



Optimization. Delivered.



LTL vs. UPS Hundredweight and FedEx Multiweight

By: Kevin Smith – Supply Chain Analyst, Optimum-SCO



The evolution of shipping methods has helped spur competition and operational efficiencies for shippers and carriers. FedEx and UPS have more trucks in more locations than LTL carriers, giving them the ability to deliver on their small package network at a lower cost than LTL carriers. As a result, cost structure and scalability must be considered when choosing the best method for your needs. A competitive analysis will help us decide when to utilize one over another.

Because the hundredweight and multiweight services are very similar in nature and execution, this analysis will combine them to benchmark against the LTL method. Let's begin by examining the advantages of each.

Advantages of using LTL:

- 1) Since LTL shipments are palletized:
 - a. The amount of material handling goes down
 - b. Risk of damage goes down
 - c. Security goes up
 - d. All of your boxes arrive at once
- 2) The cost of shipping compared to Multi/Hundredweight decreases as:
 - a. Your package travels further
 - b. Your package weight increases
 - i. *See Appendix for visual representation*
- 3) If the consignee has a loading dock, its very easy for him or her to receive
- 4) LTL has proven optimal in situations where product can be stacked well and if you're shipping in the range of one to six pallets per truck
- 5) There are less constraints on package size

Advantages of using FedEx Multiweight or UPS Hundredweight:

- 1) No pallet cost, additional weight for pallet or labor for preparing pallet
- 2) Minimum delivery charges are much lower
- 3) Pricing and convenience is far better for small shippers without LTL discounts
- 4) The claims and audit process are easier
- 5) More consistent transit times
- 6) Does not require a loading dock at pick up
- 7) Higher automation lowers administrative costs
- 8) Revenue credits from FedEx and UPS will save you 1-3% on ALL of your shipments
- 9) Freight Class is not required
- 10) Scheduling pickups is not required
- 11) Recipients can receive shipments without delivery appointments
- 12) Tracking is more real-time and reliable

REPORT

optimum
Supply Chain Optimization



Optimization. Delivered.



REPORT

Decision-making tools are available to help guide you in this optimization process. In your operation, you must ask yourself the following questions when laying your framework of physical distribution:

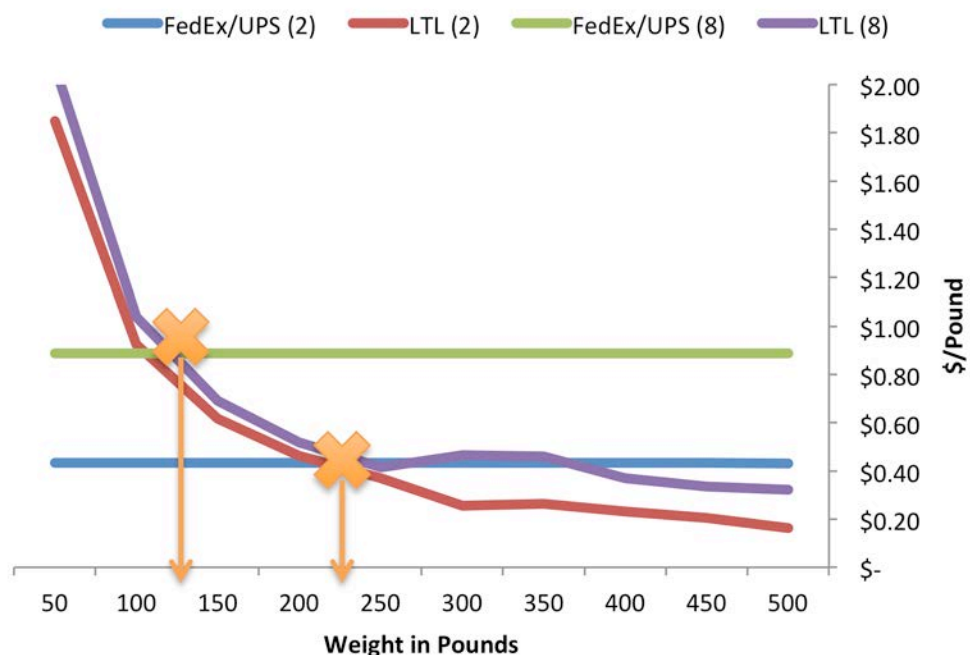
- Are my FedEx and/or UPS contracts optimized?
- Are my LTL contracts optimized?
- At what threshold does LTL become more cost effective?
- Where do I need more consistent service?
- What is the value of convenience in my organization?

Remember that proper logistical design allows you to satisfy customer demand at the lowest total cost.

Appendix: Comparing example FedEx and LTL pricing data:

- The point at which LTL becomes cheaper (break-even point) is different from zone to zone
- Zone 2 represents 0-150 miles traveled from origin
- Zone 8 represents shipments traveling 1800+ miles
- The break-even point in Zone 2 is about 225 pounds, while in Zone 8, its about 125 pounds. From this example, it's easy to validate argument #2 in the LTL advantage list above.

Example Data - Price per Pound Zone 2 and 8 Breakeven Comparison





Optimization. Delivered.



The Optimum Team



Kelan Raph – Chief Consultant

Kelan has provided global logistics & transportation solutions to the world's leading manufacturers, distributors, and retailers. With over two decades of hands-on international logistics & transportation experience, he is able to create and implement supply chain efficiencies that get bottom line results. He loves the problem solving that goes into his practice and truly enjoys building solutions customized to his client's business strategy.



John Mandel – Senior Consultant

John has nearly 20 years of experience in directing and sustaining organizational performance that drives productivity & bottom-line profit improvement in logistics, transportation, & warehouse operations. He has managed all aspects of an organization's financial and operational processes to drive best-in-class supply chain practices vital to optimizing performance, productivity, and cost containment.



Arun Rao – Technology Consultant

Arun is an entrepreneur with over 20 years of experience in supply chain & enterprise software. He has worked for several successful venture-backed startups as well as large multinational companies where he managed multi-million dollar projects, implemented complex & innovative solutions, & built cross-functional, geographically diverse teams. Arun is an avid hiker, likes reading fiction, the occasional game of chess and traveling.

REPORT

optimum
Supply Chain Optimization



Optimization. Delivered.



REPORT

optimum
Supply Chain Optimization



Wenting Pan – Senior Supply Chain Analyst

Wenting received her Ph.D in Operations and Decision Technologies from the University of California, Irvine. She is currently an Assistant Professor in Operations and Quantitative Methods at Saint Mary's College and her research interests includes managing supply chain uncertainty, sourcing strategies, game theory, supply chain management, operations research, and decision analysis.



Janel Alimboyoguen – Project Manager

Janel is a graduate of Santa Clara University with an Accounting & Information Systems degree. She is versed in marketing, accounting, and business administration. She has had previous experience with C-level support and financial project management. She is passionate about bringing Lean concepts to all aspects of business operations. She is deeply involved with the community through the Rotaract Club of Silicon Valley, a group of young professionals dedicated to community service.



Kevin Smith – Supply Chain Analyst

Kevin is an Economics graduate from UC Berkeley. He is currently working towards his Masters in Global Supply Chain Management with USC. Between undergraduate & graduate school, he worked with Apple as an Operations Manager. His constant desire to improve the status quo and ask questions works in his favor as Optimum's resident data analyst. Kevin is passionate about educating people about the importance of operations & optimization.



Optimization. Delivered.



REPORT

optimum
Supply Chain Optimization



Peter Bui – Operations Analyst

With his excellent interpersonal skills, Peter is Optimum's first point of contact with new & potential clients. He has had previous operations experience with a major retailer and distribution centers. He has also assisted in change management efforts for various companies. He is passionate about creating operations that run smoothly and is deeply involved in optimizing supply chains with Optimum.



Pedro Nguyen – Operations Analyst

Based upon a background in business management, Pedro provides Optimum and its clients with keen insight and skills in operational management. His skills are valuably applicable to the processes of the supply chain industry - purchasing, inventory management, logistics, and integrated business process management. His experience in creating SOPs helps set businesses up for success.



Momo Raph – Chief Creative Director

Momo is a film graduate from Nihong University in Tokyo, Japan. In addition to a creative background, she brings operations experience through managing a chain of restaurants in Tokyo and Los Angeles. She is passionate about continuous improvement, constantly striving to improve Optimum's deliverables to their clients.



Optimization. Delivered.



Chocka Cordova – Research Assistant

Based in the Philippines, Chocka has a Bachelor's degree in Industrial Engineering with a Master's in Special Education. She is currently a part-time SPED teacher at the University of San Carlos Montessori, as well as Optimum's virtual assistant in data entry and research. She has five years of experience in sales and marketing.

REPORT

