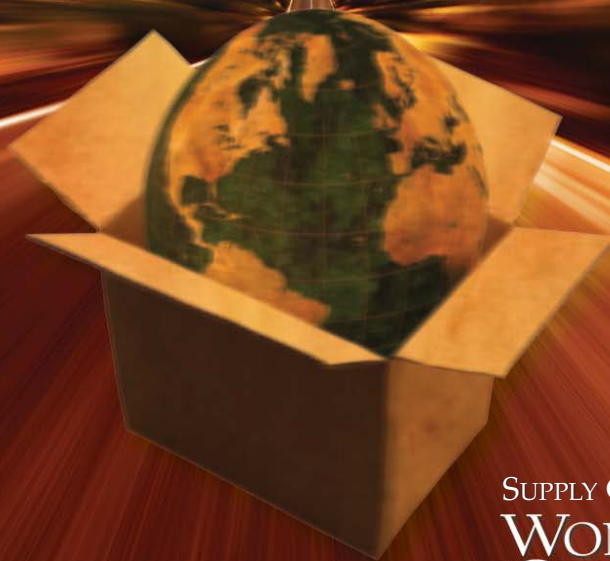


The logic behind
LOGISTICS
Infrastructure delivers for the state



SUPPLY CHAIN MANAGEMENT TEAM

**WOMBLE
CARLYLE**
OUR LAWYERS
MEAN BUSINESS





From left: Thomas Eagar, Paul Clayton, Timothy Martin, Gregory Chabon and Greg Plemmons say supply-chain strategy is crucial to business.

SUPPLY CHAINS KEEP PROFITS FROM SLIDING

North Carolina's roads, ports and airports give it a competitive advantage over other states, logistics experts say.

Third in a series of business round tables sponsored by Womble Carlyle Sandridge & Rice PLLC

How is technology changing supply-chain management — the process of getting raw goods to factories and finished products to distributors? Experts assembled by Womble Carlyle Sandridge & Rice PLLC, a Winston-Salem-based law firm, recently discussed that and other topics. Panelists were Paul Clayton, vice president of global logistics for GlaxoSmithKline in Research Triangle Park; Thomas Eagar, CEO of the North Carolina State Ports Authority in Wilmington; Timothy Martin, senior vice president of supply-chain management for R.J. Reynolds Tobacco, a subsidiary of Winston-Salem-based Reynolds American; Greg Plemmons, vice president of Old Dominion Global, part of Old Dominion Freight Line in Thomasville; and Gregory Chabon, the law firm's supply-chain team leader. The discussion, moderated by Arthur O. Murray, BUSINESS NORTH CAROLINA's managing editor for special projects, was held at Womble Carlyle's Greensboro office.

When Dell came to the Triad, many suppliers came with it. Will that become the norm for manufacturers?

Clayton: Dell is different. We're in the pharmaceutical business, and our business model is built around research and development and then commercialization. Dell's business is supply chain. It doesn't make computers. It manages a supply chain. So having its suppliers around it makes sense.

Chabon: Paul's comment is well taken. Dell is a different kind of model.

What works for it doesn't work necessarily for a pharmaceutical company or a food-packaging company or another consumer-products company.

Martin: You pick up valuable concepts from the other models, some of which you can customize for your own benefit.

What are the supply-chain trends?

Martin: I see a trend to increase efficiency using technology to maintain customer service while taking cost out of the operation and increasing speed. Increasingly, the total cost of supply-chain management is considered.

Clayton: We've optimized the supply chain and

"If it's sitting on the ocean, it's just in a floating warehouse."



Paul Clayton



Thomas Eagar

“We just saw
Boeing locate
to Mobile, Ala.,
because of
the port.”

find it fairly cost-efficient internally. What we’re looking at now is extending that to the broader

enterprise, involving our suppliers and trying to understand what our customers really require and looking at the total end-to-end supply-chain cost to get products to customers as quickly as we can.

Plemmons: It’s no longer enough to deliver our shipment on time and damage free. Our customers are looking to limit the number of suppliers, and they expect more out of them.

Eagar: Technology that’s coming into play now plays a big role in our operations, and that is the transfer of information, not just between the cargo principals but the multiple stake holders in the business — the cargo principal, the shipper, manufacturer, agent, broker.

What are the technology changes?

Martin: At R.J. Reynolds, we’re coming from a midyear implementation of a software tool to integrate business transactions all the way from order to cash. It has enabled a seamless integration of large amounts of data. We’re in the process of organizing job roles around the data availability and having fewer handoffs.

Clayton: We took our number of logistics-service providers from more than 30 to three for

interplant shipments and shipments from our factories to our warehouses. It allows us to put in some software tools that let us see the state of our shipments anywhere in the world, whether it’s at a broker, whether it’s on the sea, wherever. It gives us alerts when things aren’t going right. We get as close to real-time information as is practical.

Plemmons: Our customers tell us that information about the shipment is at least as important as the shipment itself. They are no longer carrying the inventories that they once did. We have more than 11,000 full-time employees and most are working on computers, from the driver hand-helds to the radio-frequency ID readers beside every gate to our dockyard-management system.

Eagar: On the discharge side, the information that we provide is available not only to the regulatory agencies but also to the customer, to the degree that a customer can call in and say, ‘I just saw container so-and-so discharged off the vessel. I need that by 4 p.m.,’ which then allows you to coordinate with the trucker.

Chabon: One of the things growing by leaps and bounds is the number of calls we get about how companies share this shipping-information access. ‘How do I share this with my vendors so I can get them on board and make this chain as tight as I can without either exposing my data to loss or providing erroneous data to my supplier — who may run out and do something based on data that turns out not to be correct?’

Fifteen years ago, people talked about the rise of just-in-time manufacturing. Is that here now?

Clayton: In our business there are elements that are just in time. We call it value-stream planning, looking at the end-to-end chain and understanding what the pull is for the customer. There’s no sense having just in time at one element of your business if the product sits and waits at the next.

What do you do?

Clayton: We try to optimize the flow all the way from our suppliers to our primary manufactur-

ing sector and from manufacturing through our distribution centers to our end customer. That sounds simple. It's incredibly hard to do. Just in time is important. Velocity through the supply chain is important. Even if you do something wrong, you're better to find out about it fast and then change it.

Martin: Just in time is not a one-size-fits-all proposition. We balance factors in the supply chain at each point, from supplier to customer.

Clayton: We've shifted a lot of our freight worldwide from air to sea. We've convinced our senior-management team that if it's sitting on the ocean, it's just in a floating warehouse. It doesn't get damaged as much as air freight, and you save a bunch of money. You wouldn't call that just in time, but it's optimization.

Chabon: Somebody suggested that just in time really today means right on time, where it needs to be, balancing that whole chain, because just in time puts a lot of pressure on the things that a company such as Old Dominion does.

Expand on that.

Plemmons: We are putting together a new service between the U.S. and China. We've pulled together a group of customers and talked to them about what we need to do. The thing that came through loud and clear was velocity, for sure. But even more was reliability, predictability.

Clayton: If you've got predictability and reliability, you can plan. Even if it takes a little longer but you know it's going to show up at 2 o'clock Thursday, you can plan.

Chabon: The mantra in the '80s was all about trying to cut costs. Now it's back to that right-on-time concept. It's not enough just to trim the price of a bolt by a penny, because by doing so you may have increased your shipping cost twofold or you may have increased your risk of disruption because you're outsourcing to a country where political instability or shipping instability increased that cost.

What can a region do to foster an environment for supply-chain management?

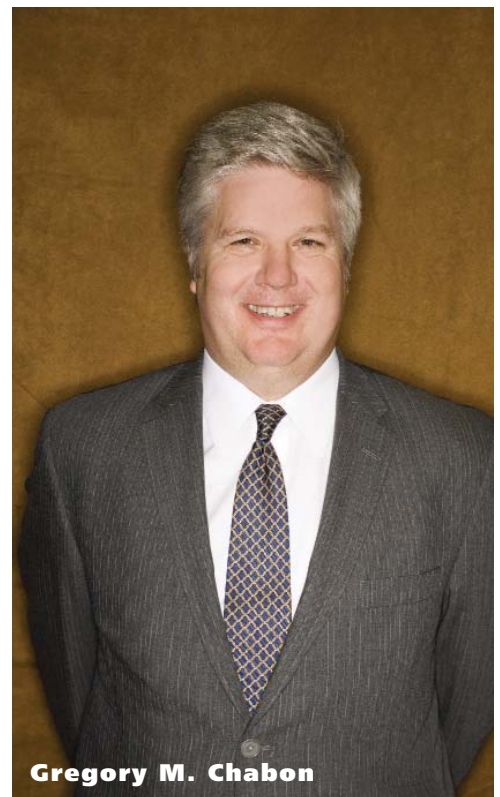
Chabon: Elected officials have to look at companies in this space, where supply-chain management is a critical facet of operations or a critical policy issue for profitability, tie that in to the region's natural resources and education systems and tie that together with incentives, identifying companies that can benefit from clustering around each other. That's something that the Triad does.

Eagar: Right now we see international trade growing 6% to 7% a year. The North America containerized market will double as early as 2015. This kind of leads into the North Carolina International Port. We have the opportunity for a major port in Southport like those in Norfolk, Va.; Charleston, S.C.; and Savannah, Ga. Those ports have an economic impact of 250,000 jobs and generate about \$1.5 billion in tax revenue. This new port could do that.

Plemmons: The new international terminal is critical. We need to attract more service providers and users to build critical mass. We should look at incentives for supply-chain providers and users. The tax incentive that the ports offer for users in the state is successful. But if we're going to have the infrastructure and the capacity to move products in and out of our state and our region, we'll need the capability to expand.

Clayton: Infrastructure is a huge issue, and it's an

“Just in time
really today
means right on
time, where it
needs to be.”



Gregory M. Chabon



Timothy G. Martin

“We expect
a supplier to
bring ideas for
long-term
improvement.”

issue for the whole country. India and China are spending billions on it. Admittedly, they're coming

from a lot different place. But in 10 years, they're going to leapfrog us if we're not careful.

Chabon: Tim and Paul, when you're looking to establish new distribution centers, do you look at the local area and its infrastructure?

Martin: That would be a prime consideration.

Clayton: We do modeling of where the best places for distribution centers would be, and it's based not only on where your customers are but also the infrastructure, how you get goods in and out. Secondary factors are things like tax considerations. Different states have different incentives.

How important is location?

Eagar: Industry is drawn to places that have port access. We just saw Boeing locate to Mobile, Ala., because of the port and the access to the global marketplace, access to the inventories necessary to maintain manufacturing. But we've also seen the same principle hold true for major retailers — Wal-Mart, Lowe's, Home Depot, Target. They want proximity to a port. They want proximity to major infrastructure whether it is highway or rail. That's where they establish their major distribution centers.

Plemmons: We have customers who position their operations near our hub because we can get product basically anywhere east of the Mississippi in one to two days. With the FedEx hub, you'll see some of that same dynamic.

How is the relationship changing between manufacturers and suppliers?

Martin: We expect a supplier to bring ideas for long-term improvement and not simply offer service for a fee. Technology is reaching back further into the supply chain, into the supplier base, which enables better planning. We also look at how we can bundle our relationship with the customer in providing services that help their business and at the same time provide value to us.

Clayton: We also have incentives in place for year-on-year improvement. The bottom line is, we can't be successful unless we have appropriate services and suppliers. We have to make sure they're successful as well.

Plemmons: With our suppliers, we tend to manage the supply chain ourselves. A good example is fuel. After the Katrina disaster, we found ourselves in a touchy situation with fuel. That was the one segment of our supply chain that we hadn't managed, and now we do. We're actively involved in moving our own fuel around, partnering with those suppliers.

Chabon: You mentioned that customers are looking for suppliers to bring long-term improvement into the mix. It introduces a set of issues for us as we look at helping institutionalize those relationships because of innovation, invention and development: Who owns it, how's it going to be exploited, how does it better both people?

How do security concerns affect relationships with suppliers?

Clayton: We watch out for diversion. Any counterfeiting, our partners help with that by shipping goods to distribution centers for us. They ship to our major wholesalers. So it's important that they understand the criticality of our shipments. We're shipping medicine, and it's impor-

tant that it doesn't get diverted. Otherwise there's a patient risk.

Eagar: Since 9/11, the Maritime Transportation Security Act governs our activities. Our primary objective is to be able to operate within the constraints of the act but not impede commerce. There's just a whole lot more involvement by a number of agencies in how we do our business.

Chabon: Security is almost synonymous with risk management. One thing that 9/11 and Katrina drove home is that disruptions are going to happen. You're not going to be able to predict them, but what you can predict is what you're going to do in the face of one. The triage is the supply chain looking for where points of failure might be. After Katrina, West Coast grocery stores couldn't keep anything on their shelves because every refrigerator truck had been commandeered to New Orleans. Paul, with the products you deal with, temperature and humidity control become critical.

Clayton: It changes the rules pretty quickly.

What does the work force of tomorrow need to do to be prepared?

Martin: It's important that they understand business fundamentals along with the engineering fundamentals that go into being a supply-chain professional, because it's the integration of those two that makes for a powerful executive or analyst. Historically those sciences have been taught separately.

Is anybody teaching those together on the university level?

Clayton: Rob Handfield, director of the Supply Chain Resource Consortium at North Carolina State University, has an MBA program that specializes in supply chain, taking people that have six or seven years experience and teaching more of the business basics.

Chabon: The program at N.C. State is the kind of thing you're going to be seeing a lot of around the country. I often draw the analogy to the IT field. In the course of 20, 25 years, you've seen IT elevate from being literally a tool to being a management science — one

that's recognized as important to profitability and operations of every kind of business, nonprofit, government institution, etc. Supply chain is on that same trajectory.

What else can the state do to help companies with supply-chain-management issues?

Martin: One thing would be to encourage major importer-exporters to locate distribution centers near the port. The carriers would begin service for the new port that's coming on board, leading right on back into the infrastructure of the rail and highways to bring those goods and services in through the state.

Clayton: There need to be more incentives around getting people to set up that infrastructure. States that are bordering on North Carolina give more incentives to put a warehouse up and have it managed than North Carolina does. We at least need to be competitive.

Eagar: We've got a tremendous window of opportunity here with the North Carolina International Port project. But it's going to take state support at least for the next five years to get us through the threshold of being able to put together the packages to bring in the private investment that will see the project through to completion. ■

“We need to attract service providers and users to build critical mass.”



Greg Plemmons

Clear a Path to Success



**WOMBLE
CARLYLE**
OUR LAWYERS
MEAN BUSINESS



www.wcsr.com

WOMBLE CARLYLE SANDRIDGE & RICE, PLLC

GEORGIA SOUTH CAROLINA NORTH CAROLINA VIRGINIA WASHINGTON, D.C. DELAWARE

©2007