repair facility itself or via a service order generated by the contact center or field service agent. This is a crucial element toward providing universal visibility from inception of the repair order all the way through to final disposition. It also facilitates the generation of seamless contract updates to reflect exchanged materials, repair histories, and warranty implications.

The principal features users should consider in reviewing and evaluating alternative Depot Repair software should include:

- Support of in-house, vendor and subcontractor repairs and exchanges.
- RMAs issued for universal merchandise visibility through final disposition.
- Status monitored through repair station flow for real-time visibility within support applications.
- Real-time warranty tracking, tracing merchandise returned to service and/or exchanged.
- Graphic repair data analysis and history logs.

The principal benefits that can be realized through the use of Depot

Repair software should include:

- Creates and processes repair orders, whether internal or third-party, in a seamless process for better database capture and workload balancing.
- Tracks equipment through the repair chain, enabling enhanced spare parts inventory management and customer service (e.g. estimated time to completion).
- Captures billable time and materials automatically to speed service-to-cash cycles.
- Full-loop repair history tracking facilitates enhanced compliance with contracts and industry standards.
- Supports problem/repair statistical analysis to help identify engineering and sourcing issues.
- Integration with the rest of the

software suite allows repair orders and report status queries to be initiated from customer contact centers, field service, field sales and warehouses, as well as the repair depot.

### 3. Logistics

A strong Logistics functionality allows companies to enhance asset management, wherever the product resides (e.g., remote warehouses, service vans, spares pools, or parts exchanges, etc.). It enables a reduction in inventory costs while ensuring that stock levels and movements keep pace with service and sales activities. It also enables parts management for effective field service delivery and SLA compliance. Cost management improves cash flow by streamlining and shortening the cycles from inventory, to usage, to billing and the resulting lower logistics costs open

up opportunities to realize higher margins on products and services. For many companies, the logistics module needs to be flexible enough to support multiple warehousing strategies, ranging from centralized to regional repair depot, as well as service agents' mobile inventories including kits and tools. It should have the ability to track movements through item transaction logs, including in-transit stock. Color-coded priority queues can also be used to expedite key orders through warehouse operations.

The most robust logistics offerings available today are designed to track key areas including component/equipment relationships, serialized and non-serialized items, substitutes and super-sessions, costs, defective parts, vendor and customer returns, and parts held for repair. They are also able to monitor inventories for reorder quantities, stock levels, and reorder points utilizing sourcing rules by warehouse, including vendor ratings by grades, lead times and prices. At a minimum, the system should also be able to support cycle counts and physical inventory adjustments.

The principal features users should consider in reviewing and evaluating Logistics software should include:

- A color-coded demand queue that provides a visual prioritized "to do" list.
- Support of process flow through pick, pack, ship, and receive, including transaction logs.
- Asset management with inventory searches by item, serial number or advanced filter.
- Multi-site and multi-national

spare parts inventory control.

- A parts replenishment engine that automates requisitions to streamline the purchase of depleted stock.

The principal benefits that can be realized through the use of Logistics software should include:

- Visualization of demand and assets, encompassing warehouses, vans, customer sites, repair chains, spares pools, parts exchanges and in-transit.
- Improved stock level control, reduced carrying costs and expedited premiums due to out-of-stocks.
- Correlated sales, service, and repair order processing with physical fulfillment.
- Increased probability of first-time fix and enhanced service delivery.
- Support for all warehousing strategies, including mobile inventory.

Be sure to read the conclusion of this article in the July/August 2008 issue of Reverse Logistics where Zack describes the remaining three components of a "best-in-class" SLM solution; namely, Sales, Marketing and Professional Services.



*Zack Bergreen is Chairman and CEO, at Astea International, global leader in service management software that*

*addresses the unique needs of companies who manage capital equipment, mission critical assets, and human capital. Zack can be reached at (215) 682-2500. Astea's website is accessible at [www.astea.com](http://www.astea.com).*

## Read the Press

Full articles available from: RLA News Center

### Samsung Starts its Own Recycling Program

Samsung has announced its own recycling program in Canada. The program, called Samsung Take Back and Recycling Program, will be a free service that lets customers return empty Samsung-branded toner cartridges for laser and multi-function printers.

### Panasonic Uses Catalytic Reaction to Decompose Plastics Into Harmless Gas for E-Waste Recycling

Panasonic, by which Matsushita Electric Industrial Co., Ltd. is known, today announced that the company has developed together with Kusatsu Electric Co., Ltd. a recycling technology that enables the recovery of metals from plastic-coated wires and plastics used in electric and electronic equipment without causing hazardous side-effects. Using the catalytic properties of titanium oxide (TiO<sub>2</sub>), the innovative technology facilitates recovery of inorganic substances such as metals by transforming organic substances such as plastics into harmless gases.

### US Postal Service Introduces Recycling Program

The United States Postal Service has launched a pilot program that allows customers to recycle small electronics and ink cartridges by mailing them at no cost.

### Sony, Dell & HP Products Top Greenpeace study

A Sony Ericsson mobile phone, a Sony laptop and PCs from Dell and HP have come top of their categories in a study of green electronics devices conducted by Greenpeace.

## 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](mailto:info@RLTinc.com).

\*Job posting is a benefit of Professional Members and above.



# Building an Optimized Return Solution from Logistic Network Commodities

by Eelco Meenhorst

The logistics market in Europe today is characterized by a multitude of high-quality logistics networks ranging from national postal networks to express networks and long-haul road logistics. There is really no need for additional networks, although there is a continued need for increased connectivity amongst these systems to optimize capacity usage, traffic and volumes. The reverse logistics industry is growing rapidly but, given its relatively small size in comparison to express and postal markets, is reliant on existing logistics infrastructure. As a result, when providing a reverse logistics solution, the focus is on customer requirements rather than network limitations. Trucks, warehouses and drop-off points are readily available throughout Europe, with a very high density. The real challenge is to knit all these different platforms together into a seamless reverse logistics solution centred on customer requirements. With a powerful IT system, any reverse logistics solution can be designed without the limitations of an owned logistics infrastructure or network. Traditionally, solutions based on express networks were often the default option in reverse logistics. The rapid development of reverse logistics and its changing role for

many organizations has allowed for more differentiated views on how to address these developing needs. This makes it possible to look at other existing logistics infrastructures, such as national postal networks, as part of a comprehensive fit-for-purpose reverse logistics solution. Obviously, client needs should continue to be the main determinant when selecting the right logistics components. A selection can be made on criteria such as the size and weight of the return.



Pick-up solutions are usually more convenient for heavy and large items. Smaller boxes, up to a maximum of 60x60x60cm (23.6x23.6x23.6 inches) and with a weight below 20 kg (45 pounds) can easily be handled by the national postal networks. Those networks are specifically designed to handle these types of packages. In addition, consumers often prefer to drop off the return instead of having

to wait for a courier to collect it from their homes. Another important criterion is timing. Whereas returns can easily be managed through express, the speed and associated cost of express often overdelivers. The return might just as well be managed with a combination of post and express, or a combination of post and trucking. By looking carefully at the required time of delivery and cost parameters, it is easy to arrive at a customized network solution. This applies to both consumer-to-business and business-to-business returns.

Developing a reverse logistics solution by leveraging available infrastructure through IT requires in-depth knowledge of the different systems. This ensures a design that utilizes the strengths of each system component. The combined postal networks in Europe, for example, are by far the largest logistics system available. With over 120,000 post offices and more than two million other drop-off locations such as mail rooms in 27 markets, the number of accessible specialized drop-off points is unmatched by any other system. This is a benefit for the end-user, who simply drops off the return whenever he wants at any post office or mail room. National postal networks in many markets are characterized by state-of-the-art logistics facilities ensuring high quality. No matter what the origin of the return is, the cost

remains the same, making a solution that leverages the postal network very predictable in terms of cost. And just imagine the capacity of postal networks, able to handle millions of packages per day, ensuring maximum scalability. Whether it is just a single digital camera or a hundred thousand printer cartridges, the postal network cannot easily be saturated. The liberalization of the postal market will mean more competition, which will result in more choice and potential cost savings. The express market, on the other hand, is already an international and consolidated market with a limited number of players. They can offer high speed, but that comes at a premium price, which is not necessarily the right answer when looking to optimize the reverse logistics chain. The overall logistics market remains highly fragmented, with a large number of local, regional and international operators that are able to ship and store. Deploying these different, flexibly based systems into one integrated solution can enable an optimized reverse logistics chain.

The challenge is to ensure that the return travels together with an uninterrupted information flow. When integrating a number of logistics systems into a single reverse logistics solution, a strong umbrella system is required. This umbrella system should be able to receive and process data, but more importantly provide input or assignments to other systems based on clear rules and protocols. Beyond generic Electronic Data Interchange (EDI) capabilities, it should allow real-time and on-demand reporting services as well as easy integration with a client website or call centre. The system should be able to support modern protocols such as SOAP and different data formats ranging from XML to CSV and Excel to EDIFACT in order to easily integrate with and communicate to different systems. Obviously, data safety is critical for a system that needs to be able to interface with numerous

external systems. There are only few commercial systems in the market today that can meet these requirements and are able to function as an umbrella system. Developing a powerful proprietary system therefore creates an immense competitive advantage. It allows you to deploy a fully flexible reverse logistics solution leveraging the strength of existing high-quality networks, but without the burden of capacity in an owned network. This creates an opportunity for fit-for-purpose, customer-centric reverse logistics solutions. Whereas in some returns time is crucial, in other returns a slower consolidated shipment with minimal per-item cost may be preferred. No matter what solution is chosen, the system will be able to deliver and ensure that information always travels together with the return. This allows organizations to manage an efficient return process while creating the possibility to obtain valuable customer data at the same time. Building an optimized return solution based on network commodities is already possible today. RLM



*Eelco Meenhorst, CEO of Cycleon is responsible for overall management and strategic development. He closely works with partners, investors and*

*key customers to enable the company to further expand its leadership position as the only dedicated provider of pan-European reverse logistics solutions.*

*Cycleon is the only dedicated provider of pan-European reverse logistics solutions, leveraging the national postal networks for the first mile, and providing transparency and control throughout the entire return process. Since 2007, Cycleon has been part of the Reverse Logistics Group, which provides a full range of reverse logistics solutions through its group companies CCR Logistics Systems AG, Cycleon Netherlands B.V. and Vfw GmbH.*



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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](mailto:editor@RLmagazine.com).



## Upcoming Events

**WERC Annual Conference – Chicago**  
May 4-7, 2008  
[www.werc.org](http://www.werc.org)

June 22-24, 2008  
[www.electronicsrecyclingconference.com](http://www.electronicsrecyclingconference.com)

**Investment Recovery Association – Houston, TX**  
SPRING '08 SEMINAR & TRADESHOW  
May 19-21, 2008  
[www.invrecovery.org/SeminarSchedule-Spring08.pdf](http://www.invrecovery.org/SeminarSchedule-Spring08.pdf)

**RLA Seminar - Hong Kong**  
Recycling, Reuse & Governmental Regulatory Controls  
August 6, 2008  
[www.rltshows.com/hkg08\\_event.php](http://www.rltshows.com/hkg08_event.php)

**Green West – Los Angeles**  
May 20-22, 2008  
[www.greenwestexpo.com](http://www.greenwestexpo.com)

**RLA Seminar – Detroit, MI**  
RL Issues in the Automotive Industry  
September 10, 2008  
[www.rltshows.com/hkg08\\_event.php](http://www.rltshows.com/hkg08_event.php)

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

**Innovation in Product Giving - Alexandria, VA**  
Gifts in Kind International  
October 13-15, 2008  
[www.giftsinkind.org/productgivingconference/](http://www.giftsinkind.org/productgivingconference/)

**Electronics Recycling Conference & Trade Show - Chicago**

**RLA Seminar – Toronto, ON**  
Retail Reverse Logistics Issues, Spare Parts Management  
Oct 21, 2008  
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# Technical Trends

L. Bryant Underwood

and “if we know the pESN, why can’t I just do some magic math and get the MEID?” Both are good questions—let me explain. A “hash” is a logical function that will give you a fixed length string that will have a low likelihood of duplication as an output after it “digests” a larger string. For example, the text (“The quick brown fox jumps over the lazy dog”) will always equal the SHA-1 hash of 2fd4e1c6 7a2d28fc ed849ee1 bb76e739 1b93eb12 .

**Several years ago the CDMA side of the cellphone business announced that they would be moving away from the ESN structure for mobile unit identification.**

The reason this is useful and the main way a hash is typically used is in generating a signature of a document. If you type a letter or a contract and generate a hash value for that document, and then if you only change a single character in 1,000 pages of text—the value of the hash will change to a totally different value and that value cannot be easily predicted. So hash functions are great to link data or to verify information is unchanged.

This is why a hash was used as the algorithm to generate the pESNs from MEIDs. The problem is that for repair, if your test equipment only gives you the pESN for a cellphone and you need the MEID, there is no way to get from one to the other. In addition, the pESN is not printed on the label of the unit, only the MEID. What repair operations need is an easy way to scan an MEID

and generate the pESN and load that into their shop floor control systems.

What people have been telling me is that by and large the solution that many are using is having receiving staff perform duplicate data entry. First, they will collect the pESN from a public web page that will generate the hash (L4 Digital’s is one of the more popular tools) and then copy and paste the pESN into their shop floor system—clearly not an acceptable or scalable solution. Friends, I feel your pain and have done some work on this problem and there is a much easier solution.

In the Windows API there are a host of ‘library’ files. These are typically called DLLs (dynamic link library) and these files serve to provide various functions that can then be called and drive standardization across platforms. One of these libraries that is very helpful to this task is called “advapi32.dll.” This ▶

(WARNING very technical content this month-but should be very helpful)

## MEID Struggles

Several years ago the CDMA side of the cellphone business announced that they would be moving away from the ESN structure for mobile unit identification. The replacement structure would closely approximate the GSM IMEI structure and would be called MEID. In order to ensure easy roaming and backward compatibility, the phones would also be identified by a pseudo-ESN (pESN) in addition to the MEID. This pESN would be generated based on a cryptographic algorithms and a manf portion of the pESN would have be set to a unique value (80). Although there was some concern about collisions and billing,

all in all, the program has worked well, right? Yes, except for repair. In the last few weeks, I have had a number of friends in the cellphone repair business tell me of the problems they have been having with MEID and pESNs. These problems have only recently come to light as more and more of the CDMA cellphones began shipping with MEIDs rather than ESNs. There are two reasons this MEID issue is causing so many problems for repair operations;

1. The test equipment used in repair will often only echo back to the operator the pESN, not the MEID.

So if you need to verify labeling, you have no way of knowing the unit’s MEID.

2. The algorithm used to make the pESN is a “hash” called SHA-1. The programming of this function is really more optimized for implementation at the FPGA/micro-controller level. Your basic SQL (structured query language—very common database language) programmer working at a repair site will really have a tough challenge in getting this working for a shop floor control database.

So now, I know you have a few questions. First, “what is a hash?”

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[www.unipartlogistics.com](http://www.unipartlogistics.com)



file has a host of cool functions. The one function this DLL provides that we want is the SHA-1 hash. Using this DLL, a programmer need only to;

- Declare the DLL and the variables to expose the functionality
- Convert the MEID from ASCII to its binary value
- Send the MEID to the DLL to be digested
- Take the returned data, lop off the lsb digits
- Add the (80) prefix for the manf code and viola—you have the elusive pESN!

The process is pretty straightforward; the only quirk is the conversion from ASCII to binary. The reason for this is in SQL the symbol “1” is represented as the ASCII value (49). Sending (49) to the hash algorithm and expecting it to treat it as (1) is not a good idea and it will always give you bogus output.

To further help the process along I have included what should be a very clear and simple piece of VFP source code that will do the conversion automatically—free

**The solution that many are using is having receiving staff perform duplicate data entry. First, they will collect the pESN from a public web page that will generate the hash (L4 Digital’s is one of the more..and then copy and paste the pESN into their shop floor system—clearly not an acceptable or scalable solution. There is a much easier solution.**

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for download from RLA (reverselogisticsassociation.org/pesnmeid). Download this file and shoot it over to your database programmer and they should have no problem getting your pESN/MEID troubles behind you. If you have any struggles, feel free to email me your questions—I will help as my available time permits.



*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.*

We are the Association that specializes in Reverse Logistics and we have found that many OEMs and retailers spend a lot of time, energy and money trying to find the right Third Party Service Provider. So, we have developed a way to facilitate your search at NO COST to you, while you remain anonymous. And, we call it RL Quote.

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**RESEARCH**



# ALOM Celebrates 10 Years of Forward and Reverse Supply Chain Excellence



## Quick facts about ALOM:

- Customers rate the company 4.9 on a scale to 5.0
- Able to process returns and ship out of 14 locations worldwide
- Processes millions of units each month
- Diversified customer portfolio, mostly high-tech, but also medical equipment, financial, e-commerce and government
- ISO certified since 1998
- Privately held, certified woman-owned

Gailen Vick, Reverse Logistics Association (RLA) President and CEO, recently had the opportunity to mingle with ALOM customers, partners and staff at the company's Fremont, California headquarters. The occasion was ALOM's 10 year anniversary as a leading supply chain company, offering full turnkey package assembly as well as outbound and reverse logistics.

Several international customers flew in to join a multitude of local Silicon Valley clients to honor ALOM's decade of outstanding service. ALOM mainly caters to high-tech companies, but also serves customers in the health care, financial and government sectors. Munching on award-winning food with a jazz orchestra in the background, guests discussed supply chain, product launches along with less serious topics.

During the tour of the company's 150,000 square foot headquarters, ALOM President & CEO Hannah Kain showcased several company initiatives to maintain an environmentally responsible operation. From high-efficiency energy saving lights to recycling practices to source reduction, ALOM is committed to keeping the world as clean as possible.

Founded in 1997, ALOM's guiding principle has always been to provide exceptional supply chain services. From the very beginning, ALOM offered web-based reporting with extranet sites, and was thus a pioneer in the field. Today customers can follow online (and in real-time) hundreds of different activities, including order and return status, as well as inventory usage and financial status. These systems earned ALOM special recognition from Cisco for its advanced use of technology.

An e-commerce fulfillment pioneer, ALOM developed state-of-the-art systems to provide e-commerce, retail and business-to-business fulfillment for its prestigious customer base. High-speed production lines and proprietary production planning systems allow the company to assemble and package products just-in-time, based on customer orders. This minimizes inventory requirements and allows extreme flexibility, making ALOM's services equally popular with the customer's operations, finance and sales department staff.

An increased volume of outbound shipments resulted in more returns. In response, ALOM developed returns handling and processing as one of

its core competencies. Their returns processing system offers the option of different levels of notification and automation. For example, a customer may want to be notified each time a return is received. In another case, a customer may want all pre-set parameters in which ALOM automatically disposes of the return based on assessment of the condition, credits the customer, and provides the reporting.

According to Kain, returns have a tremendous impact on a company's

profitability and on the environment if they are not handled appropriately. At ALOM, returned units are tested, repaired, and refurbished or recycled in a controlled process. In fact, while ALOM joined the RLA to get the opportunity to benchmark its returns practices and continue to gain knowledge, another deciding factor was RLA's activities to increase awareness of the importance of returns.

Looking back at 10 years in the supply chain, market changes during the past decade include a growing number of customers shipping hardware. Embracing this need, ALOM developed the ability to provide light assembly services, configuration management and last minute uploads. Along with sophisticated IT systems, ALOM is known for strong process control and dedication to continuous improvement. ISO-9000 certified since 1998, ALOM's quality focus is legendary. Organized and streamlined processes have allowed ALOM to experience explosive growth with very minimal rise in head count.

In recent years, ALOM expanded to provide services in Europe. This year the company began to serve Asia. With this growth, ALOM can now



produce, ship and handle returns in the Americas, Europe, Asia, Africa and Australia, making it a truly global company fully capable of handling global supply chain challenges.

As the 10-year party was winding down, cabinets showcasing ALOM's awards once again became visible. During its first 10 years in business,

ALOM has been recognized as a top-notch supplier, a diverse company, a community leader, an IT-savvy business, and an industry leader. Entering its second decade, ALOM is poised for growth and is uniquely suited to service advanced and discerning customers.

# Returning thoughts...

## Reverse Logistics Metrics: Targeting Success with a Performance Management Framework



by Paul Rupnow

Reverse Logistics metrics are essential to managing and improving a Reverse Logistics operation, whether you are an Original Equipment Manufacturer (OEM) or a third party Reverse Logistics service provider. Developing a framework to define and monitor your metrics can help you to better target success for your Reverse Logistics operations.

“Utilizing key performance indicators and industry benchmarks can help a Reverse Logistics team become a “Best in Class” operation,” says Michael Blumberg of Blumberg Advisory Group in a recent presentation of Reverse Logistics research and benchmarks. To help you help identify and define the Reverse Logistics Key Performance Indicators to monitor and benchmark for performance improvements, I have prepared a sample framework with some key performance metrics below:



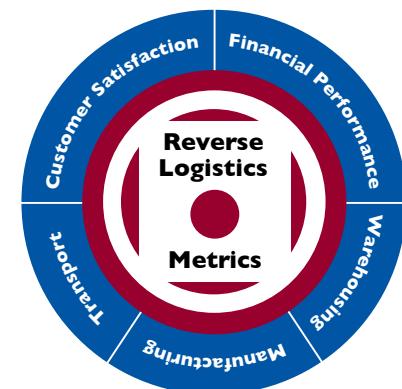
A typical manufacturer may identify the key areas of Reverse Logistics as: Customer Satisfaction, Financial Performance, Manufacturing (or Returns Processing and Refurbishment), Transportation and Warehousing. Within each operational area, key performance indicators can be established. Some sample indicators are outlined below as a starting point to develop an outline specific to your requirements. In addition you may want to include the indicators outlined with your customers in your Service Level Agreements (SLAs):

- Financial Performance**
  - Recovery Rate on Returned Assets
  - Processing Cost Per Return
  - Repair Cost per Return
  - Credits issued for Returns
  - Warranty Rate
  - Warranty Allowance
  - Warranty Expense
  - Year over Year change in Warranty Expense
- Customer Satisfaction**
  - Return Rate (Defect and Non-Defect)
  - Order Fill Rate
  - Transit Time
  - Backorder
  - Customer Order Promised Cycle Time
  - Time to Process Credit
  - Time to Process a Warranty Claim
- Transportation**
  - Inbound Freight cost per unit shipped
  - Outbound Freight cost per unit shipped
  - On Time Pickups
  - On Time Deliveries
- Manufacturing**
  - Manufacturing Cycle Time (Receipt to Refurbishment)
  - Defect Rate
  - Scrap Rate
  - No Trouble Found Rate
- Warehousing**
  - Number of Inventory Turns (Unprocessed, Refurbished Goods)
  - Replacement Inventory
  - Months of Supply

Use this example to get started defining your metrics, developing your framework and targeting Reverse Logistics success. Define your benchmarks and compare them with others in the Reverse Logistics industry. Your customers, your Reverse Logistics team and your CEO may thank you for your forward thinking.

Good Luck!

Learn and Share Reverse Logistics best practices, insights and strategies with Paul Rupnow at [ReverseLogisticsProfessional.com](http://ReverseLogisticsProfessional.com)



A Sample Reverse Logistics Performance Management Framework



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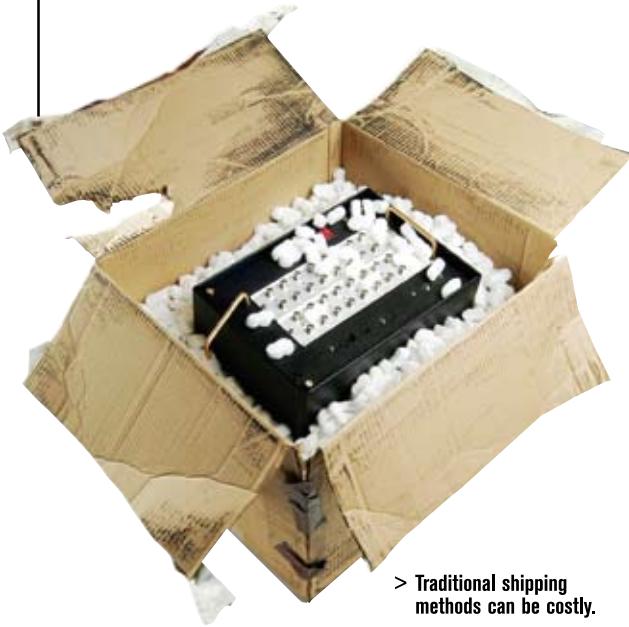


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