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REVERSE LOGISTICS DIGITAL magazine®

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AMSTERDAM SHOW EDITION

OFFICIAL MAGAZINE OF THE REVERSE LOGISTICS ASSOCIATION®

Edition 39

8th Annual RLA/RLTS Conference & Expo

AMSTERDAM

Over 400 RL Professionals & 200 Companies will be in Attendance

Location:
Mövenpick Hotel Amsterdam City Centre

Date:
Workshops - June 19, 2012
Conference & Expo - June 20-21, 2012

Two concentrated Days of RL Thought Leadership, Innovation and Networking!

The Reverse Logistics Association Conference & Expo kicks off on Monday with workshops and committee meetings. Tuesday and Wednesday's events include the opening of the exhibit hall, the keynote address, sessions presented by RL professionals, leading academics and interactive panel discussions.

Session topics include "Controlled Reverse Chains for End-of-Life Products," "Returns Management and Asset Recovery" and "Challenges and Compliance with Cross Border Commerce." 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 OEMs, ODMs and Retailers will be looking for Third Party Service Providers that can manage Reverse Logistics in Europe and around the world. This is a rich opportunity for OEMs and Branded companies to identify future service partners among the many exhibitors showcasing their Reverse Logistics solutions.

For more information, visit: www.RLAShows.org

REVERSE LOGISTICS® ASSOCIATION
CONFERENCE & EXPO

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Message from the Editor

Amsterdam, I'm told, has 780,000 people who live in Amsterdam own an estimated 881,000 bicycles. Clearly, the Dutch love their bikes but moreover they have found a way to make biking easy, fun and safe for people of all ages. The rest of the worlds large cities should adopt a culture like this, so what is Amsterdam doing?

Well, they have dedicated bike lanes everywhere. Major streets, side streets, parks and along the canals you will see bikes, bike and more bikes. Parking your bike is no problem, not only does this city provide bike racks everywhere but there are also bike-parking garages. A mammoth parking garage is right at the entrance of the main train station (pictured here).

The city is set up for bikes as a city would be for vehicles. They signal their turns, watch out for crossing traffic and there are signs posted warning pedestrians to watch out for cyclist.

New ideas are emerging in Amsterdam as well. Communal bikes are putting up public parking pads in different locations, you pay a yearly fee and pick up and drop off the bike as you wish. Electric bikes with charging stations are being introduced to those who no longer can pedal long distances but don't want to give up the cycling lifestyle.

What's not to love about a city that bikes? It's good for the environment, you save money on gas and vehicle maintenance, its amazing exercise and it allows you to be outdoors when now a days most of us spend the day inside.

So ride your bike to help the environment and your wallet!

Happy Travels!

Lyndsey Turner, Editor • Editor@RLA.org

OUR MISSION

Our mission is to educate and inform Reverse Logistics professionals around the world. RLA focuses on the reverse logistics processes across all industries. No matter the industry — High Tech, Consumer Electronics, Automotive, Medical/ Pharmaceutical, Food and Beverage, Apparel, or other — 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 and to be a catalyst for innovation in developing and implementing new RL processes. We have been and will continue to provide our services to the industry at a moderate price.

Managing the latest information in services such as 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 through our membership services. We serve manufacturers and retailers in a variety of settings while offering ongoing updates on market trends, research, 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- and medium-sized service providers have found that RLA resources help advertise their services to a regional and global audience. OEMs like Microsoft, HP, RIM, and Sony, along with Retailers like Wal-Mart, Canadian Tire, Tesco and Best Buy all participate at our events. Through RLA Events, RLA Connect services and our publications – RL Magazine and the Weekly News Clippings email – we help OEMs, ODMs, Branded and Retail companies find service partners and solutions providers that were previously unknown to them.

REVERSE LOGISTICS ASSOCIATION

Message from the Publisher

THINK SESSIONS WITHOUT AN AGENDA

Our staff at RLA is preparing for the Conference & Expo in Amsterdam which will be held on June 19-21 at the Mövenpick Hotel Amsterdam City Centre. I can't think of a better place to be in June, Amsterdam is just lovely, the museums are world class and going bicycling on the country side along the canals is a must!

I love the fact that over 25% of business commuters in The Netherlands travel on bicycles to work. It must be the Dutch roots from my mother (Lola Van der Mark) that compels me to leave my home each morning, no matter if rainy or sunny day to get a little exercise on my commute to work. In The Netherlands, commuting by bicycle is common (Wikipedia.org). Starting in 2005 a new record for the average bike trips surpassed cars (FietsBeraad). They even have a Dutch Cycling Embassy that promotes the use of bicycling as the first form of transportation. Look at the use of Bicycling list by country; The Netherlands 26%, Denmark 19%, Switzerland 11%, Germany 10%, Austria 9%, Belgium 8%, Sweden 7%, the United States, Canada and Australia are at the bottom of the list.

You might wonder why I'm spending so much time on bicycling. Well, in the past I have asked you to "sit down and review…. two areas; non-essential vs corporate objectives." I have found that everyone (including me) needs time to think in order to make these decisions. It takes me just over 30 minutes to travel the 8.3 miles to my office, during that time new ideals and thoughts seem to pour into my mind. By the time I reach the office, I'm full of creative ideas that I can share with my staff.

While visiting companies around the world, I find that most employees don't have time to think, they are doing their job! They don't schedule or plan for thinking. It is a must if you are going to stay competitive with the world market demands of Reverse Logistics. I encourage every company to review employees to see if they have planned some time for "just thinking." Departments should have off-site meetings at least once a quarter to meet with an agenda of nothing other than to discuss ideas, thoughts about improving their company. A Saturday is best, because no phones are ringing. A breakfast meeting at 7 AM finishing at 9 can fit for a "think session". You will be surprised by the results.

Gailen Vick -
Founder & Executive Director
www.RLA.org

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:

Jack Allen – Scientific Atlanta, a Cisco Systems company

Jack Allen currently serves as Director of Global Supply Chain Processes at Scientific Atlanta. In his role, Jack is responsible for the creation, development and performance of Scientific-Atlanta's supply networks in the United States and internationally. His leadership and commitment to the recent success of several product and distribution center transfers, the development of a cross functional supply chain team and the development of an integrated forecasting/ production planning/procurement supply chain planning process resulted in the improvements in Scientific-Atlanta's supply chain and significant annual savings for Scientific-Atlanta.

Christopher Gant – FedEx

Chris Gant is Director for FedEx Supply Chain Sales. He is responsible for all business development strategy and execution for both the FedEx SupplyChain Systems and FedEx Emerging Products Sales teams.

A 20-year veteran of transportation, logistics and electronic commerce, Chris has extensive expertise in the development and delivery of complex supply chain solutions for some of the world's largest corporations inclusive of both Forward and Reverse Logistics. He began his career with FedEx Ground (formerly RPS) in 1989 as an operations coordinator before joining the company's sales team in 1991. He quickly rose through the sales leadership ranks, holding the posts of area sales manager, district sales manager and senior national account manager for FedEx Ground.

Edwin Heslinga – Microsoft

Edwin is currently Director of Reverse Logistics Programs and Policies for Microsoft Devices. In his position Edwin is responsible for development and enforcement of policies surrounding returns and all related costs to the returns and is also involved in the Customer Satisfaction Continuous Improvement Council. Working with Microsoft Call Center and the Microsoft Manufacturing Operations Edwin is driving the improvement of consumer satisfaction through agent assisted support and on-line support while managing the costs.

Prior to working for Microsoft Edwin worked for Jabil Global Services as the Director of IT Solutions, where he worked with various teams on the proposal and implementation of reversed logistics services for various companies at the Jabil factories around the world.

Charles Johnston – WAL-MART Stores, Inc.

Charles Johnston is Sr. Director of Reverse Logistics at the Bentonville Return Center, WAL-MART Stores, Inc. Chuck has been with WAL-MART for the past 14 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.

Bernie Schaeffer – Motorola

Bernie Schaeffer is corporate vice president of Post Sales Support for Motorola Mobility. His global organization is responsible for providing both in- and out-of-warranty repair services to both consumers and carriers, provides consumer support services through call center, web access and on-device solutions, is the fulfillment engine for value-added services, manages asset recovery on equipment returns and is the source of information on product field reliability.

Doug Schmitt – Dell

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 Senior Manager of Asset Recovery 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.

Susan Wackerman – Hewlett-Packard Company

Susan Wackerman is currently a Sr. Operations Manager in the Americas Supply Chain for HP's Imaging and Printing Group. In her position, Susan is responsible for the Recycling Operations for HP Americas and the Returns Operations / Remarketing for HP Americas Imaging and Printing Group. This includes supply chain development, reverse logistics, disposition and processing, refurbishment, resale, channel management. For Recycling Operations her product responsibilities cover all HP product categories including inkjet and laser printing, digital imaging, supplies, scanners, shared printing, PCs, notebooks, desktops, servers.

Complete biographies of Advisory Board Members are available from the RLA site at: www.ReverseLogisticsAssociation.org/company_advisory.php

Reverse Logistics Association Industry Committees

REVERSE LOGISTICS ASSOCIATION®

Industry Committees are 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 RLA Conferences & Expos. Industry Committees educate the industry on reverse logistics:

- "Best Practices"
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- Regulations on a Worldwide & Regional Basis
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Join today at www.RLA.org

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Reverse Logistics of Aftermarket Motorcycle Parts

by Maricon Williamsg

Logistics leads us to understand the uproar of aftermarket motorcycle parts. Here are the ways of its overwhelming support… When we try to track the logistics of aftermarket motorcycle parts we can say that it is doing good. Different parts may mean different distribution strategies. Aftermarket spark plugs and filters, for instance are placed in several layers of distribution between producer and end user.

Aftermarket parts have high outourcing percentage. In fact, some companies are even supplying the European market. Some of these companies have centralized warehouses. Aside from that, they also provide emergency back up for vehicle-off-road (VOR) demands through airfreight. Negotiations and sales are made more accessible and effective because they are extending their facilities through agents. Nonetheless, some are relying on their franchised dealers for distribution, sale and delivery.

Delivery nowadays is more efficient than the past. A conclusion has been arrived at stating that we have faster deliveries because the broader range of stock. Another factor is the availability of back up and facilities to support it. The supply chain is maintained and bolstered. The delivery notes of aftermarket motorcycle parts is quite impressive.

Every aftermarket

motorcycle parts manufacturer is battling with their competitors. They compete in different ranges. Some are improving the aftermarket's quality in order to compete with the Original Equipment Manufacturer parts. Others are trying to slash the price down and are creating a cheaper version of aftermarket motorcycle parts.

There is an stigma attached to the minds of the motorcyclists. It is all about the presumed poor quality of the aftermarket motorcycle parts. This is definitely a misnomer. There are aftermarket motorcycle parts that can actually compete with the OEM's quality. However, there are also those wh cannot topple its well-established identity. Nonetheless, what is important is the rider's choice. Whether he choose aftermarket or not, the choice lies in his discretion alone. However, his choice must be guided by the knowledge, observation and experience. They should be reminded of how to choose the best choice.

Aftermarket motorcycle parts logistics are getting better and better. This is also brought about by independent aftermarket motorcycle repair shops. These shops recommend the use of aftermarket motorcycle parts. Consequently, this phase has proved a more profitable aftermarket sector. They are the ones who boost the sales of aftermarket parts without the need too much marketing.

The accumulated help coming from pools of experts from warehousing, transport, inventory, sale and logistics make the aftermarket market bigger, better and more effective!

RLM

Maricon Williams - Author and writer for many publications worldwide.

What is the Reverse Logistics Association?

REVERSE LOGISTICS ASSOCIATION®

At this year's RLA Conference & Expo in Las Vegas you may have noticed a television crew roaming around. The crew was there to capture response to the conference and make a video that displayed the essence of the Reverse Logistics Association. They were also filming segments for a new video series in RL Digital magazine called RLA Rewound. As you view it, you may see some familiar faces. A big thank you to everyone who took time out from their busy conference schedule to stop and talk with our reporter. We hope you will share the video with friends and colleagues as you introduce them to the association and explain what we do and how we can support them. Stay tuned, because we may be talking to you for the next series of videos for RLA Rewound.

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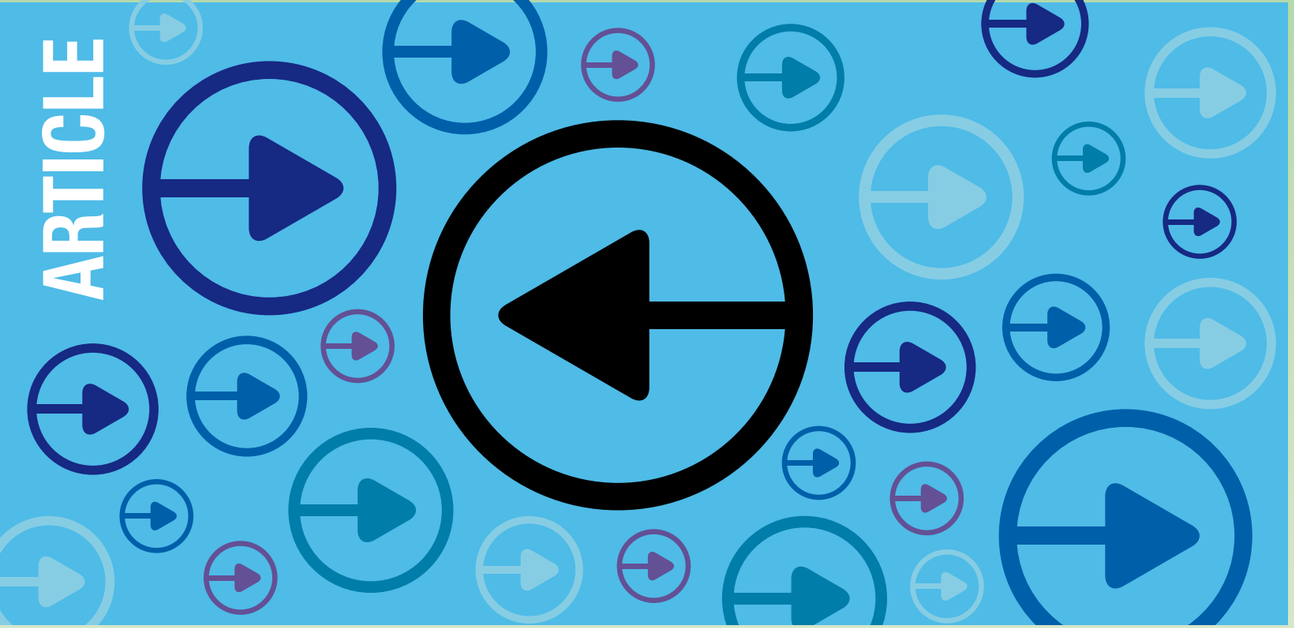

Logistical Counter March: An Analysis of Reverse Logistics in the U.S. Marine Corps

by Dave Wikler, Marine Corps

In his 2001 article, In Through the Out Door, Jim Whalen wrote his often quoted statement, "In an ideal world, reverse logistics would not exist", which is to say, in a perfect logistics and supply chain scenario, we would not have to worry about reverse logistics operations because there would be no returns, defects, or waste. The reality is that we do not live in an ideal world and, contrastingly, defective and unwanted material abounds. As the need for lean, expeditious, and fiscally conservative sustainment support moves to the logistics forefront, effective reverse logistics management has become paramount in practically all organizations that use forward logistics; the U.S. Marine Corps is no exception.

In the last eighteen years reverse logistics has evolved very rapidly within the Marine Corps to the point that its reverse logistics chain contains an average of approximately $300 thousand per day more in principle end-items (PEI) and material than the forward supply chain that supplies repair parts and other items to its operational units (Scharfen, 1994). Furthermore, on any given day there is an average of over a thousand individual items of equipment and material in the Marine Corps reverse logistics chain (Swift & Chandler, 2003). Reverse logistics management in the Marine Corps is increasingly paramount to their fiscal savings relating to inventory, equipment availability, compliance with the Code of Federal Regulation (CFR), and overall mission readiness.

There has been a metamorphosis of the relationship between the military and civilian sectors shaped by a greater and more intimate technological collaboration, an increase in contracted logistics support (CLS), and the constraints of and lessons learned from the Global War on Terrorism (GWOT), which has ultimately level-set their relationship to the extent that their present-day shared knowledge is equivalent.

The Marine Corps' definition of reverse logistics captures the essence of the civilian sector definition as "the science of planning and carrying out the reverse movement of equipment and material to support maintenance, re-acquisition, evacuation, and disposition thereof" (MCWP 4-12, 2002). This definition is intended to meld with the Marine Corps' mission and function of providing power projection from the sea, using the mobility of the United States Navy to deliver combined-arms task forces rapidly, thus its reverse logistics processes are tailored to this end in breadth, depth, and efficiency alike. The Marine Corps' in-depth perspective on reverse logistics centers on the sustainment, reconstitution, and redeployment of equipment and material as to support the expeditionary functions of its operational logistical processes. This has fostered the requirement for an integrated and embedded

logistics capability (IELC) that allows for a reduction in repair cycle times, transportation, inventory, and defects, while eliminating the risk of over production and over processing (Swift & Chandler, 2003). Using business models from the civilian sector, specifically twenty-first century computer and telecommunications technology, the Marine Corps' logistics integration reduces duplicative processes, while

embedded support allows for expeditious response to shifts in asset posture and supply chain needs allowing for greater anticipatory capabilities and less contaminated reverse logistics channels.

In the later 1990s, the Marine Corps merged its two largest logistics support entities, the Marine Corps Logistics Bases, which dealt with mostly new acquisitions fielding and depot-level repair of principle end items, and the Marine Corps Material Command, which was tasked with provision of repair resources and management of secondary repairables (SECREPs), to form the Marine Corps Logistics Command (MARCORLOGCOM) (MCO 4790.19, 2001). This "one-stop-shop", of sorts, provides a source of worldwide integrated logistics that includes operational logistics support, supply chain, distribution, depot-level maintenance management, and a world-wide strategic prepositioning capability in support of the operating forces and other supported units to maximize their mission readiness and sustainability (MCO 4000.58, 2005). A major tenant of this initiative is the support of enterprise level and program level total life cycle management (TLCM) through reverse logistics processes. Of these, the most prolific and beneficial are the Depot Level Maintenance (DLMP), Secondary Repair (SRP), Stock Rotation Management (SRMP), and the Enterprise Returns Management Programs (ERMP).

Depot level maintenance can be independent of the location at which the maintenance or repair is performed, the source of funds, or whether the personnel are government or commercial (government contractor) employees due to co-location and collaboration with key vendors and CLS providers. The organic workload is accomplished by Marine Corps Multi-Commodity Maintenance Centers (MC3) located in Albany, Georgia and Barstow, California and other secondary service depots throughout the world. The MC3s provide low cost, high quality overhaul, rebuild, depot-level repair, and modification of ground equipment, while maintaining a high rate of reliability, flexibility, and responsiveness (Winkle, 1996).

A critical component of the Marine Corps reverse logistics and self-sustainment capability is its ability to procure and repair components for its entire ground equipment stock. As part of the SRP, SECREPs consist of components that can be repaired, which generally proves more economical and timely than re-purchase, or recycled. The Marine Corps at one time maintained spare SECREPs at seven principal locations; each operating independently of the others, which resulted in excess inventory service-wide because of the isolation of the inventories and inherent mathematical flaws in the Marine Corps' sparing methodology (Winkle, 1996). The Marine Corps reconfigured their SRP to form enterprise-wide centralized management of SECREPs, which included accountability, responsibility, and funding, thus reducing inventory cost from $41.6 to $25.9 million and increasing end-item availability from 72 to 89 percent (Scharfen, 1994).

The Marine Corps' SRMP strives to enhance equipment readiness, prolong equipment and material service life, and to achieve full use of resources and assets prior to the end of their useful service life and eventual disposal (MCO 4400.194, 1997). Prepositioned equipment is periodically used for short periods in training exercises and real-world operations, but is used less than equipment in fleet units. Equipment in high operational tempo units that receive the most usage are rotated with available equipment which receives considerably less usage (i.e. administrative storage/ deadlines, prepositioned stocks, etc.), thus achieving a more consistent maintenance history and dispersion of equipment wear.

Various programs in use throughout the Marine Corps to execute stock rotation throughout its inventory are the Replacement & Evacuation (R&E), Service Life Extension (SLEP), Mid-Life Rebuild, Product Improvement Program (PIP), and Weapons Exchange for major training commands.

The Marine Corps' ERMP gives thorough consideration to establishing criteria and implementing procedures and systems for managing defective materiel, excess materiel, and materiel requiring maintenance, repair, or overhaul. It uses in-transit asset visibility capabilities, whenever possible, as the basis for identification and selection of materiel to be returned from organizational echelons to wholesale locations in order to leverage various supply structure and the contribution of such returns to improve inventory performance (MCO 4440.31E, 1999). Two of the most prolific ERMP components are the Product Quality Deficiency Report (PQDR) and Warranty Administration programs.

The primary goals of the PQDR program are to maximize equipment and materiel readiness and operational effectiveness, prevent recurring materiel deficiencies, and improve user satisfaction with Marine Corps materiel (MCO 4855.10B, 1993). It provides a user-friendly product quality deficiency reporting and a data feedback system that facilitates appropriate documentation, action/resolution reporting, and specific points of contact for all phases of PQDR processing.

The Marine Corps Warranty Administration program works in close association with the PQDR program by providing a quick and efficient vehicle for the correction of material deficiencies and capture of subsequent data for future analysis. Since the beginning of 1985, the Marine Corps has been required by the Department of Defense (DoD) to obtain and include warranties in contracts for equipment with a unit cost of more than $100 thousand or a

projected total procurement cost of more than $10 million (MCO 4105.2., 1987). The Marine Corps currently has 246 types of equipment, representing tens of thousands of individual items of equipment, manufactured by over 50 separate companies in 29 different states that fall under contractual warranty constraints (MARCORLOGCOM webpage, 2012).

Reverse logistics, although at times referred to in the Marine Corps community as plainly "logistics" or by more specific element titles, is in many ways the life-blood of the Marine Corps and intrical to the success of its expeditious operations. In short, due to its need for resourcefulness in a constrained budgetary environment, the Marine Corps, since its inception, has been re-inventing, re-using, and re-furbishing practically everything it owns. The support of, and interest in, all reverse logistics efforts commence at the highest level within the organization, and thus have the full support of senior and intermediate managers and leadership. Through the use of cross-functional teams, collaborative educational relationships with manufactures and supply chain members, and the use of comprehensive resource planning solutions, the Marine Corps has been able to accurately assess the true value of its reverse logistics, created visibility and traceability throughout the reverse logistics channel, and instituted a continuous improvement mindset (Swift & Chandler, 2003).

The Marine Corps annual logistics budget is slightly over $10.3 billion, which does not include principle end-item procurement or Defense Logistics Agency (DLA) affiliated programs, but does include transportation, purchase of consumable materials, purchase of repair parts, and purchase and maintenance of SECREPs (U.S. GAO webpage, 2012). Comprising a little more than one third of the Marine Corps' total budget and less than four percent of the total Defense Department budget for logistics (U.S. GAO webpage, 2012), it is logical that there is a scant chance for any tangible surplus. However, the Marine Corps consistently closes out the fiscal year under budget for logistics, which is directly attributable to its reverse logistics initiatives that yield a recurring savings of $2.9 to $3.4 million annually (U.S. GAO webpage, 2012).

Through web-based IT solutions, such as the newly fielded Oracle-based Global Command Support System-Marine Corps (GCSS-MC), the Marine Corps has achieved an end-to-end visibility and traceability of its reverse logistics channels. For individuals who perform finance functions, this provides the capability to manage reverse logistics financials on a near real-time basis enabling them to avoid over- and double-obligation as well as seamlessly and rapidly divert recouped funds to new or alternate obligations. Maintenance personnel have the capability to see locations SECREPs need to be repaired, receive preventive maintenance, or be rotated, to include specific defects, as well as where equipment and material is in other entities maintenance cycles, or where repair parts are located locally, nationally, or globally to mitigate double-ordering and facilitate the shortest repair-cycle time possible. Finally, supply personnel can achieve more accurate and efficient inventories in a multi-location environment, project future requisitions of consumables and repairables to include warranty and general expiration dates, transfer surplus repair parts and material to entities that require them, and determine when and where supplies, purchase orders, and work orders, should be deployed within an extended reverse logistics chain.

The Marine Corps continuous process improvement (CPI) initiative has proven to be one of the more intrical reverse logistics best practices since gaining its momentum in the first half of 2004 (SecNav Memo, 2006). Through the methodology of Define, Measure, Analyze, Improve, and Control (DMAIC), this has enabled its workforce to achieve enterprise-wide reverse logistics and equipment readiness objectives through standardized business tools. Some of the most tangible results have been the elimination of waste through minimization of process steps, and reduction of re-work by controlling processes and quality, therefore cleansing reverse logistics channels allowing primary processes to engage more freely (SecNav Memo, 2006).

There are twenty-six major Marine Corps installations within the United States, each with a robust Environmental Management Division (EMD) that is charged with evaluating and continually improving environmental compliance and protection programs, with emphasis on carbon emission reduction, and training and education (MCO 5090.2A, 1998). Efforts center on carbon emission, hazardous waste and recycling, and environmental compliance management through the Marine Corps Environmental Management System (MCEMS) which is a framework of five interrelated components (policy, planning, implementation, inspection and correction/prevention, and management review) consisting of 18 elements ranging from risk mitigation/prioritization to funding and management. This framework is consistent with those used by other military services and Federal agencies and with International Organization for Standardization's (ISO) 14001, an international standard for environmental management systems (EMS) (MCO 5090.2A, 1998). The Marine Corps' EMS emphasizes continual improvement through effective policy, planning, implementation, checking and preventive or corrective action, and management review (MCO 5090.2A, 1998).

The Marine Corps embarked on the aggressive implementation and use of Combined Heat and Power (CHP) at four of its major installations in early 1999. The

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cogeneration power plant concept was adopted with combustion turbine generators that produce up to 7.5 MW of electricity and hot water, generated using waste heat from the turbine exhaust, for heat and domestic purposes in most buildings aboard these installations. Absorption chillers were implemented to produce chilled water from the CHP generated hot water for air conditioning systems. With an efficiency of over 64 percent, the plant uses 24 percent less fuel than a conventional energy-supply system. Based on this comparison, the CHP system avoids an estimated 19,700 metric tons per year of CO2 emissions, equal to that from the electricity used by more than 2,400 homes (Menassa, et al, 2012). The installations reported an average annual energy costs reduction of $5.8 million (EPA webpage, 2012). This gained the Marine Corps recognition by the Environmental Protection Agency (EPA) with the Energy Star Combined Heat and Power (CHP) award for taking an efficient, clean, and reliable approach to generating power and thermal energy from a single source. Over the past twelve years, the Marine Corps has capitalized on this successful program to employ CMPs at practically all of its installations, and improvements are being made continually.

The Marine Corps' reverse logistics movement of equipment and material to support maintenance, re-acquisition, evacuation, and disposition thereof, has proven vital to its modern day mission and function of providing combat power through combined-arms task forces in an expeditious manner. The IELC and use of twenty-first century IT and telecommunications technology are tailored in breadth, depth, and efficiency alike to facilitate the sustainment, reconstitution, and redeployment of equipment and material in support of the Marine Corps' expeditionary operational logistics functions and processes. End-to-end visibility and traceability has been achieved through the use of IT solutions such as GCSS-MC and its commitment to CPI to reduced process cycle times, improved safety, provide affordability and flexibility to elevate their ability to meet emergent requirements, and improved customer satisfaction. Additionally, the Marine Corps has achieved the cultural shift and transition to green and carbon credit supportive practices through the establishment of EMDs to manage the MCEMS, and hazardous waste minimization and reutilization and recycling programs.

It has been said that the ultimate goal of a successful reverse logistics program should be to phase itself out over time through systematic process improvements (Whalen, 2001). The Marine Corps will most likely never reach this goal as it will undoubtedly become more reliant on its reverse logistics programs in the future, and as it continues to realize the utility and value they hold. As the nation requires the Marine Corps to be more versatile, expeditious, and engage in operations on multiple fronts; as conservation of the environment and non-replenishable natural resources becomes increasingly paramount, and federal regulations respond with greater restrictions, so does reverse logistics management in the Marine Corps become increasingly intrical to their fiscal savings relating to inventory, equipment availability, compliance with the CFR, and their overall mission readiness.

RLM

A twenty-five year Marine Corps veteran of logistics and ground equipment maintenance management, Dave Wikler currently works for Headquarters Marine Corps, Installations & Logistics as a civilian Logistics Management Specialist and Supply & Maintenance Analyst.

Read the Press

BrightPoint Americas Announces Distribution Agreement to Offer ALCATEL ONE TOUCH Devices
Indianapolis, IN—8 May 2012—Brightpoint, Inc. ("BrightPoint"), a global leader in providing device lifecycle services to the wireless industry, today announced that its subsidiary, Brightpoint North America L.P., has entered into a distribution agreement with TCT Mobile Multinational Limited, a subsidiary of TCL Communications. Under the terms of the agreement, BrightPoint Americas will provide distribution services to CDMA regional carriers and the ACG group to support the delivery of ALCATEL ONE TOUCH branded wireless devices including Android and full qwerty smartphones to retailers and customers throughout the United States. *CLICK HERE*

Multi-Billion Dollar Global Services Company Selects ServiceCentral's Software Solution
Atlanta, GA—8 May 2012—ServiceCentral Technologies announces that a leading global services company has selected ServiceCentral to provide the core service management software platform for its reverse logistics solutions across the Asia-Pacific region. The multi-billion dollar company will utilize ServiceCentral's solution within their service channels to manage product service, return and repair processes from retail partners to their distributed logistics hubs. *CLICK HERE*

Research In Motion Appoints New Chief Operating Officer and Chief Marketing Officer
Waterloo, ON—8 May 2012—Research In Motion (RIM) today announced key additions to its executive leadership team with the hiring of Kristian Tear as Chief Operating Officer and Frank Boulben as Chief Marketing Officer. *CLICK HERE*

Microsoft Adds New Board Member
Redmond, WA—3 May 2012—Microsoft Corp. today announced that Stephen J. Luczo, chairman, president and CEO of Seagate Technology PLC, has been appointed to the company's board of directors, bringing the board's size to 11 members. *CLICK HERE*

Avnet Integrated Resources' ROUND2 INC. Donates to The Nature Conservancy in Observance of Earth Day Initiative
Austin, TX—3 May 2012—ROUND2 INC., an Avnet company within Avnet Integrated Resources and leading eRecycling service provider announced today that it will be donating $1,480 in observance of their Earth Day initiative that ran throughout the month of April. ROUND2 pledged to donate a tree for every 5,000 pounds of electronics processed in the month of April. With the assistance of employees and several sponsored corporate electronics recycling events in April, ROUND2 was able to accumulate and process 7.4 million pounds of electronics. The Plant a Billion Trees campaign, started by The Nature Conservancy, was established to help rebuild the Atlantic forest on the coast of Brazil. For every dollar donated, one tree will be planted and will directly help The Nature Conservancy's work in the region. *CLICK HERE*

Many happy returns
2 May 2012-BURLINGTON Global Mobility Products Inc. (GMPI) has experienced triple-digit growth for the past three years, all thanks to broken cellphones. *CLICK HERE*

Greentec Makes Every Day Earth Day
Cambridge, ON—2 May 2012—Are your old cell phones, computers, ipod/mp3 players, digital cameras and toner cartridges gathering dust in your office or home? Don't know what to do with them? Greentec has all the answers. *CLICK HERE*

Brightstar Selected as dtac Thailand's Exclusive Supply Chain Provider
Miami & Bangkok—2 May 2012—Brightstar, the world's largest specialized wireless distributor and a global leader in services and solutions for the wireless industry has been appointed as the exclusive supply chain provider to dtac Thailand, one of the country's leading mobile operators and part of the Telenor Group of Companies. This three-year agreement includes strategic sourcing, device management, supply chain planning, channel support and warehousing and logistics services. *CLICK HERE*

Pantaloon to demerge its branded retail biz
30 April 2012-Future Group, in an announcement made to the exchange, said it intends to spin-off Pantaloon Retail from Pantaloon Retail India Limited. On completion of the process, the demerged entity will automatically get listed on the NSE. *CLICK HERE*

Barnes & Noble, Microsoft Form Strategic Partnership to Advance World-Class Digital Reading Experiences for Consumers
New York & Redmond, WA—30 April 2012—Barnes & Noble Inc. and Microsoft today announced the formation of a strategic partnership in a new Barnes & Noble subsidiary, which will build upon the history of strong innovation in digital reading technologies from both companies. The partnership will accelerate the transition to e-reading, which is revolutionizing the way people consume, create, share and enjoy digital content. *CLICK HERE*

BrightPoint and Foxconn Global Services Division s.r.o. Collaborate to Deliver Technical Aftermarket Services Throughout EMEA
Indianapolis, IN—25 April 2012—Brightpoint, Inc., a global leader in providing device lifecycle services to the wireless industry and Foxconn Global Services Division s.r.o., which is part of Hon Hai Precision Industry Co. Ltd. also known as Foxconn Technology Group, the world's largest manufacturer of mobile devices, today announced a strategic alliance to provide technical aftermarket services to both existing and new customers throughout the EMEA region. *CLICK HERE*

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Operations and Development Director
TESCO

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Pre-conference workshops will be held Tuesday. Wednseday kicks off with the Welcome Address by Gailen Vick, President of RLA followed by the Keynote Address, speaker sessions will commence after lunch and continue throughout the day and into Thursday. Thursday ends with the closing remarks and lucky draw.

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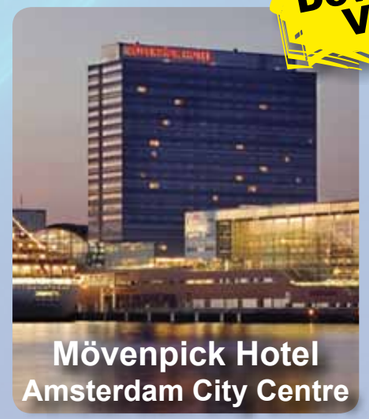

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The focus of 3PSPs will be to help European OEMs & Branded companies become aware of RL support on a global basis. This is a rich opportunity for OEMs and Branded companies to identify future service partners. There has never been an opportunity like this for 3PSPs to sit down face-to-face with the key outsourcing decision makers from the major OEMs and Branded Companies.

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Jaap Hazewinkel - Service Parts Planning Manager Europe — IBM

Derek Scott - European Parts Technical Support Supervisor — Canon

Ian Towell - National Returns Manager — TESCO

Charlie O Shaughnessy - Global Returns Manager — intel Leap ahead

Timmy O'Dwyer - Service Programs Manager European Service Logistic — DELL

Jeroen Weers - Global Product Marketing Manager — Spring Global Mail

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Smart Energy Solutions Mean Every Paint Job is Green

by David Wiles, Volvo Trucks

Having cut the fuel consumption of its vehicles over the past few decades, Volvo Trucks is now improving the environmental footprint of its facilities. With reduced energy and paint use and lower emissions of solvents, its northern Swedish paintshop is the most environmentally sustainable unit of its kind in the world. Even so it can offer customers more than 850 colours to choose between.

You need about 20 litres of paint for a single truck cab, and each cab must then be baked in an oven to harden the finish. Multiply this process by tens of thousands of vehicles each year – not to mention the heating and cooling needed for other parts of the paintshop – and it becomes clear that such a facility could potentially have a huge impact on the environment in terms of materials and energy.

But with heat from trash, cooling from nature and paint consumption nearly halved, Volvo Trucks' paintshop in Umeå, northern Sweden, has become a shining example of how smart thinking can shrink the environmental footprint of a major industrial facility.

INVESTMENTS UP, EMISSIONS DOWN

For many years now, staff at Volvo Trucks' paintshop have been focusing on reducing the emission of solvents into the air and improving energy efficiency. Every stage of the painting process has been mapped, right down to the smallest detail. Everyone has been encouraged to come up with suggestions and ideas, and major investments have been made. The results are impressive. Between 1999 and 2008, energy consumption was reduced by 30 per cent. This success is even more remarkable in view of the fact that the amount of painting being undertaken has increased significantly during the same period, partly because of the fact that plastic components that were previously painted in Belgium are now painted in the Umeå paintshop.

FIGURE 1: YOU NEED ABOUT 20 LITRES OF PAINT FOR A SINGLE TRUCK CAB.

"When components are not painted in the same place, it's incredibly difficult to make sure they are the same shade as the rest of the cab. That's why we chose to bring them here," explains Hans Venngren, Volvo Trucks' global process manager for surface treatment.

Energy savings have been achieved by re-using the air in the spray booths and at the plant. The air in the plant is used as incoming air in the painting process, while around 75 per cent of the air in the spray booths is re-used. As a result, the need for air brought in from outside has been dramatically reduced.

FUEL FROM WASTE

Improved operational planning, such as turning off machines when there

are gaps on the production line, has also helped reduce energy consumption. Other energy-saving measures include the installation of energy-efficient electric motors.

"When we started jointly painting the plastic with the cab, the temperature in the paint-hardening ovens was cut by more than 50 degrees and this naturally reduced the need for energy," says Venngren. "Since we required lower temperatures, we were also able to switch from liquefied petroleum gas (LPG) to district heating to heat the ovens."

District heating – fuelled in part by converting domestic waste into energy at a nearby power plant – has also replaced oil in the heating process and the remaining LPG in the afterburning system is now being replaced by environmentally friendly dimethyl ether (DME) produced from biomass.

WHAT A COOL IDEA

One of the most spectacular energy savings, however, comes from the plant's cooling system. The Umeälven river flows just outside the plant and under it there is an underground river that is always cold, regardless of the season. This cold water is pumped through a two-kilometre pipe system into the pipes at the plant. "We then use the water in various cooling systems," says Venngren. "This has enabled us to replace many of the cooling machines that used refrigerants such as CFCs*."

The paintshop has been modernised and production has been streamlined in several different phases and, as a result, the use of paint and solvents has been significantly reduced, together with emissions into the air. In 1988, these emissions were approximately 70 grams per square metre of cab surface painted.

"The corresponding figure today is less than 10 grams, which is a fair bit below the EU's limit of 55 grams per square metre. Even if we still have some way to go, we are still really satisfied with the work we have done," says Venngren.

NAILING THE RIGHT COLOUR

While it is its environmental performance that has attracted attention, the Umeå paintshop is also remarkable for the sheer range of colours it is able to apply for truck cabs. "We are able to comply with virtually any customer request," says Denny Westerlund at Volvo Trucks' communications department in Umeå. As a somewhat extreme example he cites the case of a customer visiting the plant to order his new vehicle, accompanied by his wife. When the customer was asked what colour he wanted for the cab, he shrugged and turned to his wife. A truck driver herself, she hesitated for a moment before holding out her painted nails and saying: "I want this colour."

FIGURE 2: PRE-TREATMENT. THIS IS ONE OF THE "CHEMICAL BATHS" IN THE PROCESS, WHICH ENSURES THAT THE METAL IS TOTALLY CLEAN SO THE PAINT CAN ADHERE PROPERLY.

"No sooner said than done," says Westerlund. "They took a sample of her nail polish and then started running tests to reproduce it. In the end she got a cab that matched her nails. This gives some idea of what we can do."

Volvo Trucks takes great pride in the massive range of colours available at its Umeå paintshop. The palette extends to some 850 hues, tints and shades, which means that customers are certain to get the exact

Money Talks

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FIGURE 3: MOST OF THE WORK AT THE FACTORY IN UMEÅ IS AUTOMATED AND HANDLED BY ROBOTS. HOWEVER, AFTER THE TOPCOAT HAS BEEN APPLIED, EVERY CAB IS CHECKED MANUALLY TO ENSURE THAT THERE IS NO DAMAGE, NO SCRATCHES OR UNEVEN PAINT APPLICATION.

match for their livery or existing fleet. Winter White may be the most-chosen shade among Volvo Trucks' customers, but green will never go out of style.

*CFC stands for ChloroFluoroCarbon compounds, also known as freons.

Facts about Volvo Trucks' paintshop in Umeå:

Top-ten colours

Even though the Volvo Trucks paintshop in Umeå has more than 850 colours to choose between, it goes without saying that not all of them are used that frequently. Here is the top-ten list:

1. Winter White
2. China Red
3. Signal Yellow
4. Ruby Red
5. Volvo Blue
6. Cream White
7. Royal Blue
8. Clean White
9. Gentian Blue
10. Indian Red

41,000 is the number of MWh by which the Volvo Trucks paintshop in Umeå reduced its energy consumption between 1999 and 2008.

RLM

David Wiles

Specialties: Environmental technology, automotive, aerospace, paper and packaging, ITC, engineering and travel.

Photo: Sören Håkanlind

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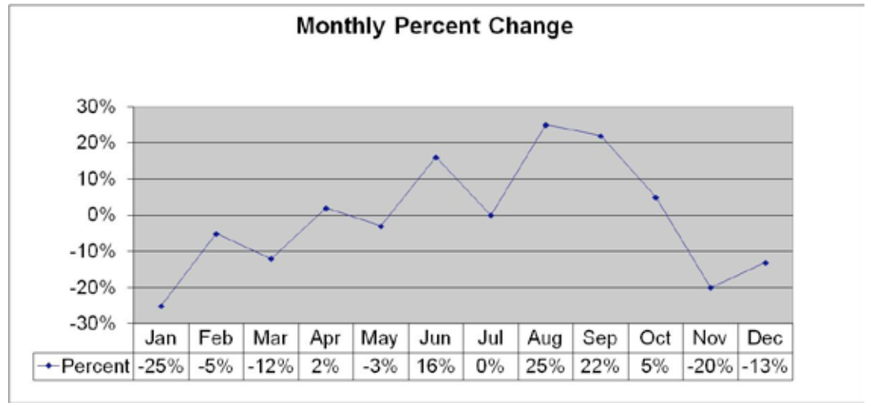
Technical Trends

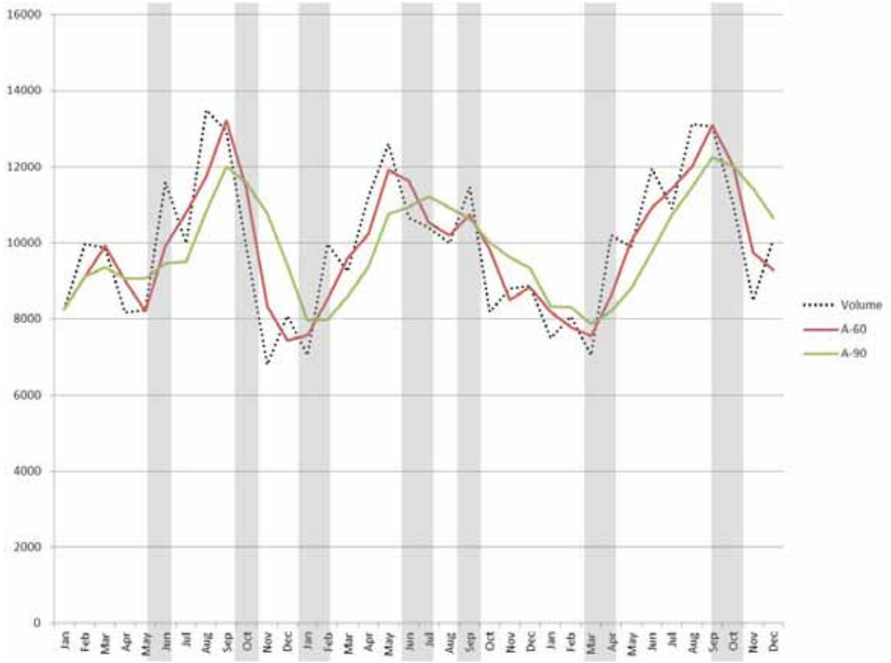
Calling Your Shots

One of the most enduring metaphors from Baseball originates from Babe Ruth in Game 3 of the 1932 World Series. The legend is most generally recounted as Ruth pointed to the center field bleachers as a sign to the fans of his intent to hit a home run. On the next pitch, Ruth indeed hit a home run to center field. While many wax about the accuracy of what really happened that day, the goal is still one of significant importance. In reverse logistics the margins are very slim. A little labor overtime consumed at the wrong time can destroy operational performance. A critical need is a consistent method of performing technical analysis of the gross return trends so that operational performance can be better planned. Thomas Welsh and I have been discussing the dearth of meaningful guidance in predicting inbound trends of defective materials. To that end we wanted to outline some thoughts and suggestions to help you improve your own forecasting methods.

There is a great deal of science around technical analysis for finance and stocks. Much of this is beyond the scope of what we are trying to do here, but nonetheless very interesting. I especially like Elliot wave theory and how it leverages the Fibonacci Series. Very cool techniques for finance and equities just not very relevant to reverse logistics forecasting. The main hinge that all RL forecasting must start with is some understanding of the seasonality of your product line. Each product line will be different, but there will be some trending. For example, the RL trend for navigation products all stems from the two sales peaks they have each year. The first is in the springtime in support of dads-N-grads gifts followed by winter sales for Christmas. There is a similar pattern for consumer notebook computers, while business class machines are more level loaded across the year. As a first step in improving your forecasting you need to take a look at your data and aggregate the gross return numbers over time. From this you can then extract the overall seasonality trend of your product returns. Just this basic metric will help greatly in forecasting your returns accurately.

In the cell phone side of the business I collected data for ten years or so. The seasonality trend I documented grew steadily throughout the year.





Then had a large 'dip' of returns in the summer. We had always assumed this was because people at the distribution centers were on vacation and waited until they returned to send the defectives off for repair. Having this data charted then served as the map for assessing planning throughout the year. Once you perform a similar analysis and define your seasonality profile we then need some tools to apply that will give us triggers for adjusting staffing and materials ordering.

For developing the triggers, the best tool I know of is an adapted version of Moving Average Convergence/Divergence, AKA: MACD. With this method you build two moving average trends that have different periods. One that reacts faster, the other with a more dampened response. As these trend lines cross they will build a signal pattern that points to changes in return rates to help signal needed adjustments to staff and material levels. Like all analytic indicators the process is not perfect. Since it is based on averages, the method is inherently lagging. However, so is the trending of seasonality data. The key to using these methods is in performing analysis to your historical trends to find inflection points. Also because you can see the data in real time the previous signals allow you to anticipate changes based on the hints that historical receipts provide.

The chart above reflects MACD signals from three years of repair data. In this example the two trends are set at 60 and 90 days. The exact days to use in averaging the MACD lines will vary and should be customized based on your experience when you build your own reports. Feel free to experiment and tune the data for the specific market behavior your business experiences. Notice over a three year period there seven signals with two key indicators per year. One in the fall and the second in the spring. Depending on the intensity of the vacation drop-off there may also be a leading indicator in the summer. For even better analysis, overlay turn-around-time or repair backlog (on a separate axis) and you will discover a goldmine of information. The resulting data sets provide a clear and manageable set of triggers to address your business and provide enough levers to allow tuning for the best forecasting. One last benefit is that of training. Much of our business seems incomprehensible to new managers. By using tools like these we can better expose the experienced vision senior managers have in seeing through the fog and calling the shots.

RLM

Bryant Underwood manages Public Safety Sourcing for Cassidian Communications, an EADS North America Company in Frisco Texas.

Returning Thoughts

The Who, What, Where, When and How to Improve Global Visibility with Reverse Logistics Partners

Successful Reverse Logistics depends on many partners performing functions such as transportation, RMA processing, receiving and sorting, repair or fulfillment. The Reverse Logistics challenge is to quickly, efficiently and effectively process each returned unit, while minimizing costs and inventory. This challenge can be extremely difficult when you need to rely on multiple partners around the globe to help you get each returned item processed.

A Best Practice being utilized by many manufacturers' is to improve visibility. But how can you get the same visibility from a small partner on an island in the south pacific as you can from your multi-national shipping partner down the road? An approach to improving your visibility is analyze the who, what, where, when and how of your Partner interaction, operations and relationships.

Who: All partners, large and small. Create a list of each Reverse Logistics partner and the functions they perform (e.g. receiving, shipping, repair). Do not forget your internal operations as you work through this analysis.

Where: If you have not done this already, map out the locations and regions of each partner, as well as the region they serve.

When: The best answer here is real time. But the need for true real time data visibility is often not as critical or as expensive if you can be flexible. For instance, day end updates may be satisfactory, especially if the work is performed while your decision team is in another time zone sleeping.

What: List out what key data you need to have visible in order to improve your performance. You need to monitor your Reverse Logistics processes. The two key areas you will need to monitor for your processes are:

1. transactional data and
2. balance data

For instance: what repairs were performed today (transactional) and what is the balance of units in process at the end of the day in the repair area (balance data).

Visibility data needs should be generated for each key process at each partner, such as:

- Inbound Shipments – expected arrival date, overdue
- Receiving – received today, on the dock but not processed
- Inspection/Sorting – results of inspection/sort (like No Trouble Found or Scrap)
- Test and Repairing – results of Test and Repair, Units on hold or Awaiting parts
- Finished Goods – repairs completed to finished goods
- Outbound Shipments – backorders, in process, percent filled
- Discrepancies, Exceptions and Issues – unidentified receipts
- Inventory – daily ins and outs, balance on hand, refurbished stock ready for re-sale, free stock that can be moved to another partner in need.

How: Now that you know the data you need, how will you get it? How do you ensure it data is accurate and useful? How will you easily analyze the data? How can you ensure all partner data is consistent so you can consolidate it? To address these questions you need to outline your data requirements and then ideally get all of your data into one central data repository for access and analysis:

- Define the data you need: Provide your partners with a detailed list of the data you need. Unfortunately, the Reverse Logistics industry and the varying needs of partners and manufacturers will make it very difficult to develop your own standard data set. But it is time well spent, since if you can measure it, you can manage it.
- Define when you need it: Work with your partners to ensure you are getting timely data
- Provide a place to upload the data: Different partners have different capabilities. Ideally you can provide for all:
- Larger partners may send data to you via XML or EDI
- Smaller partners – you can provide software or web screens for your partners to use to process or collect data results. Alternatively you enable them to download the data from your system and upload data to your system via an easy access partner web based tool for batch or spreadsheet uploads.
- Email or spreadsheets – better than no data, but try to move away from these – they are difficult to consolidate and often result in lost or forgotten data items.
- Provide your partners with the tools they need: It is often not practical for the partner to integrate for everything you need. When there are gaps, best practice companies provide their partners with the tools they need to capture the data, such as:
- Access to the Corporate System or ERP – ideal, but often this can be expensive and require significant training.
- Web Based Reverse Logistics software or Web based screens and tools: Many companies are now very successfully utilizing Reverse Logistics software or web based sites and tools for visibility. With a web based Reverse Logistics system partners around the world have 24 x 7 access to:
- Record the result of processing (e.g. receipts, disposition, test, repairs, shipments)
- View the data they have provided and related data that can help them perform their tasks.
- View select data from other partners, such as shipping data to ensure a shipment has been delivered.
- Receive immediate feedback, such as warranty validation before starting a repair.
- Collaborate and share tasks, such as collaboration between receiving and customer service on receiving exceptions to quickly resolve issues and continue processing.
- Sophisticated processing – web based handheld scanners and printers are now available, allowing you to provide your small or mid sized partners with the web applications they need to inexpensively achieve the same high end warehouse processing sophistication that your large partners have.
- An easy to learn environment – well designed web applications can significantly reduce training time.
- Consistent Processing – when you provide the web based tools, all users will be following the same standardized methods and rules, resulting in significantly reduced managing or auditing time requirements.

Improved visibility and good data will help you and your Reverse Logistics partners achieve significantly better, faster and more reliable results (even for the very small partners in far away places).

Good Luck!

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