For more than 18 years, Logistics KnowledgeBase has been a reader favorite and focal point of reader response and activity.

Why? Because *Inbound Logistics* assembles the best contributors to offer their experiences, perspectives, and knowledge accumulated over years of successfully managing complex logistics and supply chain challenges, and, more importantly, leveraging business opportunities through logistics excellence.

Knowledge is power and Logistics KnowledgeBase gives you a quick data dump and the information you need to drive transformative change at your enterprise.

LOGISTICS knowledgebase©

LOGISTICS knowledgebase©

Anthony Vitiello, Director of Marketing, UltraShipTMS
800- 731-7512 • info@ultrashiptms.com

How TMS is Proving 'Time is Money' for Shippers in 2018

There is only one way forward for high-volume shippers who are facing a logistics environment where they'll be forced to produce far more efficient shipping using far fewer resources in a much more competitive environment. Expectations surrounding shipping velocity (and the fines increasingly imposed for late delivery) have never been higher. The visibility required to plan, execute and monitor freight movements–and most importantly–efficiently schedule pickups and deliveries, can only be delivered through the use of powerful logistics technologies like TMS, optimization tools, appointment/dock door scheduling and others. Shippers simply can no longer afford the extra time it takes to manage these processes manually or use outdated and less-efficient logistics solutions.

The demands heaped upon transportation logistics in the era of accelerated supply chain management continue to pile up at exactly the same time as truckload capacity enters a historic shortage. Yes, capacity shortages have been experienced before, but the premium consumers place upon near-immediate access to goods–from consumer products like apparel, home furnishings, groceries and electronics to B2B items like construction materials, raw materials, packaging, and more–is exacerbated by the exodus of carriers and drivers sparked by the ELD mandate.

Restricted capacity normally means it takes more time and costs more money to move goods through the supply chain. Yet, shippers with solid TMS platforms in place carve extra time out for their operations and can actually save money not only in terms of freight rates, but also in terms of cost avoidance (the penalties levied on late pickup/delivery) as well as in labor expenses.

Saving time *is* saving money for shippers leveraging advanced scheduling capabilities like those offered by UltraShipTMS. Powerful new appointment scheduling solutions use TMS data to provide real-time carrier notification of available loading dock doors, hours of operation, and loading times for each dock door. This upgrade to traditional scheduling in TMS informs transportation planners with the unique method of scheduling–Appointment Time, Appointment Window, Hours of Operation or any other method–in use at any given location.

Carriers are provided access to the TMS so they can select from a list of available appointment types and times. Appointment times, pickup and/or delivery appointments, and other scheduling data can be set in the order management section of the TMS and transmitted via EDI, prior to offering a load to a carrier. Moreover, the system disallows scheduling if the pickup or delivery requested can't possibly be achieved given the parameters in the TMS for appointment time/day, product availability transit times and other critical considerations.

Helping to further improve timely pickups and thus, higher on-time delivery rates, Advanced Scheduling tools also support easy dock door scheduling. Vendors are given access to scheduling interfaces via a vendor portal. There, they can determine scheduling availability and reserve specific dock times from among the available open slots. A best-in-class solution produces system-generated messages to be issued to DC management whenever a door is scheduled or released. DC management may also view the entire schedule for a global view of daily DC throughput. Even dock users can be provided access for purposes of reserving dock doors as needed for maintenance, storage or any other reason.

Better scheduling automation and management saves time by:

- Improving utilization of driver hours of service
- Boosting on-time pickups/deliveries
- Minimizing late fees
- Optimizing labor utilization at the warehouse
- Reducing man-hours dedicated to scheduling calls/emails for transportation managers
- Improving visibility into delayed shipments and enabling subsequent re-routing

Not only does the time saved by improving scheduling translate to money saved, but improved logistics also translates to greater competitive advantage in the marketplace.

Want to save time and money in a tough logistics environment? Engage solutions with advanced scheduling capabilities now!

LOGISTICS knowledgebase©

Paul Thompson, Founder and Chairman, Transportation Insight
877-226-9950 • info@transportationinsight.com

Accelerate Breakthrough by Helping Human Experts

Imagine the art of the possible in an advanced digital age. What breakthroughs emerge? A look inside supply chain innovation labs shows engineers and academia collaborating as:

- The artificial intelligence revolution accelerates
- Algorithms pave the way toward superintelligence
- Shippers align supply chains to carrier networks to grow with less capacity
- Technology-centric supply chains optimize all modes
- Data scientists hone multi-modal, interactive metrics
- The multi-generational workforce excels in adaptability, waste reduction and innovation

From AI and blockchain to a trucking evolution contending with new ELD regulation, capacity shifts, surging volumes and a future with driverless vehicles—exponential change is here. Some argue the human mind is incapable of perceiving it. Yet, human creative intelligence and humility—which arguably elude AI—may be the X factors required for sustainability in our industry.

While machine learning and predictive intelligence will shape this era, creative companies that value collaboration, human expertise and servant leadership can change the game. In a framework of "it's all about we," CEO blueprints reveal leaders who do good work and show consideration for associates, customers and business partners can achieve more and drive transformation.

With the crosscurrents of change springing up faster than voice recognition apps on a smartphone, human experts equipped with insight can quickly multiply expertise. Multi-modal advisement from industry thought leaders, technology deployment, training and soft skills development combine to launch adaptive, innovative game changers.

When markets tighten, supply chains generally shift to focus on reliable service. Broad industry knowledge becomes critical. Decision makers seek proven processes, deep domain expertise including understanding of carrier strengths in all modes, cost and service. By leveraging shipping volume, visibility, long-term, executive-level carrier relationships and a mode- and carrier-agnostic philosophy that yields best lane, best price, best service options in a co-managed environment, shippers with an Enterprise Logistics Partner can improve performance despite constraints. Good shipper behavior is encouraged to reduce dwell times, establish reliable dock appointments, quickly pay and clearly communicate issues that may impact drivers' hours.

Great supply chain strategy can provide success for all stakeholders when designed with operational excellence, transparency and trustworthiness. Companies that are genuinely built to last—without exception—have high trustworthiness and competence. Shippers who foster long-term relationships with partners, who also value high-growth, entrench service dependability.

"What-if" scenario analysis also is valuable during disruptions. Mixed integer, linear optimization-based tools allow shippers to put constraints into the model of the supply chain network. Shippers can evaluate complex business and economic trade-offs, while rethinking network flows and lean process improvements. By examining the entire multi-modal supply chain, leaders can make the quantum leap from incremental improvement to predictive business processes and entirely new business models to evolve profitable performance.

Nimble companies use advanced analytics to evaluate same-day delivery options, last-mile delivery capabilities and knowledge of LTL shipping intricacies. Omni-channel shippers are also addressing risks while targeting growth as:

- E-commerce platforms have emerged to avert global trade non-compliance, penalties and seizures
- New sustainability business codes of conduct require third-party audits, inspection and analysis
- Warehouse sourcing optimized for e-commerce fulfillment allows for rapid market entry

Next-generation supply chain leaders embrace change to drive efficiencies. Innovation is how each of us is successful. Passionate, collaborative visionaries who find success by helping their teams accomplish their goals can help their companies do the same.

Neural networks lay the groundwork for the unimaginable. Siri, Alexa and Google Assistant fascinate, as we ponder technology and this thing called success. But the highest level of life is not success. The highest level of being is significance. Significance is not what you do for yourself—significance is what you do for others. When you value people, you accelerate the art of the possible and achieve breakthrough.

Paul Thompson is Founder and Chairman of Transportation Insight, an Enterprise Logistics Provider offering multi-modal (LTL, Parcel, TL) and e-commerce supply chain solutions. A recognized innovator in long-term value creation, Thompson was named the inaugural Grant Thornton North Carolina 100 Cultural Leader of the Year and received the 2015 EY Entrepreneur Of The Year® Southeast Region.

LOGISTICS knowledgebase©

Matt Parrott, Director of Transportation, A.N. Deringer, Inc.
888-612-6239 • marketing@anderinger.com

Top 3 Supply Chain Check-ups Provide Cost Savings

At the onset of overseas procurement, logistics professionals focus on supply chain strategy. Finding the right supplier, defining sales terms, determining the best transportation solution and speed to market mean sourcing start-up can be time intensive. When the goods finally arrive at the consignee, many supply chain professionals relax a little knowing that leg of the supply chain is established. But is "set it and forget it" a cost effective strategy?

When cargo consists of hundreds of SKUs or thousands of shipments moving via 10, 20, or 50 trade lanes, the complexity of cargo management can be challenging. In the age of Big Data, information is plentiful—but useless when not consistently reviewed and acted upon.

Paring the information to a few key points can bring cost clarity to the big picture, and make the task a little less daunting. A few quick supply chain check-ups pull together the right data to make it actionable (*download this tip sheet to learn the top five cargo transportation tactics at bit.ly/2msczWR*).

1. Container Utilization

For goods shipping via ocean carrier, how much of the container does the cargo occupy? When the container weight isn't maxed, available space equals money left on the table.

Assess the loss by calculating the useable, available space and the cost per cubic foot/meter. Periodically reviewing container loads and adjusting for maximum utilization will result in cost savings. Some best practices for ensuring container loads are maximized include:

- Revising packaging or pallet usage to gain space efficiencies, including possibly floor loading the container to fit more product (e.g., being sure to calculate the additional costs associated with offloading a floor loaded container at destination).
- Using container load calculators to determine optimal positioning within the container, as well as space utilization by cargo type.
- Utilizing consolidations such as shipping cargo together with goods from other suppliers at origin (i.e., a buyer's consolidation) or co-mingling cargo with other importers' goods (i.e., less than container load (LCL) consolidation).

2. Routing Review

Whether locking in carrier contracts or making use of spot rates, re-evaluating routing options should be a regular component of a supply chain check-up. Shifting market conditions or an expanding list of consignees has a big impact on the bottom line—and even more so if routing isn't routinely evaluated.

Market conditions are myriad. Anticipating contract re-negotiations at the ports, impacts of weather phenomenon, or chassis shortages are considerations for how goods are routed. As important, distribution strategies may require realignment when customers or consignees are added. Additional consignees may necessitate more shipments or bi-coastal warehousing, triggering a routing review.

Each leg of the trade lane should be evaluated to ensure a streamlined supply chain. For example, is there construction at the origin port? Is the port of unlading still logical given the consignees' locations? Are there chassis shortages that make an alternative port of lading more favorable? Is all-water routing a sound alternative over mini land bridge?

3. Discourage Demurrage & Detention

Without the right coordination and planning, daily storage fees at the airport or container yard (i.e., demurrage) can rack up quickly. Alongside those fees, detention can simultaneously be incurred when equipment, such as containers, are kept beyond the allotted free time. Avoiding these charges is the best tactic to achieving cost savings, and quantifying this expense provides an additional diagnostic measurement in supply chain health.

Experienced Customs brokers will ensure all of the required paperwork is prepared accurately in advance of the cargo's arrival—without the right documents, US Customs and Border Protection may delay cargo release, which can quickly devour available storage or per diem free time. Additionally, cargo and shipment delivery instructions should be shared with the carrier, vendor, and all third parties well in advance to avoid delays.

Proactively avoiding demurrage and detention becomes easier with the right tools or partnerships. Monitoring container movement through online tools and reporting or directly through a freight forwarder helps ensure these charges are avoided. Moreover, larger shippers have the buying power to negotiate extended free time.

During a supply chain check-up, focusing on a few of the right diagnostics results in healthy cost savings.

LOGISTICS knowledgebase

Shan Muthuvelu, President and CEO, SCM & Digital Business COE, ITOrizon Inc.
470-564-8798 • Shan.muthuvelu@itorizon.com

Rapid Rollout Plan for Manhattan's WMS

Currently, there is no proven rapid implementation strategy for Enterprise Warehouse Management Solutions. Complexity quadruples based on the MDM, ERP, EOM, WCS, MHE, and interface architecture, and presents unique challenges for each probable combination.

In the case of Manhattan, there are not many system integrators whom understand the product in-depth, and can implement quickly and efficiently.

ITOrizon has a long history of designing and implementing Manhattan SCM solutions, and we agree with Gartner on their WMS magic quadrant assessment.

We've come up with 10 steps for a rapid implementation strategy.

Step 1. Building a thorough BRD for selected vendors

Based on your strategic objectives and KPIs the RFP has been completed. A granular BRD is like a contract, and helps assure that design goes in the right direction, and accounts for every vendor's industry expertise.

Step 2. Pre-designing the operations flow, inventory segmentation, slotting, warehouse automation, and ERP/EOM/TMS/MDM Integration

Pre-design the operations flow to draw the line precisely for your WMS, WCS, MHE, TMS, ERP, EOM, and MDM vendors. We want to govern the systems based on your requirements, rather than on their capabilities and limitations on core functionality, integration architecture, budget, timeline, and resources.

Step 3. Presenting pre-design to Manhattan and all your MHE vendors, and getting final design

ITOrizon recommends having pre-design sessions with all software vendors, to get everyone on board with a single vision, and a consolidated design.

ITOrizon wants Manhattan to be the owner of the WMS design, to make sure, as a software vendor, they are not blindsided. They will provide the final design, considering your current objectives, and future roadmap.

Step 4. Exploring base and alternate solutions to avoid enhancements in Phase 1

Customers should religiously explore base solutions and base alternatives, keeping enhancements to ZERO. We have learned that taking this route helps you go live fast and gives time to adapt and focus on continuous improvements later.

Simplicity is the key.

Step 5. Enabling WMOS test automation for full continuous regression testing

It is ITOrizon's consistent observation that customers slip on both regression testing and manual testing, and force themselves not to take builds from Manhattan, because they are afraid of breaking things. We recommend taking builds and fixes and investing in Test Automation for managing the effort, to ensure timeliness and consistency of builds.

Post Implementation Strategy

Step 6. Building integration automation

Integration is where customers struggle because it's very difficult to automate integration. We recommend setting up integration tests across multiple applications. This approach has enabled our customers to roll out process improvements across systems in an agile way (even every two weeks), as part of their development sprints.

Step 7. Building VPT framework

For industries such as retail, you don't want systems to fail during peak times or high stages of customer demand. Retail is where rapid implementation is vital because of the repeated promotions, peak seasons, market disruptions, and seasonal needs. These factors will continuously throw curve balls, delaying projects and subsequently doubling and tripling costs. Build ongoing performance testing into your process.

Step 8. Implementing enhancements and process improvements in an agile way

Once you have gone live with no enhancements, evaluate each process on a repeat basis, and assess where your KPIs can improve, and where you can remove bottlenecks. Every two weeks, roll out new improvements through automation.

Step 9. Implementing LMS

This is where you can track not only productivity, but also labor standards. ITOrizon recommends LMS to be put in place once the floor is satisfactorily operationalized with a WM go live. This is also an essential step in continuous improvement.

Step 10. Implementing SCI

Monitor your supply chain performance in real-time through dashboard monitoring and data warehousing. Make strategic decisions through these powerful analytical tools that give visible impacts on the company's BI ecosystem, and the supply chain business processes themselves.

LOGISTICS knowledgebase

Dan Clark, Founder and President, Kuebix
978-298-2100 • sales@kuebix.com

It's Time to Make Inbound Freight Management a Priority

Frequently overlooked and often pushed to the bottom of a shipper's supply chain agenda, good inbound freight management can help companies improve shipment visibility, save money, and enhance customer service—all of which add to the bottom line and boost profitability.

Unfortunately, few shippers make inbound freight a priority, and even fewer consider it a strategic supply chain initiative. In fact, it's often the "final frontier" for businesses that are trying to eke additional costs out of their transportation spend.

Done right, inbound freight management does more than just help companies gain an understanding of where their shipments are at any given moment. It also stokes better supplier-carrier-customer relationships, reduces the need for excess inventory, improves reliability across the supply chain, and creates an atmosphere of accountability for all supply chain partners.

Here are three steps you can take to start managing your inbound freight more effectively today:

1. Partner with your suppliers to lay out a plan of action. Determine the most cost-effective and efficient way to ship and unload your freight, and build a plan with your suppliers that benefits both parties. There is no "magic number" for a percentage of shipments that should be vendor-controlled vs. customer controlled. Give your suppliers a choice so that they can select the most effective service and billing procedure. Then, implement a standard routing guide for supplier compliance. This will establish a set of mandatory guidelines that will be used for all vendor-controlled (VDS) and customer pick-up (CPU) shipments. Supplier compliance programs reduce your cost of goods by making your carriers and warehouse more efficient. In the event your suppliers fail to comply, they will share in your cost through violations outlined in the routing guide.

2. Create strong alliances with your carriers. Consolidate inbound shipments to full truckload wherever possible to reduce freight and unloading costs. Reducing the number of individual LTL shipments will decrease the cost of freight, dramatically increasing the efficiency of your distribution center and significantly reducing unloading costs. Think how much more efficient your operations will be with less trucks and less deliveries. For example, unloading 10 to 14 different LTL shipments can be five times the cost of unloading a single truckload. The customer and the supplier can share all of these savings through the efficiency of consolidated shipments and drop trailer programs. By consolidating your LTL pool, you can simplify yard management and maximize consolidation opportunities. Select carriers that provide attractive rates and superior service and try to limit that set to two to four different carriers, whether the shipments are CPU or VDS. This will give each carrier enough business to ensure LTL consolidation does not affect service levels. Having a strong partnership with your carriers also opens up other opportunities for additional savings such as backhaul agreements with LTL carriers to consolidate freight to single truckload for pick up by your own fleet for the final mile.

3. Leverage technology to your advantage. Utilize a transportation management system (TMS) to maximize inbound freight management. For example, leverage your TMS to implement an allowance program for freight costs and unloading expenses with your suppliers. In most cases, allowances are negotiated once or twice a year, and rarely take into account fluctuating costs and carrier rates. Oftentimes, market rates rise above negotiated rates. Kuebix TMS enables the creation of dynamic rate allowances to ensure savings on both TL and LTL shipments by calculating the best possible real-time vendor allowances based on actual carrier rates as demand dictates. Additionally, a TMS will automate tracking, scheduling and door assignment, which will directly reduce your labor spend. Finally, if you cannot measure something it is hard to improve it. An effective TMS will capture every relevant piece of data and return reports, dashboards and scorecards that allow you to analyze your inbound freight program and identify opportunities for increased efficiency.

Ultimately, good inbound freight management facilitated by technology helps shippers achieve cost and productivity goals that very often get overlooked in the logistics space. By taking a step back and gaining a better understanding of your current inbound environment—then working with suppliers and carriers to come up with a plan of action to improve it—you'll be able to leverage all of the market's capacity, get the best rates, and gain better visibility over your end-to-end supply chain.

Download the full Kuebix whitepaper on "Better Management of Inbound Freight" in the Kuebix Resource Center at www.kuebix.com/resource-center.

Founded by a freight industry technology innovator, Kuebix offers a transportation management system (TMS) with Freight Intelligence that enables companies to capitalize on supply chain opportunities through visibility, control and the use of predictive analytics. Learn more about Kuebix at www.kuebix.com.

Polaris Transportation Group Embraces Blockchain Technology

Without question, Polaris' ongoing and increasing investments in technology have created a competitive advantage. It has been a core strength in the company's ability to compete and take market share from the larger, publicly funded competitors.

Polaris Transportation Group is the largest privately held Canadian cross-border LTL carrier and has enjoyed growth in each of its 24 years of history, with 2017 results being the best yet. Blockchain and robotic process automation is where the company is placing its next big bet.

Polaris Transportation Group President, Dave Cox, explains: "In general, the pace of change is going to accelerate with the further evolution of the digital age. In the transportation space, we see new ways to serve customers and make our business better as technology enables solutions to business challenges we've struggled with for years. It is a liberating feeling for us and the global supply chains that we participate in."

Specifically, Mr. Cox is investing in projects relating to customer service, operational precision and risk management. The return on investment offered in these three key areas has become quite compelling in the past six months as blockchain and robotic process automation solutions become more accessible and integrated.

"The thought of increasing the speed of information sharing and execution while lowering the costs of connectivity and counter party validation empowers true scale for fleets of all sizes," Mr. Cox adds.

"Today, we have large customers who want to connect to us directly but their systems either won't allow, or the costs to connect become a barrier," Mr. Cox explains further. "However, joining a global supply chain information stream, or blockchain, alongside our customer allows integration of information and cost advantages where we both serve several of the same participants.

"The change in conversation and the scale on investment becomes clearer, as opposed to the costly, non uniform, bi-lateral connections with those same stakeholders," he adds.

In terms of operational precision, blockchain pivots the traditional "waiting for an order" to a more proactive relationship where a customer request is anticipated as early as when the raw materials are sourced in another part of the world.

Mr. Cox adds, "Having a P&D fleet that is organized geographically isn't the best solution but it is what we have today. Knowing where and when trucks will be needed earlier in the process will allow us to optimize the customer experience and our operations – leaving less waste in the system. When you think about the value of knowing what orders you'll have to execute tomorrow today, for an LTL operator, it allows the system to flow in a totally different and better way."

From a risk management perspective, blockchain, and its inherent hyper ledger reconciliation and smart contracts provide for a purer approach to payments and managing credit. Moreover, the validation process associated with a global block chain and its members, transitions the business away from receivable collections and the need for three references on a new account application. Mr. Cox shares, "Knowing if a key customer has a customer that is growing or slowing, in real time, allows us to make more timely and informed decisions in a more efficient way, from a cost structure perspective."

They say that inevitably, the future always comes. For Polaris Transportation Group, the future can't come fast enough.

POLARIS TRANSPORTATION GROUP

Polaris Transportation is the largest Canadian privately held cross border LTL carrier serving every US zip code and Canadian postal code on a daily basis. For nearly 25 years, Polaris has been a carrier of choice for Fortune 500 companies, 3PLs, global freight forwarders and small to medium size businesses alike. The Polaris Transportation Group is comprised of five operating divisions that are not only leading providers of cross border LTL but of global logistics and hazmat certified warehousing and transport. Leading technology, sustainable growth and a collaborative spirit are hallmarks of their brand and delivering as promised, their commitment to their customers. For more information, please visit their website at polaristransport.com, call 1-800-409-2269, or email customercare@polaristransport.com.

Chad Crotty, Vice President of Sales, DDC FPO
303-674-0681 • ccrotty@datacapture.com

Top 8 Logistics Challenges Facing the Industry

These days you have more challenges than just trying to keep trucks full; you have your hands full of business process needs that can often feel like too much to handle.

According to a third-party logistics study by Capgemini, "cutting transportation costs" makes the top of the list as far as concerns for the logistics industry. Some other obvious pain points make the list as well, but perhaps the most important–and at times, challenging–concern is the need for greater innovations and technology advances while remaining budget conscious.

Here is a snapshot into eight of the top challenges facing the industry.

1. Fuel Costs. One of the highest costs contributing to the "cutting transportation costs" concern is fuel prices. Higher fuel prices are likely to increase transportation costs for U.S. shippers this year by pushing up fuel surcharges. Rising U.S. diesel fuel prices are escalating surcharges added to freight rates, which is reversing a two-year trend that cut into the revenue and earnings of truckers as fuel prices plummeted.

2. Business Process Improvement. Notwithstanding the need for new technology, which we discuss in number eight on this list, it has become an increasing challenge for the logistics industry to stay on top of new advances in business processes. Taking advantage of these new opportunities sounds enticing, but adoption and onboarding can be overwhelming.

3. Improved Customer Service. Customers want full transparency into where their delivery is at all times. These days, the location of a package is as interconnected as your social network. In fact, as customer expectations have increased, their willingness to pay for fast shipping has decreased, with just about 64 percent of consumers unwilling to pay anything extra for less than two-day shipping.

4. Economy. With high fuel prices comes a greater credit crisis and rising inflationary demands that take a greater toll on the U.S. economy. This industry is then pressured by increasing compliance regulations, declining demand, and additional capacity with additional increases in key cost centers.

5. Driver Shortage & Retention. Hiring and retention remain an issue despite the lower demand mentioned above.

6. Government Regulations. Carriers face significant compliance regulations imposed by federal, state, and local authorities.

7. Environmental Issues. The anti-idling and other emission reduction regulations brought about by state and local governments has created concern that the compliance costs could exceed benefits.

8. Technology Strategy & Implementation. While the industry understands and supports many of the benefits of these technologies, some questions remain as to how they will pay for it and who will help implement the improvements.

We understand how difficult it can be to manage these concerns. Outsourcing all or a portion of your freight and business processes can often provide the required expertise, people, capacity, and IT systems needed to help reduce expenses, improve visibility into the supply chain, effectively manage the supply chain, and achieve greater regulatory compliance. DDC FPO offers the right solutions to help lighten your load. From Billing and Rate Auditing to IT Outsourcing and POD Processing, DDC FPO is here for you.

Consider alleviating your concerns by leveraging DDC FPO for all of your back office outsourcing needs. Contact a DDC Team Member TODAY at www.ddcfpo.com.

DDC
FPO Solutions
Your Freight Back Office Partner