Third-Party Logistics SPECIAL REPORT

A SPECIAL SUPPLEMENT TO:
Logistics MANAGEMENT

TABLE OF CONTENTS

Top 50 3PLs: Getting the balance right

The state of the third-party logistics industry

44S

Plus:

Serving emerging markets: A survival guide

Two guest analysts share three maxims and six tips to help manage third-party logistics partners to meet today's complicated, global logistics demands

56S

CASE STUDY

Samaritan's Feet: The trials and triumphs of a global non-profit

Third-party logistics partnerships in action for the greater good

62S

A SPECIAL SUPPLEMENT TO:
Logistics MANAGEMENT

Top 50 3PLs: Getting the balance right

According to all reports, the third-party logistics industry is surging again, but experts agree that growth will reach a plateau in the coming years due to a number of looming economic uncertainties. Here's an overview of how the market is currently shaping up.

By Patrick Burnson, Executive Editor

Establishing close relationships with "key logistics service providers" has long been a precedent with shippers the world over; however, this top priority may have faced its sternest test during the last recession. By most accounts, however, the worst is behind us, and those who are left standing—on both the shipper and service provider side—are gathered in a tight circle.

In fact, that circle could indeed become even tighter. The Institute for Supply Management's (ISM) Semiannual Economic Forecast points to continued growth throughout the rest of the year. Researchers

Continued on page 46S

also suggest now that a global recovery is moving along, shippers are looking to profit from the economic rebound by engaging the most reliable third party logistics providers (3PLs) to help them stretch their supply chains into existing and emerging markets.

ISM's forecast coincides with the release of Armstrong & Associates' market analysis showing that the international transportation management 3PL segment led with a 30.1 percent gross revenue (turnover) increase over the course of 2010. According to the consultancy's chairman Richard Armstrong, third-party logistics providers are growing at multiples of Gross Domestic Product, and should be able to sustain this pace through 2011.

"The main takeaway here is that 3PLs are taking advantage of ongoing economic globalization," says Armstrong.

Revenues and profitability increased in all four 3PL segments in 2010, according to Armstrong's findings. Gross revenue increases ranged from 12.9 percent to 30.1 percent and were up 19.4 percent overall. Net revenues (gross revenue minus purchased transportation) were up 13.2 percent. According to Armstrong, net revenues are a better indicator of true business improvement because fuel related costs have minimal impact. Overall, net income increased 23.4 percent in 2010 over 2009 levels.

Armstrong's report notes that the international transportation management segment of the 3PL market led with a 30.1 percent gross revenue (turnover) and net revenue (gross margin) increases. Dedicated contract carriage followed at 13.1 percent. Overall, 3PL U.S. gross revenues jumped 18.9 percent in 2010 to $127.3 billion slightly exceeding the 2008 result. The compound annual growth rate (CAGR) for third-party logistics net revenue from 1995 through 2010 was 12.7 percent.

"When we look back, 2009 was the only negative year since we began tracking results in 1995," says Armstrong. "From 2009 to 2010, the increase in 3PL net revenue was 4.7 times the rate of U.S. GDP growth."

One driving factor of 3PL growth was world trade volumes, which increased 12.4 percent in 2010. Armstrong cites a recent report from the International Monetary Fund suggesting that freight integrators are mirroring the success of major multinationals. "Shippers are continuing to go global," says Armstrong, "and the larger 3PLs are expanding at a rate to meet this demand."

"Risk mitigation is a major concern now, and having more than one or two 3PLs working for you can be a real hedge."

—AdrianG onzalez, Adelante SCM Corp.

Encouraging reflections

"Mirror as metaphor" is more than poetic license for Adrian Gonzalez, president of Adelante SCM Corp. He is another prominent logistics and supply chain analyst who sees encouraging reflections that the 3PL market is on the rebound.

"The numbers are very encouraging," says Gonzalez, "but we must remember just how bad a year it was for everyone in 2009. Nor do I feel that globalization is the only reason for this improvement. A lot of domestic and cross-border activity is also driving this growth."

Gonzalez says that when a shipper decides to penetrate a new market, it's not always best to go with the same 3PL one might use for North America, however. "The best provider in one country could very well be the worst in another," he says. "And you will find that most major companies would rather not put all of their eggs in one basket anyway. Risk mitigation is a major concern now, and having more than one or two 3PLs working for you can be a real hedge."

Gonzalez adds that outsourcing overseas does not necessarily mean a diminution of domestic targets. He says that manufacturers can have it both ways without "cannibalizing" their operations and those of their 3PLs. "U.S. companies are going to want 3PLs in places where they have assets and domain expertise," he says. "They'll be looking to stay close to points of consumption and production, working with logistics partners for regional advantages."

Like Armstrong, Gonzalez says this does not mean smaller "niche" players will be out of the game, however. He says that there is room for a few specialists to compete in the global marketplace—especially 3PLs focused on auto parts, pharmaceuticals, and anything related to the cold chain. At the same time, though, both men say the barriers to entry are getting higher all the time.

"This is a capital intensive business," says Armstrong, "with requirements for sophisticated supply

A&A's Top 50 Global 3PLs • May 2011

Rank	Third-Party Logistics Provider	2010 Gross Logistics Revenue (USD Millions)*
1	DHL Supply Chain & Global Forwarding	30,486
2	Kuehne + Nagel	19,476
3	DB Schenker Logistics	18,999
4	Nippon Express Co., Ltd.	18,450
5	C.H. Robinson Worldwide, Inc.	9,274
6	CEVA Logistics	9,091
7	UPS Supply Chain Solutions	8,923
8	DSV A/S	7,587
9	Panalpina World Transport (Holding) Ltd.	6,887
10	GLOVIS Co., Ltd.	6,303
11	Sinotrans Ltd.	6,286
12	Bolloré/SDV Logistics	6,163
13	Expeditors International of Washington, Inc.	5,968
14	Geodis	5,578
15	Toll Holdings Limited	5,303
16	Agility	5,266
17	DACHSER GmbH & Co. KG	5,045
18	Hellmann Worldwide Logistics GmbH & Co. KG	4,687
19	UTi Worldwide Inc.	4,550
20	GEFCO	4,449
21	Yusen Logistics Co., Ltd.	3,814
22	Norbert Dentressangle Group	3,769
23	Caterpillar Logistics Services, Inc.	3,465
24	Wincanton	3,408
25	GENCO ATC	3,096
26	Pantos Logistics Co., Ltd.	2,972
27	Kintetsu World Express, Inc.	2,969
28	Damco International A/S	2,700
29	IMPERIAL Logistics	2,467
30	Penske Logistics	2,433
31	Sankyu Inc.	2,146
32	Fiege Logistics AG	2,085
33	Hub Group, Inc.	1,833
34	Logwin AG	1,801
35	Ryder Supply Chain Solutions	1,735
36	Nissin Corporation/Nissin Group	1,666
37	BDP International	1,600
38	Menlo Worldwide Logistics	1,478
39	Kerry Logistics Network Ltd	1,400
40	APL Logistics	1,260
41	Arvato Logistics Services	1,215
42	J.B. Hunt DCS & ICS	1,198
43	BLG Logistics Group AG & Co. KG	1,195
44	OHL	1,170
45	VersaCold Logistics Services	1,116
46	Landstar	1,036
47	Greatwide Logistics Services, LLC	1,022
48	Werner Enterprises Dedicated & Logistics	980
49	NFI	936
50	Transplace	900

*Revenues are company reported or Armstrong & Associates, Inc. estimates and have been converted to USD using the average 2010 exchange rate in order to make non-currency related growth comparisons.

chain visibility. That means IT at the front end and back end of every enterprise. A new company would have real trouble competing in this marketplace."

Yet even at the current pace of maturation, Armstrong maintains that 3PLs have room to expand beyond current penetration levels: "Right now, it's at 20 percent of all shippers," he says. "We see it moving to 40 or 45 percent before leveling off."

Transitional phase

A recent paper called *Global 3PL & Logistics Outsourcing Strategy*, produced by researchers for London-based Eyefortransport (EFT), comes to many of the same positive conclusions. Katherine O'Reilly, EFT's executive director, says the industry "is much changed" and still in transition.

"Looking at the impact of the worldwide econom-

A&A's Top 30 U.S. Domestic 3PLs • May 2011

Rank	Third-Party Logistics Provider	2010 Gross Logistics Revenue (USD Millions)*
1	C.H. Robinson Worldwide, Inc.	9,274
2	UPS Supply Chain Solutions	8,923
3	Expeditors International of Washington, Inc.	5,968
4	UTi Worldwide Inc.	4,550
5	Exel (DHL Supply Chain - Americas)	4,200
6	DB Schenker Americas	4,072
7	Kuehne + Nagel, Inc. (The Americas)	3,831
8	Caterpillar Logistics Services, Inc.	3,465
9	GENCO ATC	3,096
10	CEVA Logistics (The Americas)	2,756
11	Penske Logistics	2,433
12	Panalpina, Inc. (The Americas)	2,204
13	Hub Group, Inc.	1,833
14	Ryder Supply Chain Solutions	1,735
15	BDP International	1,600
16	Menlo Worldwide Logistics	1,478
17	APL Logistics	1,260
18	J.B. Hunt DCS & ICS	1,198
19	OHL	1,170
20	Landstar	1,036
21	Greatwide Logistics Services, LLC	1,022
22	Werner Enterprises Dedicated & Logistics	980
23	NFI	936
24	Transplace	900
25	Yusen Logistics Co., Ltd. (The Americas)	877
26	Agility (The Americas)	840
27	FedEx Trade Networks/FedEx Supply Chain Services	783
28	Phoenix International Freight Services, Ltd.	764
29	Americold Logistics, Inc.	761
30	syncreon	750

*Revenues are company reported or Armstrong & Associates, Inc. estimates and have been converted to USD using the average 2010 exchange rate in order to make non-currency related growth comparisons.

ic situation, a notable number of total respondents (43 percent) expected their company's growth in 2010-2011 to be as strong as previously predicted, though 50 percent anticipate a slower rate of growth than predicted," she says. "These results again show great contrast when compared to those from last year, where a much lower number anticipated strong growth and a higher number expected revenues to decline."

When survey respondents were asked to predict a timescale for the global economy to return to pre-crisis levels, results were more negative than last year, says O'Reilly. The majority of respondents this year (58 percent) do not anticipate this scenario until 2012 or later, while only 16 percent of respondents last year anticipated recovery taking this long.

"Expectations for the shape of the economic rebound were only marginally more positive than last year, with a larger number of respondents expecting a V-shaped recovery as opposed to a W-shaped or L-shaped recovery," she says.

What is the future of 3PL services?

The main themes from the recent Eyefortransport survey and report *Global 3PL & Logistics Outsourcing Strategy* will be discussed and debated among 3PL CEOs and senior supply chain executives at the 3PL Summit & Chief Supply Chain Officer Forum in Atlanta, June 21-23, 2011. One of the event's prominent participants will be Kate Vitasek, faculty member at the Center for Executive Education at the University of Tennessee and founder of Supply Chain Vision, a market consultancy. In a recent interview with *LM*, Vitasek shared her thoughts on the current and future 3PL markets.

***Logistics Management* (*LM*): Will 3PLs be more reliant on intermodal options in the coming year as a hedge on energy costs?**

Kate Vitasek: Yes, as the price of energy increases and the cost differences between intermodal and long-haul truck increase, the use of intermodal will definitely continue to grow as a choice by both shippers and their 3PLs. According to a report released last month by the Intermodal Association of North America, intermodal freight volumes in the first quarter of 2011 were up 10 percent year-over-year, about three times the rate of growth in the U.S. trucking industry.

With the base price of intermodal being 10 percent to 15 percent below truckload (TL) and the fuel surcharge half as much for intermodal, shippers and their 3PLs are getting smarter, using analytics in their planning, to figure out how to leverage these cost advantages in their networks better. Intermodal not only helps to contains costs, but helps 3PLs and their clients meet sustainability goals, especially in carbon emissions reductions.

***LM:* Will shippers have fewer modal choices as a consequence?**

Vitasek: Not really. 3PLs will continue to offer all of the modal choices based on cost and service times. However, as the cost advantage of intermodal options improves in a global competitive marketplace, shippers will look for distribution alternatives, including collaboration, to meet customer delivery needs at reduced freight transport costs.

***LM:* What key competitive advantage do "mega" 3PLs have?**

Vitasek: Those "mega" 3PLs, which include service providers like DHL, UPS, and FedEx, have the resources to operate on a global scale providing pickup through delivery services. This simplifies the end-to-end process and acts as a single point of contact for the shipper and a clear competitive advantage versus dealing with 4PLs and clusters of individual logistics related firms.

The "mega" network of shippers and carriers of the top tier 3PLs is also emerging as an opportunity to gain shipping efficiencies through multi-client optimization. For example, a large, well-designed network of carriers and shippers enable efficient continuous move, backhaul, pooling, and intermodal—all of which yield a cost advantage if applied right. The optimization technologies are now capable of supporting these models.

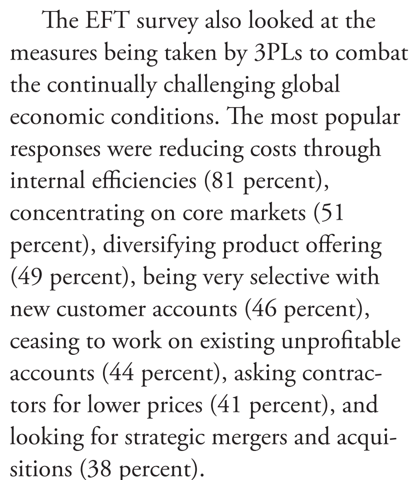
***LM:* How do upstart players capture share?**

Vitasek: There is an emergent role for innovative players in the 3PL marketplace to offer higher-value services, tailored to individual and collective clients needs. A fascinating example is the recent advent of Integrated Delivery Networks (IDNs) in the health care supply chain and the 3PLs that can provide the highly specialized, time-sensitive management of these goods. Canada may be ahead of the U.S. in exploiting this real collaboration among hospitals, clinics, and other health care providers, but IDNs with specialized 3PLs are rapidly catching on here. And the cost savings are obvious and sorely needed.

***LM:* What should shippers be looking for when contracting over the long run?**

Vitasek: Shippers and 3PLs should invest in taking their contracting relationships to the next level, what we call "Vested Outsourcing." This involves creating a win-win working relationship focused on a clear understanding of the desired outcomes of both parties, mutual trust and respect between them, incentives for innovation on the part of the 3PL, and pricing that offers the 3PL with reasonable profits and the shipper with a clear sense of value.

—Conducted by Patrick Burnson



The EFT survey also looked at the measures being taken by 3PLs to combat the continually challenging global economic conditions. The most popular responses were reducing costs through internal efficiencies (81 percent), concentrating on core markets (51 percent), diversifying product offering (49 percent), being very selective with new customer accounts (46 percent), ceasing to work on existing unprofitable accounts (44 percent), asking contractors for lower prices (41 percent), and looking for strategic mergers and acquisitions (38 percent).

"The results were broadly similar to those seen last year, although this year saw notably fewer respondents cutting jobs or asking contractors for lower prices, and slightly fewer reducing expansion plans," O'Reilly says.

Respondents representing 3PLs were also asked to identify the geographical regions that provide them with the greatest opportunities, with China (59 percent) and India (43 percent) being the most common responses. The most notable change here was the large reduction in 3PLs seeing opportunities in Eastern Europe, and the notable increase in opportunities seen in North America.

"Our survey asked 3PLs what they think shippers are looking for when choosing a new 3PL," O'Reilly adds. "The majority of 3PLs thought lowest price and best quality service were the factors of most importance to their customers, with slightly more importance being placed on lowest price than best quality service."

Shippers were then asked to identify what they are looking for when choosing a new 3PL, with results showing a marked difference. While 3PLs thought most importance would be placed on lowest price, shippers actually placed most importance on best quality service. In fact, 58 percent of responding shippers said they consider service most important, as opposed to 18 percent for lowest price.

EFT also examined whether shippers have recently switched 3PLs or are currently planning to switch to a different 3PL. Results, says O'Reilly, "proved interesting," with 47 percent of shippers having changed or planning to change 3PLs over the past 12 months. Of these, 31 percent were changing as a result of service while 16 percent were changing due to cost; however, of those not changing 3PL, a greater number (34 percent) reported not doing so because of cost as compared to those not doing so because of service (19 percent).

"The main takeaway here is that 3PLs are taking advantage of ongoing economic globalization."

—RichardA rmstrong, Armstrong & Associates

Wild ride for lead logistics providers

Transport Intelligence, another London-based think tank, has come up with similar findings in its recent *Contract Logistics* report. But it says that the U.S. market is more difficult to assess.

The U.S. debt and budget problems are depressing demand and undermining confidence, yet there are clear signs that 3PLs are continuing to grow both in the domestic sector and for international traffic. Canada and Mexico are strong economic performers and are likely to expand across all logistics sectors in 2011.

"Therefore global trends suggest demand is capable of supporting the sort of growth seen in the global logistics market over the past six months," says Cathy Roberson, Ti's senior North American analyst in Atlanta. "As ever, the joker in the pack is oil prices. These are presently high despite moderate demand in western markets."

Roberson says that even if a restrained recovery in consumer spending takes place in U.S., the oil price might increase to levels capable of suppressing demand for transport.

Yet Roberson says that there are a surprising number of good opportunities available for acquisitive companies, not only in emerging markets such as the Middle East, but also in the developed world. Like other analysts we spoke with for this report, she agrees that there are still large targets that may come on to the market.

"Take a look at private equity owned CEVA, and a number of aggressive Asia Pacific businesses with the cash and the will to buy them, such as Toll," says Roberson. "This industry is clearly on the move, and it's going to be a wild ride."

—Patrick Burnson is Executive Editor of Logistics Management

Serving emerging markets: A survival guide

Since building warehouses and internal fleets from scratch is unrealistic, companies looking to reach new markets will need third-party logistics partners—more than likely, multiple partners. Two guest analysts share three maxims and six tips to help meet these often complicated, global logistics demands.

By Pierre J. Mawet and William M. Kammerer, Accenture

For several decades, the business relationship between mature economies and developing countries was mostly "one-way." Materials, components, and finished goods were produced "over there" and shipped "here." However, today's reality is different.

Many "low cost" countries in Asia, South America, and Eastern Europe have come into their own as consumers, so their involvement with mature economies is increasingly bi-directional. Consider the results of a survey conducted by Accenture and the National Association of Manufacturers: Among large companies (revenue exceeding $10 billion), North America's share of market is projected to drop by more than 5 percent between now and 2013, while Asia's should rise by the same amount over the same period.

For global shippers, the implications of this shift are dramatic. From an opportunity standpoint, emerging markets are clearly the growth markets. But from an operations standpoint, things are murkier, with potentially new capabilities needed to ensure security; assess and mitigate risk; track and manage assets; surmount infrastructure limitations; analyze the impact of rising labor rates; interact with regulators and customs officials; and leverage broadly varying tax and regulatory policies.

Now, let's examine three supply chain maxims for companies seeking to meet the logistical demands of a new marketplace.

1. Risk assessments and tradeoff analyses should be a top priority. In emerging markets, higher levels of political, economic, financial, and operational risk are a certainty, at least in the short-to-medium term. Take infrastructure: Poor roads outside of central cities; insufficiently developed ports; and less-available, less-secure warehouses are commonplace.

Another risk is legislative. In emerging markets, for example, companies must often deal with more corruption, less-orthodox and less-codified business rules, and more nod-and-wink agreements. At the same time, there are fewer protections. In mature economies, companies are generally confident that laws and regulations will protect them. However, in emerging markets, there is less chance that authorities can or will insulate companies from dubious practices. It's important to keep in mind that things companies count on

"here" cannot be counted on "there."

Perhaps most important, companies focused on emerging markets will find that more is riding on their ability to assess risk and analyze tradeoffs. Take Brazil—a particularly fast-growing market. Is it preferable to build capacity in Brazil to serve the local market or to build in nearby Colombia? After all, building in Colombia is less expensive than building in Brazil, but shipping into Brazil is more expensive than manufacturing in Brazil for in-country sales and consumption.

On the other hand, if your efforts to tap the Brazilian market are unsuccessful, your physical assets in Brazil cannot be redirected to other countries. Unlike Brazil, however, Colombia allows foreign production assets to also serve other Latin American countries or even the United States. Thus the tradeoff is balancing higher operating expenses to serve the Brazilian market (and potentially others) from Colombia versus the higher capital investment, higher risk but lower operating expenses associated with developing Brazilian facilities.

2. New capabilities invariably will be needed. There may be little similarity between the capabilities needed to move goods and materials across developed markets or from low-cost countries into developed markets and the qualifications required to move goods and materials from developed countries into or around emerging markets.

The most fundamental difference is that, in the latter scenario, the challenge is more than just moving the item. When dealing with less-sophisticated markets, for example, a company's primary medium for receiving item requests could be as "traditional" as faxes or even delivery via post.

As a result, it may be necessary for a company to reassess and revise its most basic order management capabilities. In fact, many rudimentary structures and protections that companies are used to in the U.S. and the European Union (safety standards, hours of service, "responsible care" standards, security measures, etc.) are often weak or non-existent in emerging markets.

Along the same lines, the level of supply chain execution that many companies take for granted depends heavily on access to reliable, accurate, end-to-end data. However, many emerging markets are populated mostly by less-sophisticated logistics services (truckers, consolidators, stevedores) that can neither provide nor leverage in-depth supply chain information.

Moreover, because building warehouses and internal fleets from scratch is probably unrealistic, companies will need partners—more than likely, multiple partners. This will require coordination, guidance, and training by the organization that engages them that in turn means acquiring a fairly deep understanding of local laws, customs, and capabilities, as well as some command of the language. Marshalling a fleet of 100 trucks could require separate relationships with numerous, low-tech companies, each of which provides only a handful of trucks.

Reverse logistics may need to be reinvented in much the same way. There may be established processes in the U.S. and Europe for handling returns, but this is not the case in places like India, where such capabilities will probably have to be developed internally or with the help of an external partner.

In emerging markets, for example, companies must often deal with more corruption, less-orthodox and less-codified business rules, and more nod-and-wink agreements.

However, the latter is unlikely to be a simple turnkey operation that will process returns orders, handle distribution, and coordinate shipping. After all, reverse logistics can be a somewhat fledgling science even in developed countries. In some emerging regions, reverse logistics is barely on the radar screen.

The net effect is that establishing the capabilities you need to serve emerging markets is certain to be more complicated, expensive, convoluted, time consuming and training intensive than you think. Begin by resetting your expectations.

3. Finding the right local partner(s) is key. In recent years, consolidation has been rampant in third party logistics (3PL) market. This could make it somewhat easier to engage a mega-provider with insights and capabilities tuned to a specific market such as Brazil or India. In areas where these services operate, it would be the service provider's job to marshal and coordinate local providers to fill in the gaps.

However, there are many places where Tier One logistics providers don't yet operate; and even if they do work in a particular region, it may still be necessary to work directly with a local services provider. The essential goal (however elusive) is "integrated fulfillment"—whether coordinated by a major 3PL or by you.

Throughout the developing world, smaller, privately owned logistics companies are still the rule: fewer assets, fewer routes, less sophistication, and typically higher prices. And although some governments (China, for example) may demand that you use a certain percentage of local services, many of those

same rulemakers also encourage their smaller outfits to partner with the heavy hitters. These countries believe such partnerships are good for development and that they encourage investment in trucks and facilities.

But even if the use of local partners isn't mandatory, these local entities may still be important to help you navigate legal hurdles, negotiate customs, access local infrastructure, and understand and meet customers' expectations.

For example, local partners often help their clients access alternative transportation modes: Because most mature economies have extensive road systems and myriad transportation assets, we may be inclined to think that 48-foot and 53-foot trailers are the default asset type everywhere. Not true. In most emerging countries, road arteries may not be very advanced and thus smaller vehicles are preferable. But because these may be outside the scope of a shipper's expertise, working with a local partner becomes critical.

Following are some other observations about working with local third party providers:

• **Price comparisons will be difficult.** Pricing rates as well as structures will vary considerably among providers, not just among countries. As you shop, expect to compare apples to oranges. Moreover, the "price" may not be equal to the total cost, as we note below.

• **Added costs are inevitable.** Local service providers help you deal with local complexities and customs; but all that assistance (fees, taxes, last-minute add-ons) will inevitably show up on an invoice. Great care will be needed to understand what your costs should be—i.e., what additional fees are legitimate and which ones are inappropriate. One reason for astute invoice audits is that significant legal penalties may be assessed if a company is found to have knowingly supported improper practices—for example, agreeing to pay a bill that includes under-the-table arrangements.

• **Your contract is not a guarantee.** The existence of a contract does not mean that un-discussed or un-itemized fees won't show up on an invoice. In some cases, your relationship with a global 3PL may help you avoid these problems, but even that is not a guaranteed hedge against surprises.

• **Understand the tax and regulatory implications for doing business in a particular country or market.** These may be particularly complicated when dealing with a local services provider. New legislation in emerging markets is generally added to protect the local economy—not your company. Understanding these regulations in advance could save you a great deal of frustration and time. Also look to leverage Free Trade Zones, because many emerging markets are developing these to stimulate commercial activity within their countries.

• **Be diligent about due diligence.** Make sure the third-party logistics provider that says it can provide a complete service can actually provide that service, and that it is not just assuming it will "find a way" when the time comes. Even the Tier One 3PLs haven't achieved perfection in every market, so don't presume that because they are terrific in the U.S. and EU, they will perform similarly everywhere else.

Many emerging markets are populated mostly by less-sophisticated logistics services (truckers, consolidators, stevedores) that can neither provide nor leverage in-depth supply chain information.

• **Don't conclude that lower fuel prices are the norm in an emerging market.** Some emerging economies (Russia, China, Vietnam) do enjoy relatively low fuel prices. But, as we've found, the exact opposite may be true in other countries, such as Brazil and South Korea. And as noted previously, it may be an apples-to-oranges comparison if trucking is a less-predominant mode of transportation in a given country or region.

In net, when it comes to partnering, the bottom line is twofold. First, one or several local partners will almost certainly be needed to help manage in local markets. Second, a great deal of research will be needed before reaching a decision about who the optimal partner (or combination of partners) may be.

The logistical characteristics of emerging markets are very different from those in more mature economies—more different than most companies might expect. What's more, even companies that acknowledge these difference may not be aware of how difficult, time consuming, and expensive it will be to build, acquire, and coordinate the capabilities needed to operate effectively in emerging markets.

In all likelihood, it will be more complicated, more time consuming, and more expensive than you think. Patience, savvy risk assessment, comprehensive due diligence, and training are only some of the essential prerequisites.

About the Authors

Pierre J. Mawet is a Senior Manager in Accenture's Supply Chain Management service line. He can be reached at pierre.j.mawet@accenture.com. William M. Kammerer is a Senior Manager in Accenture Supply Chain Management consulting. He can be reached at william.m.kammerer@accenture.com.

CASE STUDY

Samaritan's Feet: The Trials & Triumphs of a Global Non-Profit

Third-party logistics partnerships in action for the *greater good*.

By Christopher Norek, Brian Gibson, and Manny Ohonme

The supply chain management themes we've heard for years—improve operations, get lean, and reduce costs to improve profits—mainly target for-profit companies. Less attention has been paid to the supply chain challenges faced by non-profit organizations, and even less to those non-profits focusing on humanitarian aid. Like their counterparts in the private sector, non-profits must continuously improve their supply chain operations to control costs. Yet their ultimate goal is not to increase profits, but to ensure that the greatest portion of donations and resources go toward helping those in need.

Samaritan's Feet is one such example. It is estimated that more than 300 million people wake up each day with no shoes to wear. Children, in particular, are at the greatest risk of contracting these infections, diseases and parasites from lack of footwear. While drugs can be used to treat patients (if any drugs are available), the real opportunity lies in the prevention of these problems. This is the mission of Samaritan's Feet (SF).

SF is a non-profit organization that was started by Nigerian-born Manny Ohonme, co-author of this article. When he was nine years old, Manny began seeing the world differently after a stranger from Wisconsin gave him his very first pair of tennis shoes at a basketball camp in Lagos, Nigeria. That first pair of shoes was the inspiration that led him to a basketball scholarship at the University of North Dakota–Lake Region and in 2003 to the founding of Samaritan's Feet.

SF today joins forces with its global community of more than 80,000 volunteers around the world, committed to making a difference in the lives of children. Ohonme and his team set out to accomplish a monumental task globally that started as a dream and, despite many stumbling blocks, has already turned into reality for more than 3 million impoverished children in over 60 nations worldwide.

Supply chain issues and challenges

SF's mission is to protect people from harm's way by providing them with much-needed shoes. The goal is both clear and ambitious: to put 10 million pairs of shoes on the feet of 10 million children in the next 10 years. While the mission and goals are simple enough, the task of moving shoes across global supply chains to people in need is anything but. In fulfilling its mission, the organization encounters many logistics and supply chain challenges. Some of these are unique to the non-profit world, while others transcend organization type to impact for-profit companies and

non-profit humanitarian aid organizations alike.

In addition to the typical issues of language barriers, cultural differences, and regulatory red tape, SF encounters supply chain challenges related to product, warehousing, inventory, transportation, and third party services. This article addresses each of these supply chain challenges along with the solutions that Samaritan's Feet has applied and the lessons learned.

Product: All donations are not created equal

The Challenges. Donations are the lifeblood of non-profit organizations. Monetary gifts are particularly beneficial because they are readily transferable to the locations of greatest need with limited effort or minimal additional cost. In SF's case, monetary donations can be used to direct-source shoes from vendors near demand points, thereby avoiding unnecessary transportation expenses. Also, these cash donations give SF leverage to procure shoes at discounted prices, which often means that the organization can buy more product for its money.

Bulk donations of new shoes also are beneficial and processing the receipts is relatively straightforward. However, these donations are not always well-aligned with demand from the standpoint of time or geography. Hence, SF may incur inventory-carrying costs to store bulk donations until they are needed, and then transportation costs to move the goods to demand locations.

Though donors have the best of intentions, some footwear does do not fit SF's mission. The organization focuses primarily on distributing new athletic shoes. It also distributes school shoes, sandals, and EVA foam shoes. Donations of other types of footwear (dress shoes, high heels, boots, for example) bring logistical and disposition challenges. SF needs to find users for these items; merely discarding them is not an option.

The Solutions. A simple solution to the donation dilemma would be to accept only cash contributions and purchase new shoes with this money. Yet to do so exclusively would reduce total donations and de-personalize user experience and the SF mission. It would also preclude individuals and groups from directly engaging with SF and the connection to people in need. So Samaritan's Feet actively encourages interested groups to conduct shoe drives and provides a step-by-step process for running a successful campaign. To assist in the effort, SF will assign to the fundraising group an "ambassador" who understands the organization's donation needs and supply chain constraints.

Many of the 80,000 global volunteers assist with the time-consuming activities of sorting and processing donations at the SF warehouse in Charlotte, N.C., and other locations around the world. For those shoes that do not fit the desired profile, SF seeks out organizations that can use them in their assistance programs.

The Lessons Learned. Just as for-profit companies benefit from collaborating with suppliers, SF has learned that it can build stronger relationships with donors that go beyond contributions. The following opportunities have been identified:

- Engage donors in the distribution process to improve supply chain efficiencies. The more donors are involved in the process, the more likely they will be to support and participate in supply chain improvement efforts.
- Enlist key supply chain leaders and volunteers from logistics, retail, and manufacturing with specific resources and expertise to drive projects, tasks or entire operations.
- Pursue new opportunities with donors and donations that don't fit the SF profile. For example, have them send worn out shoes to a recycler who then pays SF for the recovered materials.

Warehousing: Creating a responsive distribution network

The Challenges. Unlike many non-profit agencies that have a local mission and limited scope of operations, SF has a global vision that has rapidly evolved. While the organization has been able to respond to needs around the globe, the process has not always been a model of long-range supply chain planning and strategic network design. In reality, the network has been cobbled together as best as possible to meet immediate needs.

Complicating matters, to gain access to large-scale donations, SF must defer to the stipulations of its donor organizations. This means taking donations wherever and whenever they are made available—regardless of any inconvenience or

incremental cost. Thus, it is essential for SF to build flexibility and agility into its distribution network. Failure to do so could result in donor frustration and fewer partnering opportunities in the future.

Warehousing is key to creating a responsive network. Like all growing organizations, Samaritan's Feet needs affordable and strategically located facilities to promote operational efficiency. Moreover, these facilities need to be relatively clean and secure to protect shoes against damage and theft. That's a hard enough combination to find in the United States—and a virtual impossibility in many developing countries.

The Solutions. SF has been working feverishly to keep pace with its storage needs for several years now. The receipt of 1.44 million pairs of shoes in 2009 quickly stretched SF's original Charlotte, N.C., distribution facility beyond its capacity. Rapid expansion was an absolute necessity and the organization acted quickly. It established primary storage facilities in the United States, Africa, and South America as well as temporary facilities on an as-needed basis.

SF relies on partnering and creative solutions to address its growing storage needs. Rather than purchasing or leasing dedicated facilities, it often chooses to partner with other organizations to share capacity in suitable facilities. The organization also leverages the partner's relationships and knowledge of warehousing options in particular countries.

If appropriate space isn't readily available, SF must become a bit more creative. In some cases, the organization will seek out a partner with a secure compound to hold the product. If SF can safely and securely do so, it will purchase a used seaworthy container, ship it with product from origin, and drop it in a secure compound.

The Lessons Learned. Agility is not the exclusive domain of for-profit supply chains. SF needed to establish flexible capacity and develop creative solutions to enhance distribution network efficiency. Relevant opportunities identified include:

- Avoid owning and leasing facilities whenever possible. This helps to scale global capacity up or down as dictated by major donations, special projects, and demand.
- Use alternate sources of labor to keep warehouse wage expenses manageable. Going forward, SF will increasingly utilize volunteers and interns in their facilities.
- Strategically align with companies that have available capacity to donate and the capabilities (network contacts, board members, and so forth) to support SF's network.

Inventory: Visibility into geography and nature of demand

The Challenges. Even though Samaritan's Feet is a non-profit and relatively young, it experiences the same visibility headaches of a multinational for-profit company. With seven distribution facilities on three continents and a willingness to bring shoes to any location in need, SF faces a huge task in maintaining effective inventory oversight. It cannot be demand-driven and needs-responsive without adequate and up-to-date knowledge of inventory levels across its network.

Adding to the complexity of inventory visibility is the product variation of the shoes distributed. Inventory information by size, gender, and style must be captured and monitored at the distribution locations. SF needs this information to effectively replenish depleted inventories while avoiding unnecessary movement of shoes that may already be in strong supply at a particular location.

A final inventory visibility problem relates to SF's willingness to mobilize the inventory and serve remote regions of the world. This has led to the wide range of permanent and temporary storage facilities in the SF network. While SF's permanent distribution operations can leverage inventory management technologies and processes, other facilities are relatively primitive and unable to benefit from standard operating procedures.

The Solutions. SF recognized that a multiple facility, complex inventory scenario is best solved with a robust warehouse management system (WMS). Given the variety of facilities in the network and the organization's desire to limit its investment in technology, SF felt that

the best solution would be a web-based WMS—that is, a Software-as-Service (SaaS) model. After considering the options, SF implemented RedPrairie's Smart Turn WMS solution to maintain visibility across its network. This solution actually simplifies the process even in remote locations

The on-demand application enables SF to have WMS capabilities in all facilities regardless of infrastructure type and sophistication. Another benefit of a SaaS tool is that there is no infrastructure to install, maintain, or remove when locations are added, eliminated, or moved. Ultimately, SF was able to establish a critical combination of inventory agility, accuracy, and insight for its network.

The Lessons Learned. Just as for-profit companies benefit greatly from demand visibility so does SF. The organization has an acute need for a single view of inventory worldwide to be able to balance its product mix. To better respond to immediate needs and future projects, SF must:

- Identify and train regional coordinators in inventory management. Even with automation, there is a significant human component involved in tracking and managing inventory. Regular oversight and inventory updates at the regional and country levels also limits inventory shrinkage.
- Fully capitalize on the ability of the web-based WMS to collect and manage data remotely. Simplified processes help shorten the learning curve of training and reporting of good data. Making reporting less cumbersome and less complicated will help ensure regular and accurate updating.
- Leverage available mobile technology (smart phones, tablets with a simple mobile WMS application) rather than PCs or even costly notebook computers for inventory tracking and management. Mobile applications enable SF to get instant updates from any warehouse location in the world as well as the ability to report on a move from anywhere.

Transportation: Securing capacity and low costs

The Challenges. SF's largest expense outside of shoe procurement and travel is freight transportation. Like all shippers, it must overcome capacity constraints, rising rates, and in-transit product safety issues. In addition, SF encounters transportation flow challenges as their destination points may be remote and the routes unconventional to say the least.

Throughout the recession, available transportation capacity had shrunk. Some of this was due to carrier bankruptcies; in other cases, carriers reduced capacity to maintain rates and counter the effects of lower demand. The net result has been the removal of excess capacity from the system, capacity that SF previously sourced as donated backhaul transportation.

Combine delivery to some of the most troubled parts of the world with a product that is coveted by thieves and the real magnitude of the transportation challenge becomes crystal clear. Getting the product to the destination port is in many instances the easy part of the trip. The real headaches begin at the destination port during the entry process and persist on to the final leg of delivery.

The Solutions. Samaritan's Feet has taken a multi-pronged approach to overcoming transportation obstacles. First, it brought in knowledgeable transportation experts to manage freight flows and develop creative solutions to its freight predicaments. Unlike many non-profits, SF now has on staff a full-time director of logistics and supply chain. Supply chain experts also serve as members of the organization's Board of Directors and Board of Advisors.

Because SF doesn't have consistent volume, it is difficult to lock in needed capacity and low rates with transportation contracts. Fortunately, the organization's freight flows on low-demand backhaul routes in some regions of the world. So occasionally this presents opportunities for SF to seek partnerships with carriers and intermodal companies to move freight at reduced backhaul rates. Ideally, the freight will move as a donated service from the carriers, though this is rarely the case.

To minimize the risk of product loss, SF closely monitors freight flows for potential problems and works to avoid political hotspots. Likewise, it seeks to limit dwell time at ports where the athletic shoes become prime targets for theft. SF seeks to partner with people who have a strong track record of quickly clearing goods through customs.

The Lessons Learned. With global shipping capacity decreasing and rates increasing, a not-for

profit has to be very creative in transportation arrangements. Some opportunities are to:

• Increase the use of intermodal (piggyback) where available to counter the capacity crunch and rate increases of over-the-road truckload.

• Seek in-kind donation of transportation from moving companies like North American Van Lines who have shared backhaul capacity as well as providing deep discounts to move last-minute shipments or donations.

• Partner with third party transportation management companies and use their rate umbrella to secure the best rates.

• Seek additional backhaul opportunities to international locations that are primarily exporting to (rather than importing from) the United States.

3PL Partners: Never too many cooks in the kitchen?

The Challenges. It's hard to say no to offers of help when you do not have an abundance of in-house supply chain expertise or resources. A relatively young non-profit like SF doesn't have the financial wherewithal to staff and manage facilities in every region in which it is trying to help people. Thus, the assistance provided by 3PLs is both appreciated and essential. Third parties possess the capabilities, infrastructure, and knowledge needed for operational efficiency in regions where SF has a limited presence.

Problems can arise, however, when the pool of service providers grows rapidly and the supply chain network becomes fragmented and dysfunctional. Yet while SF feels that there can never be "too many cooks in the kitchen," this situation at times had made the organization vulnerable to certain supply chain problems. These include the following: simple processes became difficult, cumbersome, and inconsistent across regions; communication challenges arise, especially when dealing across cultures; and maintaining a global view of inventory becomes more difficult. In short, SF needs to be ever vigilant that the presence of multiple third parties never impedes its mission of serving people in need.

The Solutions. Intelligent partnering is the key to success for non-profits like Samaritan's Feet. The organization learned the hard way that not every offer of help should be immediately accepted. The capabilities of potential partners must be vetted, their market expertise verified, and their fit within the existing network assessed. This qualifying process needs to take place before any working relationship is established.

The Lessons Learned. SF has to be proactive in identifying requirements and partners, particularly in areas where proven capabilities are weak or absent. Some opportunity areas that should be pursued include:

• For each project, clearly map out which resources are needed (people, transportation capacity, storage capacity, etc.), the quantity of resources needed, and the required timeframe.

• Do capability and capacity checks of 3PLs to be used in each country before engaging them. This would include conducting reference checks on the providers to ensure that they have the capabilities they claim to have.

• Continue to reach out to other non-profits around the world. Compare and contrast operating footprints and expertise to better identify partnership opportunities.

• Become familiar with variances in customs processes across countries.

In its brief lifespan, Samaritan's Feet has encountered significant supply chain challenges on the way to becoming a truly global operation. The ability to identify and execute innovative solutions to meet these challenges has helped the organization mature and expand its services to more people in need in more locations of the world. The good news is that SF is quickly moving toward its goal of putting 10 million pairs of shoes on the feet of 10 million people in 10 years—the 10/10/10 goal. Solid supply chain management is a critical part of that effort.

Dr. Christopher Norek (norek@chainconnectors.com) is a senior partner at Chain Connectors, Inc. Dr. Brian Gibson (gibsobj@auburn.edu) is a professor of logistics and SCM at Auburn University. Manny Ohonme (manny@samaritansfeet.org) is the Founder, President and CEO of Samaritan's Feet.

Authors' note: *Readers interested in helping with Samaritan's Feet are invited to contact Manny Ohonme at manny@samaritansfeet.org or call toll free 1.866.833.SHOE (7463). To learn more about Samaritan's Feet, visit www.samaritansfeet.org.*