High Performance Logistics
Key Trends, Opportunities And Results
Panel Discussion with Industry’s Logistics Thought Leaders
Moderated by Dan Gilmore on June 27, 2002/1:30 p.m. CDT

Agenda

- Logistics Industry Issues
- Collaboration and Connectivity: Benchmarks for Supply Chain Evolution
- Trends in Logistics – Metrics
- Total Supply Chain Thinking and Lessons Learned to Be Successful
- Six Sigma Logistics
- Panel Discussion

This document is a transcription of a live web seminar hosted by RedPrairie on June 27, 2002. During the seminar each of the distinguished panel members from academia and the analyst community shared their research and views on key issues and trends affecting logistics management. This was followed by an open panel discussion. The discussions and supporting slides are presented below.

Today’s Panelists

Bud Lalonde, is a Professor at the Fisher College of Business Administration at The Ohio State University. Bud is one of the most preeminent logistics thinkers and one of the most well known writers and commentators on logistics practices and trends.

Karl Manrodt, Assistant Professor in the Department of Information Systems and Logistics at Georgia Southern University and co-author of Keeping Score: the Value of Logistics, has done quite a bit of critical thinking and research on the topic of performance measurement.

Edward Marien is from the University of Wisconsin, Madison. He is a professor and director of the university’s supply chain program, and is one of the industry’s most distinguished speakers and commentators.

Steve Banker, Director of Supply Chain Research at ARC Advisory Group, has carved out a leadership position for ARC in the area of supply chain and logistics research and analysis.

Dan Gilmore, the moderator, is Marketing and Strategy Results Leader for RedPrairie Corporation, formerly McHugh Software. He has 20 years of experience in logistics as a practitioner, consultant, analyst and marketer.
Thank you for being part of our ongoing web seminar series offering education on the topic of Logistics Excellence. We’re certainly pleased to have everyone join us today for what promises to be the biggest and most successful Webinar event we’ve ever had. There are literally hundreds of people joining us online today for this presentation. We are pleased to have brought together the supply chain and logistics industry’s foremost thought leaders and experts to share with you their perspective on how to achieve high performance logistics.

We believe there is a better way. In today’s highly competitive environment all of us have to continually find better ways to approach logistics and supply chain management issues. Our panel is going to give you their perspectives on how you and your company can face these issues and achieve success in your supply chain operations.

Certainly from our perspective, a lot of research is indicating that logistics costs are continuing to rise. Research done by Herbert W. Davis for the Council of Logistics Management found that logistics costs for the previous two years rose substantially as a percent of overall company sales.

You see here for the third straight year, from ’98 through 2001, costs are going up. What’s causing this is a number of factors. Certainly overall distribution complexity and distribution environment, more value-added service, increased postponement, as well as a number of other factors are serving to drive up complexity and hence, cost of logistics operations. Part and parcel of that is the continuing shift in order profiles toward smaller, more frequent shipments, putting added pressure on DC and transportation systems, forecasting systems, and virtually every aspect of logistics operations.

In the face of this, we’re certainly not getting any slack in terms of customer service requirements, as customers demand higher fill rates, shorter order cycle times and support for programs such as just in time inventory and continuous inventory replenishment. So we’re in an environment that demands today that we take a hard look at our logistics processes and technologies and try to find ways to do battle against these environmental trends that are serving to drive up the cost of logistics operations.

RedPrairie has recently done research where we surveyed over 50 companies in the consumer goods industry and asked them to list, in order of priority, their top strategic logistics initiatives over the next three years.
You see here at the top, reducing core operating costs remained the top strategic initiative for the companies within our survey, followed closely by reducing order cycle times and improving supply chain metrics and scorecarding systems. Certainly, integrated logistics is an opportunity for companies to impact multiple areas and improve the type of supply chain performance and results that they can achieve.

With that, I’d like to turn it over to our first speaker, to Dr. Bud Lalonde.

B. Lalonde

It is certainly a pleasure to be here with my distinguished colleagues for the RedPrairie Seminar on High Performance Logistics. We have a group at Ohio State called the Supply Chain Management Research Group, including four or five faculty and four or five graduate students. We have focused on three streams that we think are very critical to the development of logistics.

The first is trying to understand the connection between the balance sheet and the income statement regarding logistics activity. I don’t think we have a defined expertise on the topic. We are trying to figure out how to connect profitability and inventory. We’re focusing a lot of our efforts on inventory and trying to understand how inventory behaviors, which are the big driver in the system, impact other areas of the firm. We’re also trying to find out best practices by process, by industry and by size.

The study base that we have been using is from the Council of Logistics Management. It is about 150 senior logistics executives of US companies; mainly Fortune 1000. The data is about nine months old.

What we are looking for are broad, general trends, as Wayne Gretzky says, “I’m always skating to where I think the puck is going to be.” That’s what we’re trying to figure out, where the puck is going to be. If you want to look in more detail on the sample or some other topics that we’re doing, we post everything including working papers on our Web site.

Collaboration and connectivity is a small but very important part of what we think is going on today. It’s changing the way people behave and the relationships in the channel between the supply chain partners.

Let’s look at the first graph. The line on the top indicates what percentage of the people answering the survey said that they had a strategic partnership with 50% or more of their key customers. You can see that line is sloping upward to the right. Conversely, we asked how many of them reported no activity at all in terms of developing strategic partnerships with key suppliers. You see that’s dropping, almost to zero.
On the second slide we were looking at strategic partnerships with key customers. What we’re looking at here is the number of people that are trying to develop a customized approach. In fact we asked a question about customized approach and it looked very much like figure two. Everybody says I’m trying to customize an approach to each individual customer and each individual key customer. That’s significant, that we’re talking about key customers rather than all customers.

The last, we were looking at connectivity and we looked at e-connection to all key accounts. I’m sure you’ve read that GM has just sold out its B2B business (although maintaining 10%). A lot of companies are bailing on B2B, however most is related to a dot-com kind of hangover. It’s not the way people are communicating because everything we see says that we’re looking at an electronic Web. Certainly it’s coming very fast, with almost three quarters of the people saying that they’re going to be connected to key accounts by the year 2005. Likewise, when you look at the zero, it’s dropping again, to almost nothing. So everybody is doing it and they’re doing it in a big way, with over 50% of their customers that they have a key connection with.

In slide four, I broke this one out because we are looking for different kinds of patterns. We are looking at patterns and process, which is connectivity and collaboration. We are also looking at patterns by size of the firm. The size of the firm in this case was under $100 million, $100 million to $500 million and over $500 million.

We asked if there are differences regarding outbound percent of total volume (outside the U.S- export markets): What you see is the big companies are exporting and the small and medium sized companies really are not. I suppose there’s a public policy issue in there, but there’s certainly a target marketing issue in there as well.

Regarding our research efforts, my first point is that I think it’s almost irrefutable that there’s customization going on. There was a book written a while ago about mass customization and it simply talked about micro segmentation. It says that we are going to have to find out how to develop processes that are different for a Wal-Mart and Target and Kohl’s and certainly offshore companies, as well as bring value to our customer in a way that the customer perceives value. We’re getting away from that notion of one-size fits all. For example, you go into Wal-Mart and demand 95% in stock and next day delivery. They will say that’s fine, but irrelevant, because even if you say 99%, they’d say the same thing.
The second point is that technology is allowing a whole new science of visibility. We’re better able and have accurately forecasted demand, which will help us to understand and pinpoint inventory management. I have a definition of logistics that states that logistics managers are trying to manage inventory they can’t see and don’t own. A lot of activity is going into that concept today with better systems and increased technology trying to move us closer to ultimate visibility. The concept lies in not only managing inventory, but being able to intervene its activity and redirect it, moving it closer to the demand point. Many companies are trying to eliminate the importance of forecasting. They are saying that if we can get close enough to the demand site, we can eliminate forecasting error, because we know that we are always going to be wrong. But if we can see into the demand point and collect data at the demand point, we’re much more likely to be closer to target.

I think what we’re seeing in terms of resource transformation, is trading information for inventory. Instead of buffering uncertainty with inventory dollars as we’ve traditionally done for 30 years, what we’re now seeing happen is companies are buffering uncertainty with information and information technology.

D. Gilmore

At the very beginning you said you thought best practice was an over used term. I agree with that, although certainly it is a key area of interest for many companies. I know we see it in our customer base and certainly have tried to embody best practice within our software solutions. What does the term best practice in logistics really mean to you?

B. Lalonde

The problem is that it means too many different things. I think best practice means measuring yourself against the house, deciding what you’re capable of doing and then seeing how close you can get to it. I think logistics costs are important, but they seem to border on a fad of sorts- you can’t truly compare to somebody else’s logistics costs because you don’t know what they include in it. It’s the same thing on best practice. Sometimes we get hung up on numbers and numbers are not so important as how you get to those numbers. For any individual company, they might be irrelevant.

K. Manrodt

What I would like to talk about are some of the trends that have occurred in Metrics. To give you a bit of background, Bud had talked about a study that he has done for several years. I have been fortunate to work on a study for the last 11 years. This data is about eight weeks old and we’re still in the process of analyzing some of that and putting it together. The sample, as a group, spends about $26 million on transportation (about 5% of total spend). I had about 350 different respondents in that group within 11 different sectors. Most of the data is available and will be
available on our Web site. We also do presentations at CLM every year on our recent findings.

As Bud was talking, he emphasized the importance of working or collaborating with customers. Related to that topic we have asked managers today how much time they are spending collaborating with their customers. About 20% of our respondents are spending at least 20% of their time collaborating with customers. The number was about the same when it comes to suppliers.

The good news is that the trend that we are seeing in our data is that more firms are going to be spending more time with customers and their suppliers to try to figure out supply chain issues and better manage the inventory as well as the information flow.

Here are three trends that I thought were critical.

Number one is that managers today are going to have a greater role in developing their firm’s strategy. This is good news as I think all of us, over the last 20 years, have wanted to see this occur. We are at the doorstep of that happening and in some cases it is occurring today.

I think the area of Metrics is going to continue to grow in importance, especially as firms really understand what it takes to measure up to competition.

The final trend is compensation- how we are going to reward our employees and our managers to get the job done. Today this is not properly aligned with corporate goals. Some people would say, well it is technology that is our problem. I would hasten to think that that is not really the case. Technology has come a long way and is no longer the big issue. There are a lot of excellent software companies available, RedPrairie is a good example of that. But the big issue is incenting people and encouraging them to change, to make sure that they do the right thing the first time.

The good news is in the trend top management is beginning to set. Management is coming down to the logistics level and requesting more information and getting more engaged in the area of supply chain management.

We see this in two different ways. The first one is that we asked managers in our respondent base, compared to last year, do you see the amount of information requested from these groups increasing, decreasing or remaining the same? By far top management, the C level including CEO's, CFO's, and CIO's, are coming down and requesting information more so than ever before. That's a great trend;
they’re getting more engaged to understand the value that logistics provides.

The bad news is in how they are requesting that information. In many cases it is simply a phone call or e-mail. So 55% of the time the requests come in are actually ad hoc, unplanned, “hey can you find this out,” instead of a standardized report or better yet a query looking into our information system. That requires a lot of extra work to be able to go ahead, drop everything we have and respond to those issues. But the positive is they are looking into supply chain in a new way and getting more engaged.

But what did the top managers really want to know? In the next slide you will see they are focusing in on costs, namely opportunity costs on lost sales and the cost of unmet satisfaction. Around 86% of top managers are interested in these related cost issues. Some of the more traditional costs are derived from inventory turns and fill rates. One exciting area of peaking interest is this idea of a perfect order and trying to get their hands around that experience. If you look at a broader focus or a broader metric, I think the perfect order concept will have legs to run in the near future and be adopted by several companies.

In the past, I think our focus on metrics has been more functional and tactical in nature. Yet as we move toward this idea of supply chain management and managing across various organizations, we are going to need to have broader metrics put in place to strategically measure performance. Maybe one of those metrics is going to be looking at cost to serve and then perfect orders as well.

D. Gilmore
Can you suggest a couple of key things that logistics professionals and managers should be thinking about when it comes to improving measurement and metric systems?

K. Manrodt
Yes, I think it is kind of interesting the disconnect that still exists between corporate strategy, logistics strategy and logistics metrics. When we did interviews for the Keeping Score book, it was surprising to hear the number of individuals who had a hard time articulating the corporate strategy of their firm. If I cannot articulate what my strategy is, then how can I put in place a logistics strategy that will support it? How do I put together the metrics that I can use in order to help achieve that goal?

E. Marien
The basic thing that I want to discuss is total supply chain thinking and lessons learned.
The first lesson learned is customer focus. "Who is the customer?" is probably one of the key questions to note. In particular, end user focus. Some of the firms and the organizations that I’ve seen make dramatic increases in supply chain results when they take an end user activity and become proactive with personal and industrial consumers.

The second key area is supplier relationships, looking at collaborative types of relationships, not only in operations, but also in integrated design, R&D, where a good portion of this now is being outsourced, all the way down to Point of Installation Assistance, where the suppliers are having their people right on site.

The number three area is consortium aggregation activities. How can we aggregate volumes and activities? There are various ways, vertically along the supply chain, horizontally with firms at the same echelon level using various trading partners, including source party logistics and leading logistics providers. Today, even the banks are becoming more and more involved in this. What I have discussed as the value proposition defines, what is in reality, about a $4 trillion to $5 trillion supply chain value delivery system.

Another area that Bud mentioned relates to the forecasting and scheduling processes. Certainly one of the key areas of supply chain visibility is the collaboration on order and demand scheduling activities throughout the supply chain. The "make" portion of the supply chain has seen postponement for a number of years. Now more and more firms are going to outsource contract manufacturing. Also, micro production is being pushed closer and closer to the end users. A quick example of micro production is seen in film. Today you go into Target and essentially you’re getting the film processed there. There’s a broad range of examples now where we’re shrinking the supply chain and pushing that manufacturing on down the supply chain.

Probably one of the areas that I find most intriguing is metrics, as Karl discussed. One area of metrics is costing. I have several examples here of the evolution of cost thinking. With purchases, plus order processing, you know what the cost is. Then you go to the next level, the delivered cost that includes transportation and packaging. Then you go to total cost of ownership, inventory carrying costs and warehousing. Next level, total enterprise, still within the enterprise, cost of ownership with various value added costs. Then we have
the inter-enterprise types of costing, where now we start collaborating with suppliers and customers and intermediaries on their costing as it relates to servicing the customers. Finally the fifth level here is end user lowest delivered price, with aggregated inter-enterprise supply chain value added costs.

The basic concept is I go into a supermarket and I buy a box of facial tissues. I’ve had some of my paper companies tell me that if I pay a dollar for that box of facial tissues, about $0.35 on the dollar is supply chain costs for all the hand-offs across the trading partners. So this whole evolution, to summarize, takes us from the material price and streams all the way down to include supply chain costing activities.

I’d say in transportation warehousing, we are seeing the whole movement toward guaranteed global services. We started with the parcel services that now include LTL’s and have progressed to the railroad business. So the whole idea of looking at guaranteed services is to meet time definite delivery in order to take the slush of the inventory out of the system. This also leads to a menu of service prices and moves all the way down to end users who receive a menu of selected services and prices.

So that is a quick overview of total supply chain thinking. It’s not just logistics with a new handle of supply chain. It is really this inter-enterprise cross-functional type of thinking. The above mentioned topics are some key areas that have built increasing awareness. Understanding the situations and implementing solutions to meet the needs will help you be successful.

Lessons Learned to be Successful (cont.)

7. Transportation and Warehousing
   - Guaranteed global services, broad menu of custom and "public" extended delivery and value-added services, menu-of-services pricing.

8. Inventory/Services Payment
   - Pay-on-consumption with EFT timed payments; banks heavily involved with commodity and service payments.

9. Information Technology
   - SCN IT providers with ASP resident software and data among trading partners; guaranteed results.

Here at ARC we have been trying to do more of an intersection between the kind of research that academics have traditionally done and the kind that analyst companies have done. We are trying to look at how technology, particularly newer technology, can be implemented in conjunction with proven practices or processes that have really proven that they have return on investment.

Of course one of the best methods is Six Sigma. It is a five-phase improvement cycle including: definition of a problem, measurement, analyzing the situation, improvement and control. Six Sigma aims to define metrics or measurements, identify key sources of variants in a process, and then systematically drive that variance out of the process in order to make processes predictable and dependable. It is a very powerful tool; it saves companies hundreds of millions of dollars per year, traditionally more in manufacturing than in the supply chain area.
In a survey we did this year in conjunction with the Logistics Forum, we found that this tool is just not used as much as we think it should be. In this sample, it was only used by 6% of the supply chain executives, which tended to be rather high-end executives in very big and powerful companies.

We think there is a new kind of software emerging, called supply chain process management. Some call it supply chain event management and also talk about supply chain performance management or supply chain analytics, KPI measurements. Basically, we think they go together. For example, we think of alerts off of events and ask the question: Are trucks going to be late coming into my manufacturing facility? That generates extended supply chain visibility around an event. But if you accumulate these events, you have a KPI (Key Performance Indicator). This leads us to think there is a natural fit. The value for Six Sigma is found in the ability to get the data and to be able to do the analysis. In the past, we have not been able to get good data on the visibility of supply chain processes. Specifically related to the extended supply chain, the process from suppliers to manufacturers to customers has been breaking down.

I do want to hasten to add here that this slide is an illustrative slide; it is not based on research. I am simply trying to explain the Six Sigma concept. The concept is this; that the predictability from Six Sigma can improve the optimization of the existing supply chain tools that we already have. It does this in a couple of ways and I am going to have to try to explain this.

Let us look at the example of a supply chain planning tool. Typically what these software engines provide is a model of the supply chain. They group activities over a longer period of time, for example a month, and apply fancy math and say, if we can engage in our activities in this order and in this way, we could save, for example, $10 million.

The problem is that companies have not been able to totally stay on plan. In this hypothetical example, if they are 62% on plan, they do not achieve that full $10 million, they only achieve $6.2 million. Therefore, we see a real opportunity around this new technology in a couple of ways. One is with supply chain event management. If you have more robust advanced visibility into potential breakdowns, you can stay closer to staying on target to obtain the full $10 million. For example, a week out a supplier says we are not sure we can make this full shipment to your factory. Yet, you still have time to do some scrambling. So event management plays a role there.

The other piece integrates the Six Sigma idea. Once we have a good understanding of where our processes are breaking down and we start to drive variance out of this process, we can begin to reduce lead times. As
you reduce those lead times, you can now go back into your supply chain planning models and change those models to reflect the reduced lead times. You are going to find out that your plan will not generate $10 million in savings, but maybe it will be $12 million or $13 million of savings.

So this is one area that we are excited about. We do see the value of both Six Sigma and the value of this new solution. We think they can come together and do some interesting things. I would like to second what Karl says about the importance of the perfect order metric. One of the places we think that you can apply this tool in the Six Sigma process is really understanding where you are having problems with your perfect order and start to look at the variance in those processes and really improve on your perfect order metric.

D. Gilmore

Steve, this concept of Six Sigma is not widely thought of yet in the logistics area. Are there any companies that are really trying to apply those principles in the execution area today?

S. Banker

Research indicates that only 6% of the companies we were looking at were incorporating Six Sigma. From talking to people at the Logistics Forum, we have further found that among that 6% that are focused on Six Sigma, maybe only a third are focused on doing it within logistics.

However, there are a few companies that have been public about applying Six Sigma to logistics, namely Ford. They stood up at the NA 2002 show and explained how they had been using Six Sigma around transportation processes and had saved a couple hundred million dollars over a couple years. This is a very strong example of what is possible.

D. Gilmore

Yes, that’s a great example. Actually, one of our productivity management customers in the automotive parts arena is using our solution to support Six Sigma quality processes in their fulfillment to their retail stores. So it’s certainly a trend that I think we’re going to see a lot more of.

I would like to talk about one specific topic with the panel and that’s the area of transportation management. We haven’t spent a lot of time on transportation yet, and we certainly believe at RedPrairie that it’s an area that offers for many companies, perhaps, the lowest hanging fruit they have to really drive out costs and improve overall customer satisfaction and logistics performance, as transportation winds up being the thread that runs through so many different logistics processes.

Some of the research that has come out has looked at the opportunities for companies through both process and technology enablement in transportation. Savings opportunities that are possible include being able to reduce overhead costs and admin costs of
managing the transportation process. These savings have realized a 30% to 60% savings with 5% to 30% in terms of improved shipment optimization, load consolidation, and the ability to link movements together in a continuous move fashion. Often this can drive out another one percent to five percent of costs and realize real benefits from improved carrier management and core carrier programs.

All of these savings can add up to certainly millions and millions of dollars for companies today. It’s an area that I think is starting to get renewed emphasis and moving from a backroom kind of function to one that is becoming much more prominent in the overall supply chain and strategies of companies today.

Does anyone on the panel have comments on the trends or opportunities that you see in the whole area of transportation management today?

S. Banker

Yes, I think there are a couple of things that strike me. One of the interesting things was the poll we took earlier around this Webinar where integrated logistics was mentioned as very important. I was very encouraged to see this because honestly a number of companies play shell games around transportation and inventory. They put a program in place to reduce transportation costs, but inventory costs go up. Then a couple of years later they put in solutions to reduce inventory carrying costs and then transportation costs go up.

One thing I would love to see more companies do, from an opportunistic standpoint, is to approach transportation and inventory issues together within the realm of integrated logistics.

D. Gilmore

Even though companies often save tens of millions on transportation costs, as well as offering a huge impact in overall supply chain effectiveness and customer satisfaction, it is still an unappreciated area in the corporate priority scheme. Is there anything that transportation and logistics professionals can do to try to elevate to senior management the importance of transportation and why it is worth investment to make improvements there?

K. Manrodt

When we look at this idea of integrating transportation and warehousing or distribution we find the reason is to reduce costs. I think that our focus is our problem. For so long we have painted ourselves into a corner by typecasting ourselves to be the people that can cut costs. What I would really like to see us move towards is the idea that we add value. That’s what the managers and top CEO’s need to hear over and over again—logistics transportation; we add value to the organization. We are not the guys to go to when you want to cut costs. We have done it to ourselves. We hold seminars all the time on how to reduce costs. What we ought to do is have seminars on how to increase value or how to sell value within the firm.
B. Lalonde  
The problem is that most logistics folks really do not know how to sell financial value and net results. If you can not express to senior management the value in terms of financial value related directly to expanded sales, better customer service, or cost reduction, you can not play the game because you are deemed irrelevant.

K. Manrodt  
I think one of the hottest double majors that we had when I was at the University of Tennessee for an MBA was logistics and finance.

B. Lalonde  
For 22 years in our career pattern survey we asked logistics managers if you could go back to school for 90 days and study anything you wanted to study, what would you study- they said finance.

D. Gilmore  
I know at RedPrairie we have a program called Logistics Opportunity Analysis. It is a methodology for helping determine the value of various technology improvements. It has been amazing to us how valuable it has been. Our approach allows our customers to help them sell their achievable value for various improvements to upper management. We enable and support managers in their efforts to promote the financial value.

D. Gilmore  
I certainly would like to thank our panel for joining us today: Dr. Karl Manrodt, Dr. Bud Lalonde, Dr. Ed Marien and Dr. Steve Banker from ARC Research. I greatly appreciate their feedback today.
About RedPrairie Corporation

RedPrairie delivers superior logistics results by driving out more logistics costs than anyone in the industry, and enabling customers to consistently achieve their supply chain objectives. This is accomplished through an integrated suite of DigitaLogistix™ solutions that provide the industry's leading transportation, productivity, and distribution management capabilities, enhanced with action-oriented components for real-time control and performance measurement. These solutions are deployed through an end-to-end value delivery system (the RedPrairie Approach) that ensures results achievement. RedPrairie delivers measurable results for customers in many markets, including high tech and electronics, consumer goods, food and beverage, third party logistics, retail and wholesale, service parts, and make-to-order manufacturing. Customers include Compaq Computer, Procter & Gamble, Nestle, Panasonic, Georgia-Pacific, Eveready, Unilever, Exel, General Electric, Amazon.com, and many others.

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