Have you tried OTM's Logistics Network Modeling Yet?

Every company must deal with the constantly changing conditions of the events that may have an impact on the supply chain. Many have not yet realized that the Oracle Transportation Management (OTM) system can now be used for more than just executing shipments and auditing and paying invoices; you can do network design and modeling, and what if analysis, all using live operational and master data. For example, let's consider one of the major events happening in our country today, the potential Rail Strike. If the railroads go on strike, there will be a major impact on our supply chain. Companies will need to determine how they will ship their goods, avoiding the railroads and using the most cost-effective alternative. This is a perfect opportunity to consider Logistics Network Modeling (LNM).

LNM is an integrated component of OTM Cloud and the remarkable thing about that is it works using your operational data and configuration (orders, rates, itineraries, parameters etc.) or you can upload transactional data as well using the new easy to use order upload template. Depending on what you are trying to achieve would determine if you should execute your modeling in your production or test environment. Typically, you would want to use the test environment for analysis of large amounts of data while using production for operational analysis (LNM does use the same planning threads as your normal bulk plans). You could also schedule the modeling scenarios to run at night or over the weekend. So, let's consider this rail strike. You would want to look at your orders and predict what would the bulk plan look like if shipping rail were not an available option. Knowing how many additional TL or LTL shipments will get added to your daily shipments will allow you to secure additional capacity with over the road carriers. Understanding how the strike will impact revenue for that quarter or that year would be important to forecast as well. LNM can help you analyze these options by running different scenarios using your actual historical or future orders for a specific period. What's awesome is you could also consider options like changing where an order is sourced from that would be able to bypass a rail option, or even consider the impact if you implement a cross dock as an alternative to rail. You can run these various shipping options and compare the cost impacts of each option you want to consider in the side-by-side shipment view displayed in the LNM Workbench. Being able to do this with real order data and rates and see the actual shipments that the bulk plan will put together is so much more powerful than using a modeling tool external to OTM that does not have all your configuration. Often when using an external modeling tool, the results you get in the model are not realized when you execute it. With OTM the system uses the same bulk planning parameters and configuration in LNM, so you should see the same results when you run your actual bulk plans. Perhaps You don't use rail as a shipping option, what else could you use LNM for?

Troubleshooting - Can't figure out why your bulk plan is giving you the results you're getting? Or your bulk plans are taking a long time to run and you're unsure which parameter is causing the slowness? Troubleshooting with LNM is an untapped secret that many are not taking advantage of. Recently, Winfree Consulting was working on a project with a customer using Network Routing and Fleet. When running the bulk plan, OTM was not consolidating the shipments expected across the network legs and was creating multi-stop shipments that did not make sense. We needed to troubleshoot the planning parameters and logic configuration for Network Routing, Fleet, and Multi-stop. The old way of doing this troubleshooting is to create a copy of the parameter sets and logic configuration, then make a change, run the bulk plan, see if the change worked, then repeat the cycle over and over again. This is very time consuming and tedious because you must document each change and combination of changes you've made so you can track what you've done and what the results were until you get the results you're looking for. With LNM, you can do that same testing of all your scenarios and parameter changes, and combination of parameter changes and you never have to modify your original parameter set. You can compare the results of your bulk plans, look at the shipments side by side and the stops, even run analytics and mapping on those shipments until you get the results you want. You can see how long each plan takes to run and see the diagnostics for each plan. You can change parameters, logic configuration, even change the constraints on the orders or master data to see what the impact would be. Using LNM to troubleshoot is not difficult to configure, it does not impact your actual configuration or data and it is a benefit you can start using right away to model, manage, and troubleshoot your network and performance™ your OTM environment.

Forecast Analysis – Imagine you're going to start a new line of business, or you're going to run a sales promotion and you need to determine the impact this will have on your shipment plans. In years past many have wanted to use OTM to do this type of forecasting analysis but the only way to do this in OTM was in your test environment or creating a copy of your domain and manipulating xml's to import copies of orders and changing orders to try to simulate the volume you expect to receive and what you need to plan for. LNM has an awesome feature where you can take existing orders and tell OTM how many copies of each order type you want it to simulate, and you can run bulk plans on these orders using the different volumes and analyze how many drivers you may need for your fleet or whether you need to run a procurement bid with your carriers. If you don't have the orders in the system already, you could upload the various order scenarios you want to analyze using the new

easy to use upload template for orders, then tell LNM how many copies of each scenario you want to simulate. You could even run different scenarios for specific time periods, simulate changing the dates on the orders, change the trapping windows, changing the locations or even change the hours of operations for locations and the beauty is, you never have to actually change the live operational orders or master data, everything is done in memory using the scenarios in LNM.

Market Rates and Bid Analysis – By now you've probably heard of the API's offered to provide real time pricing or spot pricing from companies like Uber Freight, Loadsmart, and Surge Transportation to name a few (if you haven't, you're missing out and we should talk). These companies provide real-time spot pricing that can be considered in your bulk plans along with your contract rates. A more powerful way to analyze your rates would be to use LNM and these API's to compare your contract rates vs market rates and even active bid rates. Again, because LNM is using your operational data and configuration you could run a baseline bulk plan using just your contracted rates, at the same time you could run another bulk plan using each one or all of the real time pricing providers rates and compare the results of the bulk plans comparing you contract rates, spot rates and the rates you've received in a bid. Because LNM is available in production, your Analyst can run real time comparisons as frequently as required and you don't have to impact your operational bulk plans. Let's say one of your carriers wants to give you a 5% increase on your rates; you could run an LNM scenario to determine what the impact would be to your plans if you take the increase or if you excluded the carrier from your plans. Having this analysis at your fingertips allows you to have a much different negotiating posture with your carriers.

Location Opening or Closure and Changes to Stop Count – There are times when decisions need to be made strategically if a location needs to close or a new location needs to open or there are unexpected opening and closures of locations due to weather, natural disasters, or strikes. During these times you may also want to consider increasing or decreasing the number of stops allowed on a shipment or how much activity time for loading or unloading should be considered. With LNM you can quickly simulate these types of changes in your modeling projects then decide if you want to promote these changes to your live configuration.

New Customer or Co-loading Opportunities – Every 3PL wants to be able to take advantage of the freight they manage by cross consolidating multiple customers onto one truck. Or if you're a shipper with your own fleet you want to see the impact shipping to a new customer would have on your fleet as well. You already have your existing customers data and order history in OTM, what if you can have your potential new customer give you their lanes and order volumes and you upload it into LNM and run bulk plans with your other customers data and the output would be a visual look at the shipments that would get created using these new customers lanes and volumes. Using this analysis, you will be able to determine how this new customer fits into your network and it can even help you to negotiate rates with the customers and the carriers.

Customer Constraints or Preferred Carriers Impact – Ever wonder how your plans would run if you didn't have specific constraints on the orders or locations or if a customer has a preferred carrier that you must consider. Imagine being able to provide data to your customer that shows them true savings that could be realized if they removed constraints from the orders. You can use LNM to run a baseline plan with the constraints and at the same time run a bulk plan on the same data with the constraints removed and show the changes in optimization and the metrics of shipment counts, cost, distance, and transit times that could provide better cost or service by making simple changes. You can send the results to LNM Analytics which allows you to easily create visual charts and graphs of your modeling results. This makes an extremely impactful presentation to your customers or to executives.

Fleet Analysis – When managing your dedicated fleet, you need to make decisions like should fleet or common carrier be used for this lane, is the fleet positioned in the right areas, what would be the impact if I added fleet to a new location, do I have the right number of fleet drivers available, how would the plans look if the drivers were increased or decreased. How would the plans look if the drivers had a five-day work assignment vs a 6-day work assignment. What if you wanted to give your Fleet drivers an increase in salary or want to purchase new trucks and need to present the expected impact or ROI to Executives before the purchase? Again, all of these are things that can be modeled using LNM.

While these are not the only use cases you could use LNM for, I hope you can see the power that you have in OTM Cloud to model any scenario you choose. The options are endless, and Oracle continues to make enhancements. You can simulate changing order or master data, include, or exclude various shipping scenarios, simulate order volume for forecasts using historical or uploaded data and review the metrics and analytics in LNM Analytics where Oracle has provided preconfigured dashboards and user defined metrics. LNM is easy to use, it has good performance, and the results and analytics provided allow you to make long term strategic changes, daily operational decisions and even help troubleshoot planning and performance results. If you have not tried OTM LNM yet, what are you waiting for? Contact [Winfree Consulting](#) and we would be happy to train you to use it and help you take advantage of all the benefits. Here's a link to the [Oracle LNM Product Tour](#).

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Terrell has been implementing the Oracle Transportation Management application since 1999 (**23** Years).

She spent 17 years with a major third-party logistics (3PL) provider where she successfully completed more than 80 implementations with budgets of **50K-7M** in North America, Latin America, and Europe for customers in all industries including 3PL, Consumer and Retail, Life Sciences, Chemical Industrial, Oil and Energy, Technology, and Automotive.

Terrell started her consulting career in 2014 as a Managing Consultant at DXC Technology, formerly CSC for 6 years. At DXC Terrell led the OTM Practice made up of functional, technical, integration, support, and DBA resources both onshore and offshore. Terrell's team successfully completed several multi-year implementations ranging in deal sizes **15K-10M** and developed innovative integrated solutions and accelerators for OTM.

Terrell is known for the development and implementation of innovative, efficient, quality solutions for business-critical customer processes as well as developing quality OTM implementors, super users, and end users. Terrell founded Winfree Consulting in February 2021 which is a conglomerate of Independent OTM consultants that have been implementing OTM longer than 15-20 years and come together to provide affordable, quality, efficient solutions.
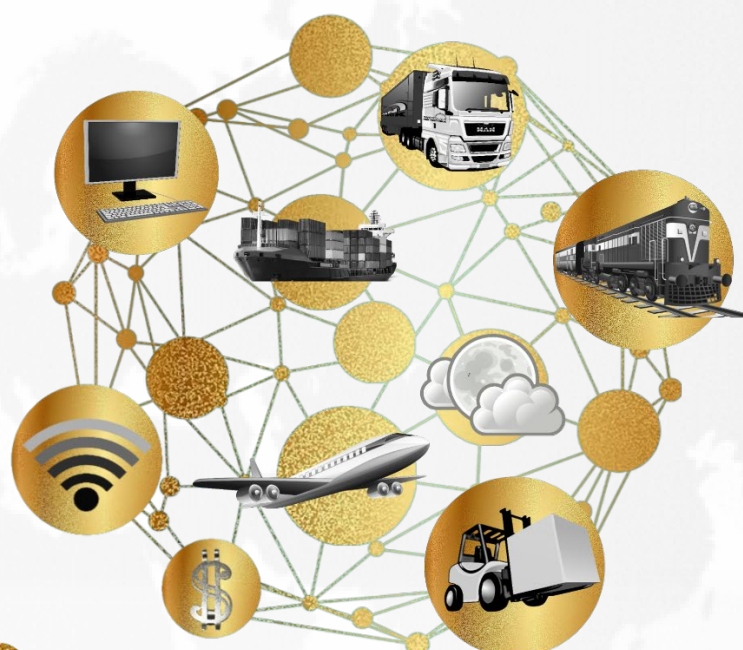
Winfree Consulting™ LLC is committed to providing experienced, quality, functional and technical resources that will not just complete an implementation but will ensure that the most effective, efficient, and user-friendly solutions will be deployed on time and on budget.

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