Field Service Survival Strategies page 12

Respect for the Earth page 20

# **REVERSE LOGISTICS DIGITAL** magazine®

Reverse Logistics in Mexico- pg28

Edition 33

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#### **On the Cover**



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## **Reverse Logistics in** Mexico

#### by Dr. Jose Antonio Valles R

It addresses the major considerations that a company must be present in the design, development and control of this activity to obtain competitive advantages of sustainability, reducing the environmental consequences that implies waste disposal.

#### Articles



Seven strategies for surviving the cloud with Page 12 a cloud computing survival guide for Field Service Organizations. Cloud Computing represents one of the most significant trends influencing the global economy today.



**Respect for the Earth** by Lorenzo Ciferri, Trelleborg

Trelleborg's TM Blue<sup>TM</sup> tire concept Page 20 comprises a set of techniques, patents,

solutions and procedures that help farmers while conserving natural resources from manufacturing to application.

#### Feature Articles



**Technical Trends** by L. Bryant Underwood

Early Lean Sigma



**Returning Thoughts** by Paul Rupnow

**Reverse Logistics Metrics** 

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www.RLmagazine.com

**Reverse Logistics** Magazine welcomes articles and abstracts. Please send to: editor@RLmagazine.com

Preview



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# Video

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**RL** Magazine will publish 12 issues annually — 12 new digital editions!

**Reverse Logistics** Association is **Partnering with CES** 



The Reverse Logistics Association is exhibiting at CES 2012 to promote its members and the solutions they can offer the consumer electronics industry.



What is the Reverse Logistics Association? by Reverse Logistics Association

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# Message from the Editor

In South East Asia, poverty and children begging in the streets is an ongoing problem. Seeing their sad little faces with their hands extended out. What to do? If I give them money I am keeping them on the streets. Showing their parents that they are more valuable as breadwinners in the street than students in school. Walking away is a hard option as well.



I was delighted to find in the capitol of Cambodia, Phenom Phen, a restaurant called Friends. Now in its 10th year of operation Friends takes in street children and teaches them many different types of hospitality trades. Friends-International has three restaurants in South-East Asia all run by former street youth in training.

Supervised by cooks, managers and hostess these children learn a trade and earn a living. Not to mention that the food was also sensational; we indulged in great tapas, Cambodian, Laos and Western cuisine all while helping these student gain the skills and confidence to work in the hospitality industry. Tourist are all to happy to tip generously to the smiling Khmer faces of these hard working children.

Next door is a shop called Friends@240, which is also part of the Friends-International family. This

store creates unique products made from local and recycled materials that provide families with income and are environmentally friendly at the same time. I bought some bracelets and necklaces that have a unique urban feel as they are made from old magazines. Hmmm maybe some RL Magazine bracelets are on the horizon?



Together, building futures.

providers have found that

#### Lyndsey Turner, Editor • Editor@RLA.org

ur mission is to educate

# NOISSIN HAUT

and inform Reverse Logistics professionals around the world. RLA focuses on the reverse logistics cesses across all industries. matter the industry - High Fech, Consumer Electronics, Automotive. Medical Pharmaceutical. Food and Beverage, Apparel, or other our goal is to provide process knowledge to all industries. We want to educate everyone about the Reverse Logistics processes that are common to all industries and to

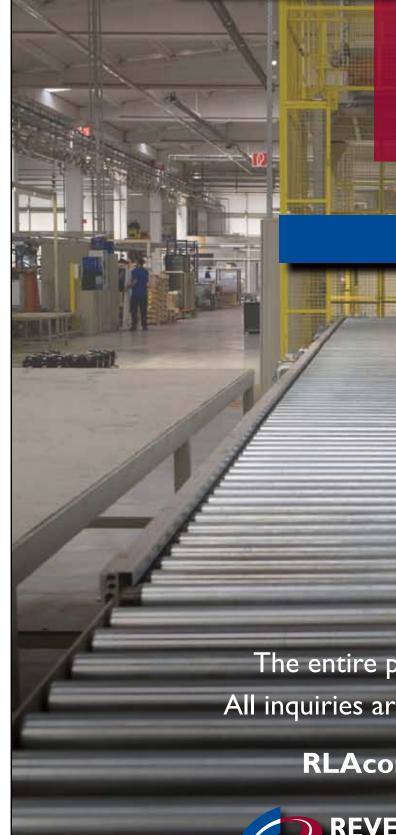
be a catalyst for innovation in developing and implementing new RL processes. We have been and will continue to provide our services to the industry at a moderate price.

anaging the latest information in services such as repair, customer service, parts management, end-oflife 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. Canon, Flextronics. Sonv and Jabil, along with smalland medium-sized service

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.

## **Closing or Moving out of a Reverse Logistics facility?**



At this very moment, RL companies are looking for facilities with infrastructure already installed. Let us help take the costly hassle out of having to restore your facility to its original state.

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Let us help locate facilities with the RL structure already in place. Save the hassle and resources and find it now!

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# **Message from the Publisher**

KNOWING GOVERNMENT REGULATIONS

Our Editor, Lyndsey Turner has selected a very appropriate picture for our cover this month. Land-fill continues to be paramount on the list of legislators and government regulators. Each of you might be surprised at the rules and policies that are required for managing waste in each country and region.

Recently a small business owner that had leased one of their commercial properties to a "tire company" for over 25 years was cited with a violation. The violation was for having 2700 used tires in the ware house. The violation wasn't given to the retailer, but the owner of the property. The location of the business happened to be in California where many regulations are in place to protect everyone. The regulations for removing the tires are unusual. No more than 9 tires at a time could be removed, if more tires are to be moved, then a certified "tire mover" is required in order to comply with county and state regulations. Both you and I know that many companies would love to capture those 2700 tires; the amount of fuel that could be generated by these tires is tremendous.

> RLA has and will continue to work with legislators to assist to understand the challenges of the growing need regulation has on the industry. government

Many times well intentioned regulations are placed into law without well thought out of the

future impact to consumers and private industry.

Several years ago, RLA warned a principality of the possible impact to drinking water as a result of promoting fluorescent lighting over incandescent. Today mercury is found in the ground water from the north to the south of that region.

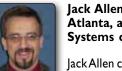
We suggest more debate and discussion on legislation from consumers and private industry along with academic researchers before final legislation is placed into law. Many laws and regulations can result in a major cost to consumers while resulting in unplanned negative outcomes.

Gailen Vick - Executive Director Editorial Note: Tire recycling www.RLA.org

legislation, www.carecycle.ca.gov

## **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

lack 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 -

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

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 labil 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 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 was named President, Jabil Global Services (JGS), in October 2004. He joined labil as Executive Vice President in July 2002 and was named Chief Operating Officer in October 2003.



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.





#### Charles Johnston -WAL-MART Stores,

#### Hartmut Liebel -**Iabil Global Services**

#### Bernie Schaeffer -Motorola

#### **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 sec-



#### Tony Sciarrotta -**Philips Consumer** Electronics

Tony is Senior Manager of Asset Recovery at Philips Electronics Consumer

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**

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"
- Consumer Satisfaction Issues
- Regulations on a Worldwide & Regional Basis
- Processes that can Reduce Costs

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#### Join today at www.RLA.org

Focus Committees & Regional Focus continued on to page 19



# **Field Service Survival Strategies**

by Michael R. Blumberg, CMC

Seven strategies for surviving extolling the virtues of Cloud • the cloud with a cloud Computing in its various computing survival guide for forms: Field Service Organizations. Cloud Computing represents one of the most significant influencing trends the global economy today. It is impossible to open a trade publication or magazine without reading an article

- (SaaS)
- Infrastructure as a Service (IaaS)

Platform as a Service (PaaS)

Cloud Computing is also Software as a Service facilitating the deployment of intelligent, instrumented, and connected technology. This "Smart Technology" forms the basis of the infrastructure that operates

the world economies and a wide array of business industrial & processes consumer segments ranging from banking, to building, to cities, to energy, to education, transportation, and even fast food.

Furthermore, miniaturization of digital computing devices makes it possible for anyone, from anywhere in the world, to plug into the cloud, and conduct transactions anytime they want.

### BENEFITS OF THE CLOUD COMPUTING MODEL

- lower cost of ownership
- reduced carbon footprint
- ease of implementation
- transferring risk from end-user to technology provider

These technology trends are a double-edged sword for Hardware Maintenance companies and Field Service Organizations (FSOs). On one hand, Cloud provides access to affordable, state of the art and easy to base density and the overall implement solutions (e.g., demand for field service. Field Service Mobility, Diagnostics, Remote In order to achieve Service Parts Optimization, predictable and sustainable and Service-CRM). This of revenue growth and profit course improves the overall margin, we believe Field productivity and efficiency Service Organizations of Service Logistics and (FSOs) can benefit from Field Service operations. following our Seven (7) Think faster and cheaper Strategies for Surviving the service! Cloud.

Alternatively, this same FIELD technology is lowering the ORGANIZATIONS demand for field service SURVIVING THE CLOUD events in general. Not only can Cloud and Smart technology be supported remotely but virtualization and miniaturization are causing the installed base of hardware to shrink, both literally and figuratively, thus decreasing installed



SERVICE

1. Strategically Manage your Installed Base Installed base density is the ultimate driver of profitability within a hardware maintenance environment. Comprehensive knowledge of service characteristics demand and Key Performance Indicators (KPIs) combined with the ability plan capacity and to influence utilization of Field Service resources is critical to achieving profit target and revenue objectives.

2. Find Synergistic Market **Opportunities** One of the interesting things about Smart Technology is that it creates a proliferation of connected (i.e.,

networked) devices and systems that contain commercial off the shelf electronic components and sub-assemblies (e.g., Printed Circuit Boards, CPUs, Monitors, Key Boards, Storage, etc.). This opens up new market opportunities for hardware maintenance providers and FSOs. A perfect example is Smart Grid Technology that predicts and intelligently responds to the behavior and actions of all electric power users connected to it in order to deliver

reliable, economic, and sustainable electricity services. The same service delivery processes and systems that support an enterprise IT network can also be deployed to support the Smart Grid.

3. Re-engineer Back end Service Delivery Model As the complexity of the serviceable installed base changes in the new cloud environment, so to does the service delivery FSOs model. and Hardware Maintenance companies must be

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durante a pré-conferência, no dia 26.

Logística Reversa nesta região.

Paulo em pleno Outono.

RLA CONFERENCE & EXPO IN São Paulo Brazil

- Professionals worldwide will attend this event.
- Major OEMs & Retailers are looking for Third Party Service Providers that can manage their **Reverse Logistics in this region.**
- Be sure not to miss the pre-conference workshops that will be held on the 26th.
- Enjoy the fall season in the Brazilian sun!



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Para maiores informações 17-19 de abril de 2012 visite: www.RLAshows.org

lean and nimble when responding to the new service requirements of the Cloud. In addition, the proliferation of mobile devices connected to the Cloud is creating the need for new services like asset management and reverse logistics. Re-engineering strategies might involve the transition to a variable work force, adoption of optimized approaches to scheduling & dispatching Field Service Engineers, outsourcing or out-tasking of non-core, service delivery functions, and/or the development of new service capabilities.

#### 4. Implement State of the Art Service Management Systems Most agree that FSOs need to be lean and mean. Cloud based Service Management applications have tremendous value and benefits from a cost of ownership perspective. Not only do they enable real-time service optimization but they also can be integrated with Smart Technologies to create robust, end-toend, service lifecycle solutions management

& Business Intelligence (BI) & Analytics. 5. Monetize back-end service offerings Companies who operate hardware maintenance as a profit center are obliged to find new sources of revenue to offset the change in demand. This can be achieved by monetizing re-engineered 6. Service back—end service capabilities. For example, faster response time brought about through the implementation of optimized scheduling be monetized could through premium

www.RLmagazine.com



and new service offerings like Remote Monitoring Diagnostics and

priced Service Level Agreements. Performance Metrics related to Mean-Time-Between-Failure. (MTBF) and number service incidents per customer locations can be mined for business intelligence, packaged, and marketed to end-users as a tool for improving the productivity and efficiency of their own operations.

portfolio targeted toward new **Cloud** environment A logical progression for many FSOs, particularly involved those in IT Services. is to become Cloud Service providers themselves

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by offering Data Center Hosting/Private Cloud platforms, and Managed Services contracts for devices (e.g., printers, scanners, workstations, etc.) connected to the based Cloud Cloud. Management Service solutions also enable new revenue generating service offerings such a Remote Monitoring & Diagnostics and Business Intelligence.

# 7. Leverage Partnerships present major challenges and/or offer new services viability.

offerings. It is impossible for one company to do it all. Partnerships and alliances are the key to tapping new sources of profitable revenue and improving the cost of service delivery.

In summary, while there is lot of excitement about the economic benefits technical advantages and of Cloud Computing, we should not overlook the fact that these opportunities & Alliances There are so to companies involved in many different options Hardware Maintenance by available to re-engineer potentially threatening their

#### TAKEAWAY

However, there is a positive aspect within the Cloud for companies who follow strategies outlined the above. It is not necessary to pursue all. By simply implementing one or two of these initiatives, a hardware maintenance company can stabilize their business, if on a downward trend, and produce a predictable and sustainable (and growing) income stream if already stable. RLM



Michael R. Blumberg is Certified a Management Consultant, (CMC) and President &

CEO of Blumberg Advisory Group. Inc. The firm focuses on providing strategic and tactical assistance for improving the overall profitability and quality of aftermarket service operations for over 40 years. Mr. Blumberg is an expert and industry authority on Reverse Logistics and Closed Loop Supply Chain Management. Contact Michael at 855-643-9060 Ext 703 or michaelb@ blumberg.com.

## **Read the Press**

## forward logistics

22 November 2011-Ryder System is expanding its reverse-logistics capability to include what it calls a "co-location solution"-designed to integrate forward and reverse logistics in the same facility to "deliver increased velocity, visibility and savings." CLICK HERE

#### **CEVA and Ford expand relationship** at new Louisville plant

Houston, TX-21 November 2011-CEVA Logistics, a leading global supply chain management company, today announced the award of additional business with Ford Motor Company. CEVA will provide a range of logistics functions for Ford's Assembly Plant in Louisville, Kentucky. CLICK HERE

#### Make Your Customers Work for You: **Increase Customer Service, Decrease Supply Chain Costs**

21 November 2011-Within the current economic conditions, many businesses are preserving profits with aggressive cost cutting, which tend to focus on customerservice(despiteitsimportance). According to a recent Manufacturing Insights survey of 800 companies, over 70 percent of responding businesses said that their most important business objective is to increase customer loyalty and satisfaction, yet customer service rarely wins the battle against the supply chain mandate to reduce costs. Optimistically, a company may plan these service cuts to be temporary, with intentions to restore its customer service levels as the economy recovers. But, in many cases, the damage will have been done and may require more than just a return to original levels to correct. CLICK HERE

#### New Breed Logistics to Provide Endto-end Supply Chain Management of Boeing Commercial Aircraft Fasteners

High Point, NC-21 November 2011-New Breed Logistics, Inc., headquartered in High Point, North Carolina, has announced that they have been selected by The Boeing Company to provide logistics and supply chain management

Ryder solution integrates reverse and of commercial aircraft fasteners in support of the Boeing Aggregated Standards Network (BASN) program. This agreement represents continued growth of the relationship between New Breed and The Boeing Company. CLICK HERE

#### Stocking all over the world **Brightpoint's way**

21 November 2011-Brightpoint claims to be the world's biggest mobile phone distributor. In an exclusive interview, president (EMEA) Anurag Gupta tells Michael Garwood about Brightpoint's global expansion strategy. CLICK HERE

Tata Group revs up reverse logistics

21 Novmber 2011-Tata Group's logistics arm, DIESL has adopted a programme to boost its reliance on reverse logistics across India in a bid to optimise supply chain services. CLICK HERE

How Intel boosted supply chain response times 18 November 2011-Intel is in the middle of a multi-year process of supply chain transformation, which has already produced three times faster response times, Simon Barrett, global logistics strategist, told delegates to the 1-2-1 Supply Chain Excellence Summit last week. CLICK HERE

#### **Rvder Enhances Reverse Logistics** Offering with New Co-Location

Solution Miami, FL-17 November 2011-Ryder & Young Strategic Growth Forum System, Inc., a leader in supply chain, warehousing, transportation and management solutions, today announced the expansion of its reverse logistics capability to include a co-location solution. The new offering integrates forward and reverse logistics in the same facility to further optimize the returns process and drive greater value recovery of returned assets. By colocating the distribution management of finished goods with returns processes such as technical repair, refurbishment, and repackaging in the same facility, this your company's bottom line. solution offers companies the ability to achieve greater speed to shelf, visibility, and cost-savings. CLICK HERE

Image Microsystems Named 2011 **Green Supply Chain Award Winner** Austin, TX-16 November 2011-Image Microsystems-a leading provider of technology restoration, reverse logistics, e-waste recycling, and recycled plastic products manufacturing-announced today they have been named a 2011 Green Supply Chain Award winner by Supply & Demand Chain Executive. CLICK HERE

#### Flextronics Receives Cisco Smart Services Award for Operational Excellence

Singapore-16 November 2011-Flextronics, today announced that it is the recipient of the Cisco Smart Services Award for Operational Excellence. This award recognizes outstanding Cisco vendors for their operational achievements. CLICK HERE

Overstock.com CEO Dr. Patrick M. Byrne Named Ernst & Young National Entrepreneur of the Year 2011 Retail and Consumer Products Award Winner

Salt Lake City, UT-16 November 2011-Overstock.com, Inc., today announced that its CEO and Chairman Dr. Patrick M. Byrne, was named the Ernst & Young National Entrepreneur Of The Year 2011 Retail and Consumer Products Award winner. He was honored at the Entrepreneur of the Year Awards gala, the culminating event of the Ernst held in Palm Springs, California on November 12, 2011. CLICK HERE

#### How to Plan for Christmas Returns

16 November 2011-It is once again that time of year when reverse logistics executives need to start planning for Christmas returns. For both retailers and manufacturers, the Christmas returns season is the by far the most important time of year. Your ability to process the tidal wave of returns during the first quarter of year will have big impact on CLICK HERE

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Reverse Logistics Magazine

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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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# ARTICL

# **Respect for the Earth**

#### by Lorenzo Ciferri, Trelleborg

tire concept comprises a interest in sustainable the mechanical damage set of techniques, patents, farming, Trelleborg has from compression caused by solutions and procedures launched a new agricultural standard tires. that help farmers while tire concept, TM Blue<sup>TM</sup>. conserving natural resources TM Blue tires are engineered manufacturing from application.

Trelleborg's TM Blue<sup>TM</sup> In line with the burgeoning organic life by minimizing to to respect the structure of a farm's soil and preserve its

For the farmer, this translates into higher productivity and crop yields.

"TM Blue tires not only Blue concept offer the highest level of care in v o l v e s for the environment," says e n h a n c e d Lorenzo Ciferri, Marketing production Director of Agricultural and processes Forestry Tires, Trelleborg decrease Wheel Systems, "but their use of natural use on farming tractors resources enhances productivity and d u r i n g lowers fuel consumption - manufacturing. also good news for farmers."

"There

The environmental benefits been are present on the factory significant floor as well. The TM investments

have some m

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to the



FIGUR	E 1:	TM BL	UE TIRE			
		reduce	energy	and	l wa	ter
nade to	consumption in our factories,					
	ω	which	include	the	use	of

rporate	
es Director - Fast	

#### **Best Buy - Secondary Markets**

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#### FIGURE 2: FOR THE LAUNCH AT SIMA 2011 IN PARIS, THE TM BLUE TIRES WERE ACTUALLY COLORED BLUE.

environmentally production process," says believes Ciferri.

"The primary goal of the TM Blue concept is to enable farmers to win twice," he says. "First, the farmers profit directly from will the superior productivity

that environmentally comes at an additional cost. stress. This is due to the 13 that there is a real value reduces soil compaction. proposition in the short, medium and long term."

of the tires. Second, they The Technische Universität that provides higher traction will benefit from Trelleborg of Dresden in Germany capability

friendly caring for the environment conducted a study of plant extender oils throughout the in the long term. Everyone loss versus tire load capacity being and found that the use of TM friendly tires resulted in lower crop But what we are trying to percent wider footprint of the say with TM Blue tires is TM tire, which significantly

> Another benefit of TM tires is the unique tread design under high

## **Money Talks**



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as a self-cleaning geometry field, which significantly in the same conditions, our that reduces the amount of reduces slippage on any soil transferred to roads, which can help to minimize

accidents.

inter-lug terracing The design at the base of the lug in the treads helps to eject mud three times faster than competing tires, according to field tests.

"Trelleborg TM tires provide www.RLmagazine.com

"the unique tread design that provides self-cleaning geometry that reduces the amount of soil transferred to roads, which can help to minimize accidents".

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kind of soil," says Ciferri. "In the plowing tests, using

torque conditions, as well excellent traction in the the same tractor sizes and tires performed better than premium-brand competitors in terms of both slippage and working time per hectare, yielding a five percent time saving for the farmer."

> On the road, TM Blue tires yielded impressive fuel savings as well – consuming 23.25 liters per hour at an average speed of 40 km/hr, compared with 24 liters per

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different tires. This could concept? add up to significant annual savings in fuel costs.

ergonomics. The shape and "In the geometry of the TM tire environmentally the tractor driver.

Why did Trelleborg choose blue as the color to be the tires themselves are not

hour on similar tractors with associated with the new blue. That is just a name." RLM

"Blue is increasingly used as the color of environmental And then there are the values," explains Ciferri. past, being tread reduces vibration in the meant respecting nature. Wheel Systems. tractor, ensuring a safe and Today, with global warming, comfortable experience for it is still about this but also what is happening in the air, and we think of the air as being blue. But rest assured



Lorenzo Ciferri, Marketing Director of Agricultural

friendly and Forestry Tires, Trelleborg

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The Reverse Logistics Association is exhibiting at CES 2012 to promote its members and the solutions they can offer the consumer electronics industry. International CES hosts more than 120,000 attendees from around the world and your company can be in front of all of them!

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# **Our Newest Members**









# **Reverse Logistics in Mexico**

by Dr. Jose Antonio Valles R

considerations that company must be present in the design, development and control of this activity competitive obtain to advantages of sustainability, reducing the environmental consequences that implies waste disposal.

often raises a

a social partners.

Among all the aspects that INTRODUCTION we consider when analyzing The logistics process for the role of business in managing the flow of goods its relationship with the and materials from the point environment, one of the of consumption to the point most studied because of of origin, we defined reverse their importance for current logistics as the process of and future welfare of society recovery and recycling The origin of the issue is the is the administration of of packaging, existence of an economical the waste generated by demolition and hazardous interest, increasing the businesses in the exercise of waste, so as the process of relations between business their activity, in particular return of excess inventory, and environment, which organizations that produce returns, inventory obsolete critical their own function and and seasonal products in

It addresses the major perception of them by the produce toxic and hazardous wastes.

packing,

order to give output in Thus, we have documented discarded, thus becoming markets with higher turnover. the presence of high industrial

The origin of the issue is the existence of an interest, increasing the relations business and between environment, which often raises a critical perception THEORETICAL of them by the social FOUNDATIONS their own function and produce toxic and hazardous (Hospitals, wastes laboratories, nuclear plants etc.).

The presence of toxic substances, heavy metals or chlorinated products causes the release and especially the incineration of these wastes may be a risk of chemical contamination exceeds the risk of biological contamination of special medical waste.

waste.

For the past few decades partners. Among all the The operations process have begun to see the aspects that we consider (design and engineering, importance, from the when analyzing the role of procurement, production, standpoint of environmental, business in its relationship storage, distribution and ethical, and from the point of with the environment, one marketing), which perform view, the proper stewardship of the most studied because multiple tasks that are and industrial waste. of their importance for generated a series of products Businesses, induced mainly current and future welfare of that, at first, had no other by increasingly restrictive society, is the administration destination that the provision legislation in terms of waste of the waste generated by in an landfill, there was little generation, begin to consider businesses in the exercise of concern about the quantity the use of cleaner production their activity, in particular and quality of these products processes in which they organizations that produce that were directly largely reduce the amount of raw



waste with concentrations of cadmium significant negative effects and toxic organochlorines, on the environment, prevent including dioxin emissions the generation of waste from incineration of such should be the philosophy governing any management plan for medical waste.

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materials used, generate equivalent to, but they environmental welfare.

#### RESULTS DISCUSSION

Certainly not yet made in significant progress absolute terms, there are cases where it is increasingly difficult to obtain firm commitments.

Generally used the term as synonymous with toxic waste as hazardous waste

less waste, streamline the include other features in use energy sources, etc., addition to the toxic: In obtaining higher levels of Mexico, the General Law of Ecological Equilibrium and Environmental Protection AND (LGEEPA) defines hazardous waste as all those wastes, in whatever physical state, which by its corrosive, reactive, explosive, toxic, flammable or biologicalinfectious, posing a threat to the ecological balance (Art. 2, frac. XXII).

> Hazardous wastes are classified as process water,

sand, dirt and dust, tars, tails. exhausted heads. catalysts, solvents, treated effluent, containers and packaging, slag, waste liquids, sludge processing, sewage treatment, material contaminated fill, spent lubricating and more, The full list of hazardous waste see the NOM 052-ECOL-1993.

In Mexico there is no complete inventory of the type and volume of hazardous waste generated in the country, despite the manifest that by law should meet the companies and establishments generators. Estimates tell us 14,500 tons of hazardous waste per day. (5,292,000 tons. per year), and in 2010 the calculations had increased to 8 million tons of hazardous waste in Mexico, not including mine tailings that can be dangerous and are produced in large quantities (from 300 thousand to 500 thousand tons. per day).

According to official estimates for 2020, 8 million tons of hazardous waste and the five areas in which qualified the country, nearly 54.5% of hazardous waste main generator of hazardous hazardous waste, primarily generated in the center of waste is 6% in Veracruz, and include the country (5,067 thousand Yucatan in the Southeast production, followed by ton/year), together with the region with 2% national. North zone (2,006 tons / year) including its border area (62 thousand tons/ year) generates nearly 90% of hazardous waste in the country.

In Central zone Foremost the mechanical Federal District (24%) and industries with 10% metal hazardous waste generated the State of Mexico (25%) and electrical industry by in the country. Resins, acids in the northern zone Nuevo 8%. Among industrial items and bases represent 10% and León main ones (12%), expected higher growth waste paint and varnish to Jalisco (9%) and Coahuila from 2010 to 2020 with the 8%. (4%) in the Gulf region, the consequent generation of

Among the main sectors generating the chemical industry primary, secondary petrochemicals and



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automobile the production of plastic, electronic equipment and machinery and equipment.

have According to official and estimates, by type of waste, (40% the oil and fats together of total), followed by with the solvents account metal for over 45% of the total

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remember that domestic solvents, as they consume and dispose storage, substances and materials.

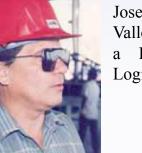
#### CONCLUSION

It is estimated that only 12% of hazardous waste generated in the country are treated or are deposited in authorized locations. Most are dumped directly into the drainage network, or dumped in ravines, rivers, seas, mixed with municipal solid waste stored in yards or businesses.

only sector that generates increased to 200 the total of infectious biological hazardous waste; it must also number of companies waste (most incinerators) consider the indiscriminate authorized to manage the and 4 companies authorized use of chemical pesticides infrastructure for treatment to landfill PR, (only 3 of it in agriculture, biological and and hazardous waste landfill, authorized to provide public infectious waste generated where the 16 companies service commercial.) partial by hospitals and clinics. Also mentioned recycling spent list of these companies can households, though to a lesser for the management of Situation extent, are also household used lubricating oils, 60 Ecological Equilibrium and hazardous waste generators, companies for temporary Environmental Protection. collection and of products containing toxic transportation; 5 companies for the recycling of metals, 26 mobile teams to treat hazardous waste site, 10 companies and treatment facilities of hazardous waste from petroleum activities, 2 companies with private incinerators, in situ, 4 cement companies under testing protocol for energy recovery by incineration of hazardous

oil processing waste, 1 contaminated company polychlorinated with biphenyls (PCBs), 16

industry is not the The latest report has companies for the treatment 9 companies be found on the General Report on **RI M** 



Jose Antonio Valles R. is a Ph.D. in Logistics and

Transportation (Ph.D.), Master of Engineering, Civil Engineering and Master of Science degree. Full-time professor at the Autonomous University of Mexico State in the Department of Transportation Engineering. National Logistics Award 2007 awarded by the SCT.

# **Technical Trends**

## **Early Lean Sigma**

When I was just getting into him. For me however his Muntz products very simple electronics I had two heroes, real nickname should have to manufacture at a low cost Forrest Mims III and Earl been 'Lean' Muntz. In many and repair was a snap, even for Muntz. First and foremost ways the success and genius an 11year old like me. Muntz for me was the legendary of what Earl Muntz delivered realized that components were Forrest Mims III. When was always wrapped around cost that took many forms I was in seventh grade, I looking at a situation and then and that by running costs out learned basic electronics from carving it down to only the of his products he could beat reading his articles in Popular essentials and nothing more. the big brands with a better Electronics. I would pour over The way I first became aware price. Since this was in the his theory of operation write- of Muntz as a brand was day of tubes-the reduction in ups. While then reviewing his from a car stereo tape player components reduced heat and schematic diagrams over and I rescued from a trash can as a result increased reliability. over again the understanding behind a TV repair shop as a He developed this approach of electronics would etch into sixth grader. By the way-TV to leaning out the product my mind and come alive. is a shortened, or shall I say design in the late 40s when Reading the writing of Forrest a 'leaned' version of the word he started manufacturing Mims on electronics was like television. Guess who first TVs. It was maddening to having an eternal truth unfold coined the phrase TeeVee? all his engineers; he called in my mind. He fueled a Correct, it was Muntz. ravenous appetite to learn all there was in electronics.

Then there was Earl (madman) the reasons I was able to Muntz. madman was self-inflicted by component count that was in Earl as a marketing tactic, but any Muntz product. This lean stuck as people got to know design methodology made

I went on and repaired that car tape player. One of The nickname do so, was the very sparse



it 'Muntzing'. There are many anecdotes as to how Muntzing would happen but they all share a common theme. Earl often kept a pair of wire-cutters in his pocket. When an engineer would show him a new working prototype, Earl would just

of TV design? Muntz was the lower cost. first brand to sell a TV in the US for less than \$100. One of the reasons that car stereo became popular was that rate that Muntz would extract costs from the process and speed market penetration. This focus even improved usability. For the Muntz car stereo product Earl directed the design team to keep the user interface of the stereo simple and easy to use, fewer knobs the better. He wanted the drivers to be able to use the product and not be distracted. All clearly good things. So where is the Muntz brand today?

manufacturing selling cars at his dealerships- value from Lean comes from

start cutting out components but all of these enterprises reducing waste not from until the TV died. Most of are now defunct. In each process change. In many the time he might have cut case of failure Muntz did operations I have seen massive out 4 or 5 parts before the not anticipate larger scale waste in administration and TV stopped working. He moves that just buried what finance goes un-touched would then challenge the gains he made by being low but production gets huge engineer to place the last part cost. For example the Muntz attention for cutting costs back, leave the others out TV business was killed by by often to the point of and do better next time. The color TV. The car stereo doing damage. So yes, Earl most infuriating part to the business was killed by a Muntz was in many ways a engineers was that Muntz was better tape technology from leader that understood lean a high-school drop-out and Lear. Fundamentally the principles as part of his DNA. was self-taught in electronic rate of competitive change But he was also a madman, engineering. What was the in technology was faster than because he was so focused result of all this leaning out Earl could add value from on a five cent capacitor that

Lean as a methodology has inherent risks. Lean is about improving today's production and is by design an incremental process. If Muntz was overtaken by color TV in 1959, what are we to do? Just look at the life cycle of products today. The notion of an annual refresh is antiquated. Not only do you need new models coming out every 40 days or so, but you need upgrades from apps that can be loaded at a moment. There is such speed in business that it is difficult and sometimes even counter-productive to drive Muntz was successful in lean-sigma methods at very electronics, low process levels. People music media, sports cars and often forget that 80% of the markets.

he forgot to prepare for color TV. I think Andrew Grove had it right about business. My paraphrase of his thought would be this 'a little less lean on the small things and a little more paranoia for the big things'. That's how not to be a madman.

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for

L. Bryant Underwood is Director, Supply Chain Elbit Systems of America.

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# **Returning Thoughts**

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

are essential to managing says Michael Blumberg of define the Reverse Logistics and improving a Reverse Blumberg Advisory Group Key Performance Indicators Logistics operation, whether in a recent you are an Original Equipment quipment perf EM") Performance Management I h ty together Customer Financial Profession Manufacturer ("OEM") or a third party **Reverse** Logistics service provider. Reverse Satisfaction Developing а framework mple to define and monitor your Sal metrics can Transport help you to better target success for your **Reverse Logistics** 

"Utilizing key performance and indicators industry benchmarks can helpa ReverseLogistics team become a

of Reverse Logistics research and benchmarks.

Reverse

Logistics

Metrics

Manufacturing

operations.



Performance

Reverse Logistics metrics "Best in Class" operation" To help you help identify and presentation to monitor and benchmark for performance improvements. I have prepared a sample framework with some kev performance metrics below:

> Α typical manufacturer identify may Warehousing the key areas of **Reverse** Logistics Customer as: Satisfaction, Financial Performance, Manufacturing (or Processing Returns Refurbishment). and 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 (SLA's):

#### Sample Reverse Logistics **KeyPerformanceIndicators**

**Financial Performance** Indicator 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

Use this example to get your defining started developing your metrics, framework and targeting industry. Your customers,

**Customer Satisfaction** Indicator 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**

Indicator Inbound Freight cost per unit shipped

Outbound Freight cost per unit shipped On Time Pickups

On Time Deliveries

#### Warehousing Indicator Number of Inventory Turns

(Unprocessed, Refurbished Goods)

Replacement Inventory Months of Supply

Reverse Logistics success. Define your benchmarks and compare them with others in the Reverse Logistics



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Manufacturing

Manufacturing Cycle Time

(Receipt to Refurbishment)

No Trouble Found Rate

your Reverse Logistics team

and your CEO may thank you

for your forward thinking.

Indicator

Defect Rate

Scrap Rate

Good luck!

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