



# REVERSE LOGISTICS magazine®

Serving the Health Sciences, Retail, and High Tech Industries



A New Standard Labeling Protocol  
for Reverse Logistics Page 28



LAS VEGAS RLA CONFERENCE & EXPO  
2015 PREVIEW INSIDE

Edition 71



OFFICIAL MAGAZINE OF THE  
REVERSE LOGISTICS  
ASSOCIATION®



# CONTENTS

Issue 9 Volume 1

## Articles



Page 16

### Rich and poor nations can link up to recycle e-waste

by Ruediger Kuehr and Feng Wang

Since the 1990s, electrical and electronic equipment have revolutionised people's lives. And with ever-increasing technological innovation, their lifetimes are, on the whole, decreasing. This means that electronic waste — or e-waste — is a fast-growing waste stream. The UN University (UNU) predicts that e-waste will rise from the 41 million tonnes currently produced each year to 47 million tonnes in 2017.



Page 22

### Solving the Rapid Growth Problem at Vineyard Vines

by Maria Haggerty, CEO, Dotcom Distribution

In online retail, growing too fast, too soon can create serious operational challenges, especially in the area of logistics and distribution. Without experienced logistics support, it's impossible for brands to maintain steep growth curves.



Page 30

### A New Standard Labeling Protocol for Reverse Logistics

by Kenneth Jacobsen, Co-chair of the RLA Standards Committee

The RLA Standards Committee has developed a protocol for the use of QR codes to encode information relevant for business processes related to reverse logistics. It is created to provide additional information to logistics professionals, consumers, field service personnel and recyclers.

## Lifestyles



Page 38

### Hindsight is 20/20/20: Protect Your Eyes from Digital Devices

by The Vision Council

The heart of Reverse Logistics is your Receiving process, but you need to ensure you also have a Smart Receiving brain. Smart Receiving will help you recover the highest value for each item, reduce processing costs and touches, avoid idle time and enable you to treat each item you receive for its own special attributes, needs and conditions.

## Feature Articles



Page 54

### Returning Thoughts

by Paul Rupnow

The heart of Reverse Logistics is your Receiving process, but you need to ensure you also have a Smart Receiving brain. Smart Receiving will help you recover the ...

RL Magazine is available on these E-Readers:



Kindle



iPad



iPhone



Android



Nook

Go to RLmagazine.com. Individual subscriptions are available without charge to qualified individuals.

Non-qualified rates are as follows:

One Year Subscriptions:  
Global: \$5.00

To unsubscribe email:  
editor@RLmagazine.com

**Publisher** – Gailen Vick  
**Editor** – Laura Teifel  
**News Media** – Alex Spasic  
**Technical Director** – Matt Gwilliam  
**Director of Education** – Doug Pratt  
**Magazine Production & Graphic Artist** – Benjamin Trokey

**Board of Advisors**  
Dr. Mark Ferguson – University of South Carolina  
James H. Hunt IV – GENCO  
Charles Johnston – Home Depot  
Troy Kubat – Walmart  
Thomas Maher – Dell  
David Moloney, Google  
Ian Rusher – Cisco Systems  
Ian Towell – Tesco  
Susan Wackerman – Hewlett-Packard Company  
For more information on the Board of Advisors, go to RLA.org

**Editorial and Circulation Office**  
441 W. Main Suite D  
Lehi, UT 84043-2024  
Phone: 801-331-8949  
Fax: 801-206-0090  
editor@RLmagazine.com  
www.RLmagazine.com

BPA Worldwide Membership May 2010. Printed in the U.S.A.

ISSUE 9 VOLUME 1  
REVERSE LOGISTICS MAGAZINE (ISSN 1934-3698) is published monthly for \$5.00/per year by Reverse Logistics Association.  
iTunes In-App Purchase: \$4.99  
Amazon Kindle Monthly Subscription \$1.49

Edition 71 published January 2015.

The information presented in this publication has been provided by corporations and is believed to be accurate; the publisher cannot assure its completeness or accuracy.

## Preview



Page 12

### RLA Conference & Expo: Las Vegas 2015

**LIVE VIDEO STREAMING:** If travel or cost restrictions are overwhelming, look at our low cost Live Video Streaming Solution. Sessions at the RLA Conference & Expo: MON - FEB 09, 2015 will be streamed live into your office or home; this includes all general sessions, case studies, panels and tracks.

## Video



Page 21

### What is the Reverse Logistics Association?

by Reverse Logistics Association

## Features

Message from the Editor	6	Read the Press	27
Focus Committees	7	Industry Jobs	30
Message from the Publisher	8	Industry Events	44
Advisory Board	9	Returning Thoughts	54
Industry Committees	10	Advertiser Index	57
Regional Chapters	17		



## A New Standard Labeling Protocol for Reverse Logistics

by Kenneth Jacobsen, Co-chair of the RLA Standards Committee

For the past year or so, the Reverse Logistics Association Standards Committee has been working on a new product labeling protocol that will expedite Reverse Logistics processes for Repair, Returns and Recycling. We are releasing this standard at the RLA Conference and Expo in Las Vegas, NV February 9, 2015. Come by the booth and see a demonstration.

### What is this new label?

The RLA Standards Committee has developed a protocol for the use of QR codes to encode information relevant for business processes related to reverse logistics. It is created to provide additional information to logistics professionals, consumers, field service personnel and recyclers. It is placed on the product so

that the information is always available. It will provide information related to product repairs, including links to documentation; product returns, including links to warranty registration; and recycling, including information about hazardous content.



We are starting with a QR code format which has a capacity sufficient for the required data and is scannable by most smartphones worldwide. The protocol is actually technology agnostic and can be deployed with other scan-able systems such as RFID.

Bar codes are great for forward logistics but lack the data capacity to do much more. Also bar codes are most



# RLA CONFERENCE & EXPOS: PARIS 2015

PARIS PORTE DE VERSAILLES PAVILION 7.2

TUESDAY, NOVEMBER 17, 2015 - WEDNESDAY, NOVEMBER 18, 2015

OVER 400 RL PROFESSIONALS AND 200 COMPANIES WILL BE IN ATTENDANCE



## RL Careers



### Toshiba

- Parts Specialist - PC Parts

**This is your place to post jobs\* within the Reverse Logistics Industry.**

If you are a job seeker or a hiring manager looking to staff positions within the Reverse Logistics Industry, this is the place for you. Contact RLA Connections for more information!

\*RL Solutions Careers is a service available to Bronze Members and above.

The Reverse Logistics Association Conference & Expo kicks off on Tuesday and continues through Thursday with workshops, committee meetings, several sessions presented by RL professionals, leading academics and interactive panel discussions. 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, ODMs, Retailers, and Branded companies to identify future service partners among the many exhibitors showcasing their Reverse Logistics solutions.

**RLA WORKSHOPS: TUESDAY, NOVEMBER 17, 2015**

<http://rltshows.com/paris.php>



**REVERSE LOGISTICS**  
ASSOCIATION®





often disposed of with the packaging prior to re-entering the system. QR codes can present 4X the amount of data as a bar code. The committee has designed a protocol that will optimize the use of this scan-able label and is providing arbitrage for a global standard so that consumers, logistics professionals and recyclers can all access pertinent information.

Each manufacturer determines which fields of data are pertinent to their product. The manufacturer also has the option to make the information available to consumers, only to logistics professionals, or encrypted for internal data. The manufacturer selects the fields they choose to populate, design the code and print the label onto each product and optionally, product packaging. The RLA is working with vendors to assure that the labels are readable (scan-able) by free smart phone applications as well as by professional scanners.

The information conveyed to consumers could include: product model and serial numbers, links to product documentation, links to warranty registrations, links to product support or recycling (end-of-life management) information. If the label is printed onto the packaging, it could include links to pre-market sales support. The multi-field label could even include links to product videos.

Information conveyed to professionals or field service personnel could include product data sheets, product configuration information, hazardous materials, various standards compliance information and installation guides. A listing of hazardous materials would be most useful for the recycling industry, and we envision that

eventually, geo-tagging will facilitate accurate disposal directions direct to consumer smart phones.

In each case, the label produced by this process will be readable by most professional scanners and by most smart phone scanning applications. The formatting of the data will require special code. The first field of the label will direct consumers to links to download a free app that correctly displays and formats the information. As the labels become more ubiquitous most scanners will be adapted.

### How to Use Them

Each manufacturer must select from the listing of fields which fields they wish to include in the label. Some of these may be generic for all of their products—such as Company name or Company URL, or links to Product Registration or Extended Warranties. Others may be specific to each product such as a serial number or a link to the product documentation or an installation video.

It is assumed that the manufacturer has technology to print labels onto their products. It is assumed that the manufacturer has the technology to individually serialize products in synch with the labels. (If not, we can make some recommendations.) It is further assumed the manufacturer has the technology to generate the label (either as a QR code or other technology). There are no fees or royalties to manufacturers of hardware products to use the RL Labeling Codes.

The RLA is creating tools that will generate appropriate labels in camera ready format. These tools will enable manufacturers to create labels and proprietary fields that

are continually synchronized and updated. The licensing of these tools is optional, but recommended. Contact [tools@rla.org](mailto:tools@rla.org) for further information.

### Fair Use and Adding Fields

There is logical space for an infinite number of fields. We are beginning with about 60 defined fields. Specific industries will from time to time identify missing fields. There are also two manufacturer's proprietary fields in the current standard. More will be provided if it is required. However, the RLA Standards Committee envisions this standard to be dynamic and is open to suggestions for fields that would be of general interest to industries or product groups, the fields should pertain to product repair, return or recycling though fields related to other aspect of a product life-cycle, including forward logistics are relevant. While the origin of this standard was the reverse logistics industry, we expect fields to be added to extend the usefulness of the label to other

groups (e.g. forward logistics, sales and marketing, inventory, etc..)

The RL Label Code is copyrighted by the Reverse Logistics Association. We have established a process for modifying the fields that is open to any professional inputs. We retain the exclusive rights to modify or upgrade the list of fields.

It is deemed to be fair use for any manufacturer of hardware products of any nature to create labels that use our schema for their internal use on products that they produce or cause to be produced.

It is also considered to be fair use for any product refurbisher or system integrator to create a label using this schema that supplements or replaces and original manufacturers information, providing that any such secondary labeling be clearly distinguishable from the label of the original manufacturer and in no manner



# To her, it is rocket science.

**PIONEERING**

*Pass It On:*

**VALUES.COM** THE FOUNDATION FOR A BETTER LIFE



Examples Uses for Reverse Logistics QR codes

A data label would be created and attached to the product at the time a product is manufactured. Today’s labels can contain much more information than a simple bar code, for example a QR code can contain as much as 4000 characters. The use of these labels will enable not only product information like a simple bar code or serial number, but it can also include information to help a consumer find help and support or disposition or recycling information long after the product packaging has been discarded. Below are some examples of how the fields from the Reverse Logistics standards could be helpful after the product leaves the retail shelves.

Consumer

- 1. Warranty and support help - part number, serial number, manufacturer, warranty period, warranty support link, extended warranty link
- 2. End of Life - part number, manufacturer, recycle support link, materials list, hazardous materials, disposal instructions, even if the manufacturer is no longer in business
- 3. Create a Retail Return RMA to Retailer (to complement omni-channel service) - scan QR code, scan Retailer receipt
- 4. Create a warranty RMA to manufacturer - scan code for warranty data, item, serial number
- 5. Register the product for warranty

appear to deceive or misdirect.

It is not considered fair use to create a generalized tool to create labels using the RL Label schema that is marketed as a tool for creating labels.

Tools for Creating RL Codes

Producing labels that conform to the standard requires some technical discipline. The RLA has produced a tool to facilitate the process while assuring technical compliance with the standard. The RLA Label Generation Tool can be accessed via the internet using most browsers (e.g., Internet Explorer, Chrome, ...). The tool produces custom labels for each product in camera ready format.

Preferences and defaults can be set to avoid repetitious entry of data on multiple labels, specify which fields the manufacturer always wishes to include, specify

Retailer Processing

- 1. at Retail display - QR code can help consumer with purchase data or support data or warranty data or extended warranty data or even recycle requirements (am i buying green?)
- 2. at Returns counter - items that should be in the box

Reverse Logistics Returns Processing

- 1. Basic - Part Number or UPC code, serial number (2 codes in one scan)
- 2. Warranty entitlement - Part number, manufacturer, serial number, manufacture date (help with warranty validation), location of manufacturing (country of origin)
- 3. Configuration info - part number, serial number, configuration (2 TB Hard drive, 16 GB RAM)
- 4. Included parts - printer cartridge, cables, power supply

Manufacturer

- 1. Support - links to a web support URL
- 2. Warranty - warranty period, product manufacture date, links to web support URL
- 3. Extended Warranty - links to web information to obtain extended warranty
- 4. Product identification - product/model numbers, UPC code, serial numbers (s) all in one scan code

which fields the manufacturer usually wishes to include, specify default values (e.g. manufacturer’s name), etc.

The tool works by first providing a menu of potential fields. The manufacturer selects the fields desired and populates them with the product-related data. Since



RLA Webinars are hosted and run by each Industry Committee.

Webinars are FREE and available to anyone who registers for the event. These Webinars are held monthly for each Industry Committee. They are 20-30 minute presentations given by a professional in that Industry, and then the opportunity is opened up to webinar attendees to ask Questions and share information relevant to the given topic.



COMMITTEE	TOPIC	CHAIRPERSON	COMPANY
STANDARDS	Developing Standards for Food Safety and Quality during Transportation Processes	Dr. John Ryan	Ryan Systems
RETAILERS	Returns After Christmas: Challenges and Issues	Derek Palmer	Transform
LIFE SCIENCES	Life Sciences Reverse Logistics Best Practices	Gailen Vick	RLA
EUROPE	Driving Post Sales Value Upstream	Paul Slaven	Intel
APAC	APAC Chapter Report	Mohan Kumar D	Hewlett-Packard
BRASIL	Impactos da LRS (Lei de Resíduos Sólidos) Nos Processos Operacionais	Orlando Cattini Junior	FGV
SOFTWARE SOLUTIONS	Better, Faster Returns Processing & Data Collection Part 2	Roger Levi	Intel
WIRELESS TELECOMMUNICATIONS	Being Green and Socially Responsible	Amy Augustine	U.S. Cellular
AFRICA	What is the state of reverse logistics in Africa?	Craig Plowden	Revlogs (Pty) Ltd
DATA STORAGE	Secondary Market for Drives	Tom Burnam	Western Digital
CONSUMER PRODUCTS	U.S. Exports of Used Electronic Products	Michael Anderson	US International Trade Commission



REVERSE LOGISTICS ASSOCIATION™



the amount of data that can be stored in a label is often restricted by the quality of printing and scanning devices, the tool also warns the manufacturer if their label needs to be printed in a larger size.

The manufacturer determines which fields are visible to consumers, which fields are visible to Professionals and which are proprietary and must be encrypted. Encrypted information requires a special version of the reader as well as a subscription to RLA's Restricted Access Manager.

The RLA Label Generation Tool is licensed on an annual basis with full support and maintenance. There is a one time setup fee. Contact [tools@rla.org](mailto:tools@rla.org) for further information.



Tools for Reading Professional RL Codes

The RLA also provides three RL Code Readers. One for consumers, one for Logistics Professionals and one for organizations using Encrypted data. All

will be available through Apple's AppStore and Google Play. The consumer product is free. It is expected that other QR code readers that are available will add RLA Label Coding compatibility as the proliferation of RL Code Labels expand.

The RLA Professional Reader has special features that make it a valuable tool for all logistics, field service and recycling professionals. Manufacturers decide which fields will only be available to those using the Professional Reader. In addition, the Professional Reader may be customized to display selected fields while ignoring others. A receiving dock professional, for instance, may only be interested in <RL05>-- the serial number.

Finally, for those organizations who wish to include encrypted data in labels, RLA offers the RLA Restricted Access Reader. The reader requires the user to register and establish a password. Access is only provided based on rules set by the manufacturer.

OEM versions of the code for the RLA Professional Reader and RLA Restricted Access Reader are available for porting to various scanners.

LISTING OF THE FIELDS WITH DEFINITIONS

RL00	Manufacturer Name	RL17	Types of batteries	R7.8)		
RL01	Product Name	RL18	Printer cartridge type	GS129	UPC Code	
RL02	Model Number	MP10	Manufact.	Proprietary	GS12A	GTIN Trade Item Number
RL03	Product Data Sheet		Encrypted		GS12B	GTIN-8 Trade Item Number
RL04	Date of Manufacture	MP1A	Manufact.	Proprietary	GS12C	GTIN-12 Trade Item Number
RL05	Product Serial Number		Encrypted		GS12D	GTIN-13 Trade Item Number
RL06	Product Configuration	MP1B	Manufact.	Proprietary	GS12E	GTIN-14 Trade Item Number
RL07	Product Support		Encrypted		GS12F	GLN Global Location Number
RL08	Product Documentation	MP1C	Manufact.	Proprietary	GS130	GSCC Logistics Units
RL09	Phone Product Support		Encrypted		GS131	GSIN Grouping of Logitics
RL0A	Warranty Terms	MP1D	Manufact.	Proprietary		Units
RL0B	Length of Warranty		Encrypted		GS132	GINC Grouping of Logistic
RL0C	Warranty Registration	RL1E	RoHS			Units
RL0D	Extended warranty	RL1F	WEEE		GS133	GIAI Individual Assets
RL0E	Presale support	RL20	FCC Certification level		GS134	GRAI Returnable Assets
RL0F	Manufacturer Web site	RL21	FDA Certification level		GS135	GSRN Service Relationships
RL10	Accessory Products	RL22	CE Certification		GS136	GDTI Document Types
RL11	Contain Hazardous Material?	RL23	Product UID for RFID		GS137	GCN Coupons
RL12	Contain user data?	RL24	UID Validation (for RFID)		GS138	GPID Component and Parts
RL13	Disposal instructions	RL25	Earth911		RL39	Ideal Storage Temp Range
RL14	Flammable?	RL26	EPEAT Level		RL3A	Refurbished Product Serial
RL15	Types of plastic	RL27	Energy Star Rating			Number
RL16	Types of metals	RL28	Energy Consumption (CEA		RL3B	Stored Original Serial Number

The RLA Committee

The RLA Standards Committee meets once a month using WebEx. Information about these meetings and sign up instructions are available at the RLA website. You do not have to be a member of the RLA to participate. Many people have contributed to the direction of this committee, but it is primarily the product of its three co-chairs, Ron Lembke University of Nevada Paul Rupnow Andlor Logistics Systems Inc. and Ken Jacobsen InforMission Systems, LLC. A complete listing of the fields with definitions as well as the full text of the standard is available on the RLA website.



Mr. Jacobsen is the Vice President of Business Development for Connexus: a silicon valley software startup focused on warranty management. He was responsible for the creation of the InfraRed Data Association (IrDA) and for the establishment of the PCMCIA. He has provided technology brokering services for HP, Toshiba, and Lockheed. He was part of the Pocket Intelligence Program at SRI, International and has been involved in numerous startups. Most recently, he was a Director of the Global Software Entrepreneurial Training Program at Oulu University in Finland.

Reverse Logistics Terminology

Industry Definition		R E V E R S E  = E Q U A L S  = E Q U A L S  =	Life Cycle Management
INDUSTRY	TERMINOLOGY		After Purchase Life Cycle
Apparel	Merchandise Returns		• Customer Service (helpdesk) • Depot Repair/ReMan • Service Logistics (Field Service) – Transportation/Warehousing – Spare Parts Management – RMA Management – Replacement Management
Automotive & HD	Remanufacturing		• Refurbishment • End-of-life Manufacturing
Consumer Products	After Market Supply Chain		• Remanufacturing • Fulfillment Services
Furniture	Rebuilders/Refurb		• IT Process Management • Recycling
Hospitality	Reader Board Shopping		• Scrap/Waste Management • Gray/B Channel Management
Military	Retrograde		• Warranty Management • Asset Management/ITad - IT Asset Disposition
Retail Grocery	Unsaleables		• Sustainability/EPR - Extended Producer Responsibility
Space & Aviation	Obsolescence		• Environmental Resources
White Goods	Takebacks		



**REVERSE LOGISTICS**  
ASSOCIATION®  
Copyright © 2014 Reverse Logistics Association. All rights reserved.

“Reverse Logistics is the process of managing assets (whether negative or positive) after a product or service is purchased or consumed in all industries and across all disciplines” ....