

Reverse logistics:

Getting to know your customers is key to keeping the retail supply chain tight, say industry experts. That entails tactical and strategic reverse logistics planning designed for long-term relationships and sustainable revenue generation.

BY PATRICK BURNSON, EXECUTIVE EDITOR

One of the basic tenets of the Boy Scout code is to “leave no trace” when vacating a campsite. The same rule applies to proper supply chain management, according to some former scouts now serving as prominent reverse logistics practitioners.

“We owe it to our community and future generations,” says Gary Cullen, chief operating officer of 4PRL, the reverse logistics operation of The Georgetowne Group, a consultancy based in Clarksville, Md. “Consumer buying patterns in the past were more conservative and therefore pushed product obsolescence to a larger window—three to five years for a television, for example,” he adds. “But now, consumers want the newest television set on the market. One year it’s the flat screen, the next it’s got to be 3D.”

And just as “secondary markets” exist in the financial world to offer investment alternatives, a similar convention helps manufacturers repurpose their supply chains.

“There are new revenue streams to be explored,” says Dale Rogers, the incoming director for Supply Chain Management at Rutgers University. “The secondary markets are effective

in diverting a large number of products from landfill and creating numerous jobs, resulting in substantial economic value in the process.”

Although not reflected in current government metrics, a conservative estimate is that the secondary market represents 2.28 percent of the 2010 U.S. gross domestic product, says Rogers. “This is easy to understand when you consider that the role that auctions, outlets, dollar stores, and retail salvage goods play in this marketplace. And the secondary market is only going to get larger as a consequence of globalization,” he says.

So how can logistics and supply chain managers profit quickly in this scenario? Rogers advises them to design for reverse logistics. For example, engine manufacturers should create packages specifically for that product that are collapsible. “That way,” he says, “there can be more loaded in a truckload and save on fuel expenses.”

In order to avoid returns, Rogers recommends following Apple’s supply chain management example and concentrating on simplicity. He notes that with other electronic products, most are returned “with no fault found.” The consumer, it seems, simply sends back the item because the right but-

ton wasn’t pushed or the right switch wasn’t flipped. Apple figured out that by building product with fewer moving parts, there would be fewer complaints. He is also a big proponent of “recycle-ability,” reducing the bulk of transportation packaging.

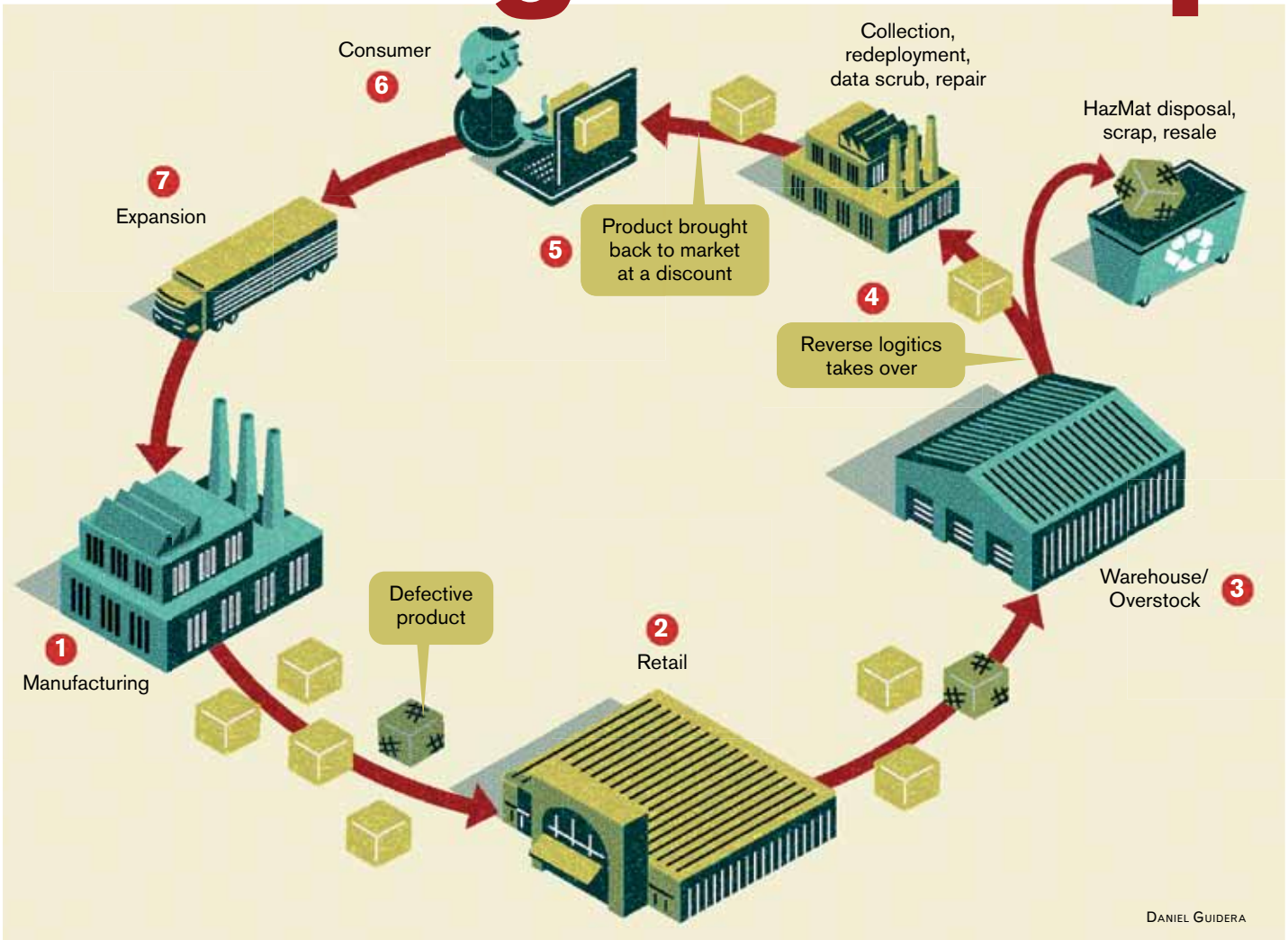
“Let’s follow the trend set by furniture manufacturer Herman Miller,” says Rogers. “They adhere to the ‘30-minute rule,’ which maintains that any piece of merchandise can be disassembled in 30-minutes or less.” He adds that the company’s most popular chairs can be disassembled in 15 and 7 minutes respectively, and that the company’s goal is 30 seconds. “That is a metric that can mobilize and inspire its workers,” adds Rogers.

THE SUSTAINABILITY FACTOR

Speaking at the sustainability session at the recently concluded Council of Supply Chain Management Professionals (CSCMP) Annual Global Conference in San Diego, Calif., 4PRL’s Cullen provided several compelling reasons for retail shippers to concentrate on reverse logistics.

“Gone are the days when pretty pictures in the annual report are enough to demonstrate your sustainability and corporate commitment,” Cullen says.

Closing the loop



DANIEL GUIDERA

“Companies must now provide verifiable evidence of social and environmental impacts. Yet in order to justify the continued application of resources, companies must also demonstrate real business results.”

In his presentation, “Social Responsibility and Environmental Impact of a Reverse Supply Chain,” Cullen cited a

recent Aberdeen Group survey showing growing concern over “cradle-to-grave” logistics. “And the consensus of responses was that the grave has to get a whole lot smaller—which a good thing,” says Cullen.

In an interview following his presentation, Cullen spoke on how a forward supply chain is only half of the total logistics

supply chain, and how the very complex network of third-party service providers’ impact expense, sustainability, and corporate environmental citizenship.

“The trend to watch,” adds Cullen, “is for more specialization in this area. The traditional 3PLs and/or 4PLs are not ready or eager to jump into the reverse logistics business. We feel that

the 4PRL model, which involves customized solutions, is going to set the new standard.”

He adds, jokingly, that the bygone television show “Sanford & Son” set the stage for reverse logistics. “But it has become considerably more complex since then,” says Cullen. Yet not so complex that a few basic guidelines cannot be followed. Dale Rogers suggests that shippers “listen to consumers” and meet their expectations for sustainability.

“Consumers demand environmentally responsible options to dispose of obsolete products,” says Rogers. “And although taking such action can cost a lot in the beginning, shippers can

lected waste in an ecologically-friendly manner, either by ecological disposal or by the reuse or refurbishment of the collected WEEE.

Restriction of Hazardous Substances in Electrical and Electronic Equipment Regulations (ROHS). ROHS bans the placement on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB), and polybrominated diphenyl ether (PBDE) flame retardants.

Electronic Waste Recycling Act of 2003. This is a California law enacted to reduce the use of cer-

GETTING IT DONE

Enterprise software solutions are widespread, but not until recently have integrated, multi-function, end-to-end systems been available for global deployments in the reverse logistics industry.

According to Michael Blumberg, president of Blumberg Advisory Group, many 3PLs and shippers involved in the reverse logistics industry have had fragmented systems, leading to a series of issues for manufacturers, retailers, and third-party service providers. In a new market research study, he found that most respondents were unsatisfied with their current strategies.

“In short, many firms miss opportunities or incur higher costs due to the lack of efficiency and service productivity in their reverse supply chains,” Blumberg says. “When examining reverse logistics supply chain operations we learned that more than half of survey respondents rated their current systems as not effective.”

Blumberg, who has established himself as an authority on closed loop supply chain management, says that the typical reverse logistics operation experiences five very unique and interdependent problems with respect to operational execution:

1. lack of visibility to the volume, location, and disposition of inventory at various points within the reverse supply chain;
2. inability to meet customer expectations and contractual obligations due to lack of reliable and relevant data;
3. limitations with respect to maximizing asset utilization and resources (e.g., labor, parts, etc.);
4. challenges with respect to benchmarking, optimizing, and improving operational performance;
5. unavailability of knowledge in opportunities to generate income when a customer returns a unit (collections, upgrade, add on, extended warranty).

“These shortcomings in a systemic infrastructure can have dramatic and negative consequences on financial performance and customer satisfaction resulting in lost revenue opportunities,

“The secondary markets are effective in diverting a large number of products from landfill and creating numerous jobs, resulting in substantial economic value in the process.”

—Dale Rogers, Rutgers University

reduce risk and become more efficient by doing so.” At the same time, he notes, it’s also better for society. “And the happy outcome for retail shippers is that their costs should come down, too,” he contends.

FALLING IN LINE

According to Rogers, shippers will be able to cut costs by avoiding the extremely strict regulatory directives that are now targeting the global supply chain these days. Fines and penalties vary among nations enforcing these regulations, but Rogers maintains that they are all significant. Among them are:

Waste Electrical and Electronic Equipment Directive (WEEE). The WEEE Directive is the European Community directive 2002/96/EC on waste electrical and electronic equipment that sets collection, recycling, and recovery targets for all types of electrical goods. It also defines responsibility for the disposal of electronic equipment on the manufacturers of such equipment. Firms organize col-

lect hazardous substances in certain electronic products sold in the state. According to Rogers, other states are beginning to adopt similar legislation. It covers all CRT, LCD, and plasma display devices contained in televisions, computers, and other electronic equipment with a screen size over four inches measured diagonally. These devices may not contain greater than the allowed concentrations of cadmium, hexavalent chromium, lead, and mercury.

Extended Producer Responsibility (EPR). Also known as “Producer Takeback,” EPR makes manufacturers take responsibility for the environmentally safe management of their product when it’s no longer useful or discarded. Many electronics companies who oppose producer takeback legislation in the U.S. are complying with these same laws in Europe, Japan, and Canada, says Rogers.

At the same time, he argues, shippers can gain by taking such action to avoid being fined or have disruptions in their supply chains.

increased operating costs and penalties due to compliance issues, and lower profit margins,” Blumberg says.

In short, current execution systems for reverse lifecycle management are typically rigid and often proprietary, thus inhibiting flexibility and increasing cost of ownership.

“It is interesting to note,” says Blumberg, “that the IT state of the art has not kept up with industry desires to achieve increased economies of scale, efficiency, and productivity which themselves are contributing factors behind these trends.”

With the exceptions of a few key software providers, the industry is still in need of more customized solutions, Blumberg maintains. Until then, “uncertainty of supply” will prevail he says. “As it stands now, most companies not only don’t know when an item is coming back...they don’t even know its condition. That’s

“Consumers demand environmentally responsible options to dispose of obsolete products. And although taking such action can cost a lot in the beginning, shippers can reduce risk and become more efficient by doing so.”

—Gary Cullen, 4PRL

because the return flow is quite diverse and depends on the end user, and that requires companies to really know their customers.”

Once that is established, says Blumberg, companies need to process assets as quickly as possible to make them available for reuse. At the same time, they should be maximizing value of unacceptable assets being returned. This often means determining if an item should be sold as scrap or repurposed for another market.

“And for this, one needs to be flex-

ible,” advises Blumberg. “Companies need to maintain capacity through careful management of facilities, processing, and transportation.”

Finally, Blumberg says, collaboration is a given. “There has to be multi-party coordination in any aspect of reverse logistics, whether it be source reduction, recycling, substitution, or disposal. That means that several parties are typically involved.” □

—Patrick Burnson is Executive Editor of Logistics Management