

THE REVOLUTION IN NETWORK OPTIMIZATION

How Transportation and Demand Variability
Open New Frontiers

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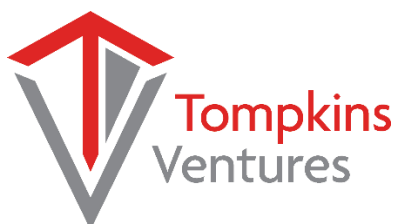
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Contents

Executive Summary.....	2
Redefining the Rules for Supply Chain Design	3
Where Network Optimization Went Wrong – and How to Get It Right	3
The Limits of Static Models in a Dynamic World	3
Why You Must Optimize Transportation – Continually	4
The Power of Consolidation, Mode Shifting and Other Tactics	5
The Tompkins Methodology Integrates Transportation and Demand Variability	5
Transportation and Demand Variability Lead the Dual Revolution	6
How Transportation Cost Reductions Redefine the Optimal Distribution Network.....	7
Transportation as the Foundation of Network Design.....	7
B2C, Where Transportation Optimization Enables Service-Driven Networks.....	7
B2B, Where Transportation Efficiency Drives Strategic Consolidation	8
Two Models, One Principle Designing for a Dynamic Future	9
How to Find – and Implement – Double-Digit Transportation Savings	11
Why Transportation Holds the Keys to 10-20% Savings	12
What a Total Transportation Analysis Can Find	12
From Analysis to Action, or Implementing a Modern TMS.....	13
The Right TMS Reduces Costs – and Improves Service Levels.....	14
Freight & Parcel Auditing Finds Hidden Savings	16
Smart Contract Negotiation & Monitoring Goes Beyond Auditing.....	17
Bringing It All Together.....	17
From Revolution to Results	18

Executive Summary

For decades, network optimization focused primarily on facility location and inventory allocation. The results looked impressive – lower costs, higher service levels, improved efficiency. But those static models failed to capture the dynamic realities of transportation and demand. In today's volatile market, that old approach no longer works.

The Tompkins team is introducing a new paradigm: transportation-led network optimization, integrated with demand variability modeling. Together, these forces redefine what “optimal” means in modern supply chains.

In Part 1, *Jim Tompkins* explains how transportation and demand variability have become the twin engines of a supply chain revolution. Static averages and fixed assumptions are giving way to dynamic, data-driven strategies that continually adjust to real-world conditions. Companies that integrate transportation early – and repeatedly – in the design process can double ROI while achieving higher service performance and resilience.

In Part 2, *Sara Shingleton* demonstrates what this revolution looks like in practice. For B2C companies, lowering parcel costs enables expansion into high-cost, high-density markets that accelerate delivery and improve customer satisfaction. For B2B enterprises, where transportation accounts for roughly 65% of supply chain expense, efficiency gains drive consolidation – fewer facilities, lower overhead, steady service. In both models, transportation cost reductions reshape the optimal distribution footprint and redefine strategic balance between cost and service.

In Part 3, *Mike Royster* brings the framework to life through execution. He outlines how organizations can uncover and sustain 10-20% transportation savings through comprehensive transportation analyses, Managed Transportation Solutions (MTS) that include advance Transportation Management Systems (TMS) and continuous freight and parcel auditing via match pay. These actions convert theory into measurable financial and operational impact.

Taken together, these three perspectives mark a fundamental shift in supply chain design. The revolution in network optimization rewrites the playbook. Transportation and demand variability now determine how high-performing networks are built, operated and evolved for the future.

Redefining the Rules for Supply Chain Design

Where Network Optimization Went Wrong – and How to Get It Right

By Jim Tompkins

For much of my career, I spearheaded network optimization initiatives for organizations across the globe. Those project results looked impressive by traditional standards: we reduced overall costs for clients by 7 to 15 percent, service levels rose by 20 to 30 percent, and performance metrics across their supply chain networks moved sharply upward.

But stuck in our silos, my teams missed examining aspects outside our lane, aspects that are revolutionizing network design projects: transportation optimization and demand variability.

Sure, back in the day we analyzed distribution footprints, warehouse placement, inventory allocation and transportation lanes with precision, then produced models that appeared to optimize the enterprise network. But with the benefit of hindsight, I realize we only produced elegant, static solutions that aligned reasonably well with corporate strategies.

I mean, transportation expenses can take up 65% of your total supply chain costs. And in a world of perpetual disruption, expecting static demand is pointless. Today, despite decades of satisfied clients, I can't claim we truly optimized networks because we left out such important drivers of performance.

Now, in our defense, much of the technology surrounding transportation has undergone a similar revolution: AI-driven Transportation Management Systems (TMS), telematics that transmit vehicle and driver data to enable dynamic routing and proactive fleet management, digital supply chain networks and more. And outside of seasonal demand variations, the world pre-2020 was much more static than what we face today.

These days, network designers who overlook transportation, demand variability and their associated technologies are missing the revolution. They aren't serving their clients to the best of their ability. In fact, organizations that fail to integrate transportation and demand variability into their planning often leave 15-25% of potential cost savings, along with substantial service improvements, "on the highway."

The Limits of Static Models in a Dynamic World

For decades, companies approached network optimization with models built on averages. They assumed relatively stable freight rates, along with locked-in transportation modes and routes. They projected demand using broad annualized

numbers. These assumptions offered the comfort of simplicity, but they ignored the volatility of the real world. Fuel prices fluctuate weekly, capacity constraints emerge suddenly, customer demand varies seasonally and often unpredictably.

Static models, no matter how sophisticated the mathematics, simply cannot accommodate such variability.

Most organizations begin their optimization projects by creating a baseline rooted in published transportation market rates. They then layer distribution center scenarios on top of that baseline, seeking the arrangement that yields the lowest calculated cost. What they fail to incorporate is the reality of their actual freight spend, their parcel costs and the service requirements that matter most to their customers. The result is that the recommended footprint — the so-called “optimal” number and location of facilities — may in fact increase costs or diminish service performance once the real world introduces transportation dynamics.

Static models were adequate for the era of predictable costs and stable freight patterns. But in today’s volatile landscape, clinging to those methods is akin to fighting yesterday’s war. The revolution lies in discarding static averages in favor of dynamic, transportation-driven design.

Why You Must Optimize Transportation – Continually

Optimizing transportation before and during a network redesign is a revolution other network planners aren’t even considering. Because to most, transportation is an afterthought to network design.

That’s not the way the Tompkins team thinks. Because before executives decide where to site a new facility or how to allocate inventory across a network, they must first understand how transportation can be consolidated, re-routed, mode-shifted and negotiated. Optimizing transportation before — and then again during — the network study allows organizations to design with real, achievable costs and service levels in view.

Consider a typical modeling exercise. Out of several potential scenarios, the model indicates that a five-distribution-center configuration yields the lowest costs based on market rates. Yet a deeper transportation analysis reveals that this footprint allows only minimal consolidation of less-than-truckload (LTL) shipments, perhaps shifting 10 percent of them to truckload (TL).

An alternative four-distribution-center configuration might consolidate 30 percent of LTL into TL, double the mode shift and simultaneously reduce the capital and operating burden of one entire facility. The “optimal” design changes entirely after you fully integrate transportation into the analysis.

The Power of Consolidation, Mode Shifting and Other Tactics

Just two transportation tactics — consolidation and mode shifting — illustrate the magnitude of these effects. Consolidation combines multiple less-than-truckload shipments into a single truckload, dramatically reducing cost per unit shipped. Mode shifting involves moving freight from higher-cost modes to lower-cost alternatives, such as from air to truck, truck to rail, or rail to water.

And then there's pooling, multi-stop, lane and network optimization – the list of tactics transportation pros can use goes on.

When strategically and systematically applied, these tactics don't just reduce costs — they redefine what an optimized network even looks like. That is the essence of the revolution: transportation reshapes the very questions we ask and the answers we pursue.

Because ignoring transportation optimization untethers network design from operational reality, making the project almost a theoretical exercise. Worse, it can produce what I call “false positives” — facility footprints that appear optimal in the model but in fact deliver inferior service and higher costs when implemented.

The Tompkins Methodology Integrates Transportation and Demand Variability

The Tompkins methodology does not evolve from traditional planning — it replaces it. By integrating transportation optimization and demand variability into network planning, we move from incrementalism to revolution, doubling ROI and rewriting the standards of supply chain performance.

Rather than assuming stability, we employ multi-period models that incorporate weekly, monthly and seasonal demand patterns. Because seasonal surges, promotional spikes and regional differences mean that the “average demand” assumed in traditional models never actually materializes. By integrating dynamic demand planning into network design, organizations can build flexible capacity buffers, scale labor and transportation resources effectively, and position inventory where customers actually need it.

And instead of treating transportation costs as fixed inputs, we model them as dynamic and negotiable, subject to the leverage gained from consolidation, mode shift, carrier competition and other tactics.

The results are striking. Traditional approaches may yield 7 to 15 percent total cost reductions. Our integrated methodology consistently drives savings of 15 to 25 percent, while simultaneously boosting service levels beyond 30 percent.

From a strategic perspective, the following table details the changes:

Strategic Element	Traditional Planning	Tompkins Methodology
Facility Siting	Based on averages	Based on demand variability
Inventory Allocation	Static models	Seasonal & real-time models
Transportation Costs	Fixed input	Dynamic & negotiable
Profit Margins	Squeezed	Expanded through efficiency

Strategies that capitalize on integrating facility placement, inventory strategy and transportation can yield numbers like these:

	Traditional planning	Tompkins methodology
Facility savings	5-20%	15-30%
Inventory savings	10-20%	15-25%
Service levels	+20-30%	+30-40%
Transportation savings	5-10%	20-30%
Overall cost reduction	7-15%	15-25%

Transportation and Demand Variability Lead the Dual Revolution

Senior executives must recognize that the world has rewritten the rules of network optimization. This revolution in network planning has permanently altered how companies build competitive advantage.

Transportation defines how fast you can move; demand variability determines where and when you must move. Integrating the two unlocks the flexibility, efficiency and resilience that static planning could never achieve. In today's environment of perpetual disruption, that unified strategy can help companies simultaneously reduce excess capacity, eliminate bottlenecks, lower transportation spend and elevate service levels.

Therefore, executives must make sure that any team tasked with network optimization brings three critical competencies: expertise in network design, mastery of real-world variability and rigorous transportation optimization. Without these, organizations risk investing millions in designs that fail to deliver a high-performance network.

The future of network planning belongs to companies whose leaders embrace transportation and demand as living systems – not fixed inputs. Those who adapt will set the new standard for speed, cost and customer satisfaction.

How Transportation Cost Reductions Redefine the Optimal Distribution Network

Transportation as the Foundation of Network Design

By Sara Shingleton and Rachel Honbarger

Now that we've established that network optimization must begin with transportation — not end with it — let's examine how that revolution looks in practice. Moving beyond static, facility-first models to designs grounded in real transportation performance and cost creates different options, depending upon your goals.

When we apply transportation optimization to actual business models, the outcomes diverge sharply between business-to-consumer (B2C) and business-to-business (B2B) networks. The balance between facility and freight costs, service requirements and delivery expectations shifts in opposite directions. Yet the underlying logic remains constant: transportation defines the boundaries of what is operationally and financially possible.

For B2C companies, reducing parcel transportation costs expands the viable geography for facility placement. Those savings allow operations to absorb higher facility costs near dense population centers, where proximity enables faster delivery and enhanced service.

For B2B organizations, by contrast, achieving deep transportation efficiencies is a prerequisite to even considering a new network configuration. Without significant reductions in freight cost, any redesign is likely to add expense rather than remove it.

Basically, transportation optimization reshapes the “optimal” distribution footprint for each model. It introduces different trade-offs and unlocks new opportunities, giving executives the chance to align cost, service and strategic reach.

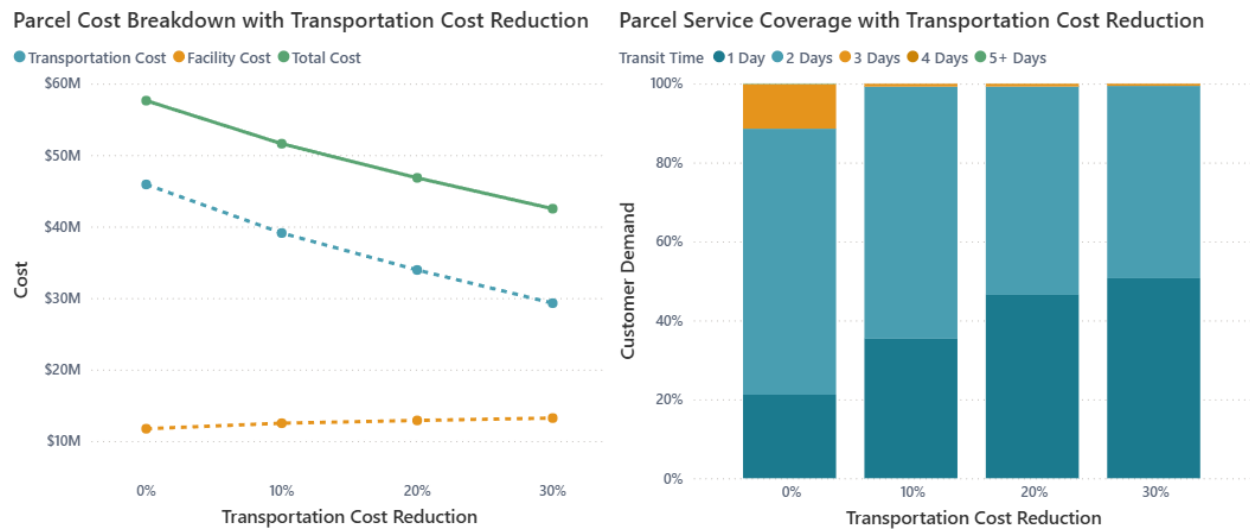
B2C, Where Transportation Optimization Enables Service-Driven Networks

In consumer-facing supply chains, parcel shipping is the dominant cost driver. Reducing those costs changes everything. When transportation spend drops by 10%, 20% or 30%, the economic balance shifts, giving companies the freedom to position facilities closer to their customers — even in markets where land and labor costs are high.

The logic is straightforward: proximity drives speed. In an environment defined by Amazon-era expectations — same-day, next-day, two-day — a company cannot achieve the service levels customers demand with a single facility in the middle of the country.

Locating distribution centers near large population clusters compresses delivery distances and cuts time-in-transit.

Traditionally, the high cost of metropolitan real estate and labor made this proximity seem cost-prohibitive. But as you can see in the charts below, when transportation costs decline, that calculus changes. The savings gained from freight optimization can offset higher facility expenses, allowing companies to expand their networks into strategic, customer-dense areas.



Those savings can also fund network expansion — adding an additional node to enter new markets or reduce reliance on expensive expedited shipping. The outcome is a more agile, service-oriented network that strengthens brand reputation while maintaining cost discipline.

Transportation optimization, then, does more than reduce spend; it creates strategic flexibility. It allows B2C leaders to choose service excellence without sacrificing profitability — transforming transportation from a cost center into a competitive weapon.

B2B, Where Transportation Efficiency Drives Strategic Consolidation

For B2B enterprises, the story unfolds differently. These networks typically rely on truckload (TL) and less-than-truckload (LTL) modes, where transportation costs already dominate to the tune of 65% of total supply-chain expense. Because shipments are often planned in advance and service-speed expectations are lower, companies can tolerate slightly longer delivery distances — but only if the economics make sense.

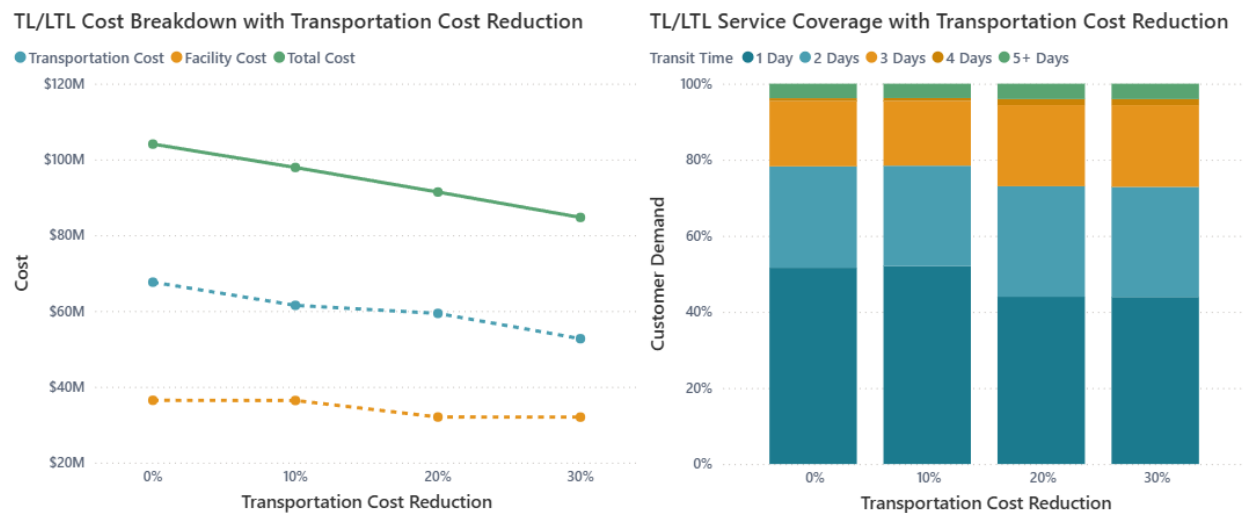
In most B2B environments, only substantial transportation savings — on the order of 20 to 30 percent — move the needle enough to justify re-evaluating facility locations. That makes transportation optimization even more important, because improved routing,

carrier optimization, conversion of LTL shipments to TL and more can dramatically shift the optimal footprint.

This shift often enables relocation to lower-cost regions with more affordable labor and lease rates. The trade-off is longer transit times. But B2B customers typically place orders in advance, allowing for flexible delivery schedules to manage that trade-off.

The result is a more consolidated, cost-efficient network: fewer distribution centers, lower fixed overhead and steady service performance. Here, transportation optimization becomes the enabler of consolidation rather than expansion – a means of strengthening margins while maintaining reliability.

As shown in the figure below, total costs decline. And B2B companies with optimized transportation operations can manage the transit times.



Two Models, One Principle Designing for a Dynamic Future

Although B2C and B2B strategies move in opposite directions, they share a single truth: your transportation strategy defines your distribution strategy.

- In B2C, lower parcel costs open the door to more facilities and faster delivery.
- In B2B, lower TL and LTL costs make consolidation viable and sustainable.

In both cases, optimizing transportation first reframes the economics of network design. Freight and facility costs exist in constant tension; every reduction in one changes the possibilities for the other. Understanding that interdependence – and quantifying it – is the cornerstone of the Tompkins revolution in network optimization.

Transportation markets, labor costs and consumer expectations will continue to evolve. The “right” network today may be suboptimal two years from now. That’s why the process of network optimization must be dynamic, data-driven and iterative.

By conducting transportation analyses before and throughout every redesign effort, companies can model multiple futures instead of betting on one. They can test how a 10-percent versus 30-percent transportation savings might alter their footprint; how eCommerce growth might shift parcel ratios; or how regional labor shortages might impact cost-to-serve.

This approach transforms network optimization from a periodic project into a continuous engineering discipline — one that flexes with market conditions rather than reacting to them.

The transportation revolution that began as a cost initiative has become a strategic catalyst. It empowers both B2C and B2B enterprises to align cost, service and resilience – creating networks that not only perform efficiently today but adapt intelligently to tomorrow.

How to Find – and Implement – Double-Digit Transportation Savings

By Mike Royster

The first two parts of this white paper explained why traditional network optimization misses the mark and how experiments show that cutting transportation costs by 10%, 15%, 20% – or more – radically alters the optimal network. Now let's talk about how to deliver those savings in the real world.

After more than three decades of running global logistics for manufacturers, distributors and 3PLs, I have learned that you do not wring 20 per cent out of your transportation spend with a few blanket RFPs or a short-term discount. You do it by getting your hands dirty – mapping your transportation flows, understanding where the money goes and acting on that intelligence. The good news is that a systematic approach can uncover millions in savings while improving service.

Executive and supply chain teams can implement two major initiatives that consistently reduce overall transportation costs by double digits:

1. **Conducting a full transportation analysis and acting on the findings.** A comprehensive evaluation shines a light on your entire logistics footprint. It identifies opportunities such as consolidation, mode shift and inventory reduction. Those learnings provide the best options for redesigning your network and managing transportation. You can execute by outsourcing to a Managed Transportation Solution (MTS) provider or doing it yourself. An MTS includes comprehensive freight and parcel auditing through a match pay process.
2. **Executing comprehensive post-auditing and monitoring continuously.** Most companies leak cash through incorrect invoicing, hidden surcharges and unmanaged contracts. Professional auditing and contract management can recover money today and prevent overcharges tomorrow.

Over the years, I've concluded that MTS provides the most benefit. In that logistics service provider model, managed transportation connects and manages carriers and shipment flow through a modern Transportation Management System (TMS), handles parcel and freight auditing through a match pay process, and provides the people, analytics and execution muscle needed to optimize your freight. Some companies choose to implement their own TMS and run transportation in-house; others partner with a managed transportation provider. I will explore both options and explain why the right fit matters.

Why Transportation Holds the Keys to 10-20% Savings

Transportation is often the single largest controllable cost in a supply chain. Too many executives think of it as a commodity: call three carriers, pick the lowest rate and move on. In reality, freight rates are only a fraction of the equation. Inventory carrying costs, accessorials, detention and demurrage, poor lane mix and inefficient routing dwarf the savings you might get by shaving five cents off your truckload rate. As noted in an earlier blog, a total transportation evaluation can uncover opportunities such as consolidation, mode shift, inventory reduction and right-sizing distribution centers. These initiatives dramatically reduce both hard and soft costs.

Consider a simple example. One manufacturer ships 500 containers a year at roughly \$1,500 each. A 10% rate discount saves \$75,000. However, the same company carries \$36.5 million in inventory each year – about \$100,000 a day. Reducing cycle times by just a few days saves more than a million dollars. Consolidating less-than-container-load (LCL) shipments into full container loads (FCL) and applying automation can drive even larger gains. When you look at transportation holistically, cutting 10 to 20 per cent becomes realistic.

Moreover, MTS has documented lead time reductions of up to 20 per cent while eliminating accessorials like detention and demurrage. That combination of cost and service improvement is why transportation deserves the same analytic rigor we apply to network design and inventory planning.

What a Total Transportation Analysis Can Find

A full transportation analysis evaluates your entire logistics network – not just freight rates. It is the starting point for any serious cost reduction program because you cannot manage what you do not measure. The process begins by collecting and cleansing all of your transportation data. The right partner examines more than 20 variables across historical data, costs, routing, suppliers, lead times, origin-destination pairs and more. Merging all data sources into a single repository and presenting them through dashboards provide metrics for decision-making and forecasting.

The insights from this evaluation go far beyond “your rates are too high.” They tell you:

- **Where costs are high:** The data get granular enough to identify high costs by lane, mode and carrier.
- **When to consolidate or deconsolidate:** Sometimes you want to consolidate less-than-truckload (LTL) into truckload (TL). Other times, you want to break down large, consolidated shipments into smaller shipments for delivery to multiple destinations due to service parameters.
- **Which modes to shift:** Examples include moving freight from air to ocean or from truck to intermodal.

- **Distribution center questions:** Knowing whether distribution centers are in the right locations enables network redesign alongside transportation optimization.
- **Carrier selection:** Some lanes require dedicated fleets or sole carrier ownership, while others are better suited for spot or brokered capacity. You also need to know where to use regional versus national carriers.

Importantly, the analysis also highlights inventory and working capital impacts. As I mentioned, many cost reductions come from reducing days in transit and improving cycle times.

From Analysis to Action, or Implementing a Modern TMS

Once you have the data, the next step is execution. The evaluation should produce a roadmap that prioritizes quick wins and longer-term strategic initiatives. Either way, your solution must include a modern Transportation Management System (TMS).

A modern Transportation Management System is the engine that executes on your analysis. You can deploy a modern TMS two ways. You can outsource to an MTS provider who supplies the technology, people and processes. Or you can build or license a TMS and run it yourself. Both approaches have pros and cons.

In my experience, outsourcing to an MTS provider yields the quickest results. The difference comes down to experience and scale: a managed transportation provider has implemented optimization solutions across dozens or hundreds of clients and can apply tested algorithms to your network.

An MTS provider has the engineers, logistics analysts and established integrations with carriers and forwarders to get you up and running in a matter of weeks or months.

Because providers spread their costs across many clients, they can invest in best-in-class TMS software, analytics and talent. That is why most companies achieve a higher ROI faster by choosing managed transportation over an in-house TMS.

And the right partner becomes an extension of your team, not a replacement. And the right partner is key – because a good logistics service provider that does not fit your needs will deliver poor results.

That's why Tompkins Ventures partners with multiple, best-in-class logistics service providers. With our experience, we help select the best fit for your needs instead of pushing an out-of-the-box solution.

On the other hand, companies with deep logistics expertise sometimes choose to implement a TMS internally. The benefits include direct control over the system, the ability to tailor it to specific needs and the potential to build a core competency in

logistics. However, beware of the risks. You need to assemble a team that understands the intricacies of algorithms, has carrier relationships and can manage continuous improvement.

I know several larger companies that operate their Transportation Management Systems effectively. But I have seen a number of organizations scrap in-house TMS projects for two reasons.

First, they're running older TMS platforms that simply execute orders and rate shop; they do not provide advanced optimization features like consolidation, mode shift or pooling. Second, their projects drag on for years and don't yield results because they lacked the IT expertise to configure algorithms, integrate data and manage change.

The Right TMS Reduces Costs – and Improves Service Levels

Like I said, older TMS platforms function as glorified shipment trackers and rating engines. A true, AI-enabled TMS delivers much more – particularly when you partner with a quality logistics service provider. Here are a few of the capabilities you should expect:

- **Dashboard:** Visibility and control over shipments, down to the SKU level. Gain end-to-end tracking across all modes and carriers, often reducing lead times by up to 20% and eliminating hidden accessorials. Access performance and cost metrics at any time.
- **Consolidation:** Combine LTL or parcel shipments headed to similar destinations into truckload or pooled shipments. On the ocean side, convert multiple LCLs into a single FCL to cut costs and transit time.
- **Mode shift:** Evaluate whether shipments should move by truckload, intermodal, parcel, ocean or air. Use real-time data to adjust modes when market conditions change.
- **Pooling and multi-stop truckload:** Build multi-stop truckloads or pool distribution routes to consolidate volumes from several shippers and reduce LTL costs.
- **Tender optimization:** Sequence tenders to preferred carriers based on cost, service and capacity.
- **Dynamic routing:** Adjust routings based on port congestion, weather, geopolitical disruptions and carrier performance.
- **Lane and network optimization:** Evaluate each lane for cost and service, book with the right carrier and mode, and use the analysis to inform warehouse locations and inventory flows.
- **Tail freight bundling:** Package one-off lanes together for brokers to handle at lower rates.

- **Inbound freight term conversion:** Take control of inbound routing for materials to capture significant savings.
- **Predictive analytics:** Forecast demand, rates and capacity to make better sourcing decisions.
- **Single point of contact:** Instead of juggling multiple freight forwarders and 3PLs, one account manager handles ocean, air, trucking and compliance issues.
- **Documentation and compliance:** Manage complex paperwork and regulatory requirements through experts.
- **Continuous improvement:** Managed transportation is not a one-off project. Your partner monitors performance, adjusts as market conditions change and brings new ideas to the table

These capabilities lead to concrete improvements in cost and service. Consolidation eliminates unnecessary miles and reduces damage risk; mode shift leverages the lowest-cost option that still meets service requirements; pooling reduces per-shipment costs; and dynamic routing keeps freight moving when disruptions occur.

Because while many companies judge transportation initiatives solely on cost, service and quality matters as much – if not more. If you cut transportation costs at the expense of on-time delivery or customer satisfaction, you'll cut costs even more – by having fewer customers to deliver to.

The good news is that transportation optimization often improves service and reduces cost simultaneously.

I've seen optimized lane selection and consolidation reduce lead times by up to 20%. Balanced routing across multiple carriers can avoid capacity crunches and tender rejections that plague lowest-cost spot market strategies.

MTS providers give you a single point of contact and proactive problem resolution, which reduces missed pickups, delays and billing issues. By combining all transportation data into one dashboard, you gain the visibility needed to meet customer commitments and adjust quickly when disruptions occur.

A complete transportation evaluation often identifies soft savings – such as redeploying employees from manual track-and-trace roles to higher-value planning and customer service. One large CPG company repurposed 22 people after a transportation evaluation uncovered inefficiencies.

In other words, reducing freight costs is not just about lower rates; it is about transforming how your logistics team works.

Most importantly, a modern TMS frees your team or your logistics service provider from manual load planning so they can focus on strategic supply chain improvements.

Freight & Parcel Auditing Finds Hidden Savings

Optimized transportation and an advanced TMS can help you save a bundle while enhancing service levels.

But if you pay invoices blindly, those savings could evaporate quickly. Roughly 5 to 10 percent of all freight invoices are billed incorrectly. Errors include duplicate invoices, incorrect rates, unauthorized accessorials and spot charges on lanes that already have contracted prices.

This doesn't mean carriers and shippers are unethical. Instead, it's simply a fact that multiple providers, brokers, handoffs, currencies and documents create an abundance of complexity.

Professional match pay services attack these errors systematically. A comprehensive match pay service examines every invoice before payment, ensuring accuracy. A contingency-based post-audit service then goes back two to three years to find duplicate invoices and incorrect charges, returning savings without upfront cost.

Together, these services can cut 3 to 40 percent from transportation budgets. One Tompkins Ventures partner helped a paper company recover \$2.4 million by identifying billing inaccuracies in ocean and air shipments and saved a chemical firm more than \$5.7 million by fixing gaps between broker and carrier contracts.

Tompkins Ventures' match pay and post-auditing partners will:

- **Analyze every invoice, lane and mode** against contracted rates and accessorial schedules.
- **Provide dynamic dashboards** so you understand spending patterns and can spot anomalies.
- **Process payments** to avoid late fees, improving carrier relationships.
- **Offer global coverage**, with expertise across North America, Europe, Asia and Latin America.
- **Enforce carrier performance**, generating data for scorecards that strengthen your negotiating position.
- **Support claims management**, working with carriers to accelerate claims recovery or extend payment terms.

The results speak for themselves. Clients have recovered millions from overcharges and improved future billing accuracy. One subscription box retailer saved \$7.7 million on a \$58 million parcel spend by auditing minimum charges and zone pricing. A parcel shipper recovered \$161,291 in just eight months.

And because post-auditing fees are contingent on savings, you face no risk.

Smart Contract Negotiation & Monitoring Goes Beyond Auditing

The best auditing partners – the ones you can find through Tompkins Ventures – go beyond uncovering errors. They help you renegotiate contracts using data and then monitor those contracts continuously. Carriers regularly adjust base rates, surcharges and ancillary fees.

Without vigilance, your savings, again, will evaporate.

Parcel carriers, in particular, have grown increasingly creative at extracting profits. Peak season surcharges, dimensional weight rules and new accessorials appear with little notice. Residential deliveries now carry surcharges measured in dollars per package, and fees for oversized and unauthorized package fees have increased. High-volume shippers face penalties when weekly volumes exceed baseline thresholds.

The right auditing partners can use your audit data to challenge unjustified fees and demand transparency. They can track carrier announcements, update your cost models with new surcharges and ensure compliance. The result is fewer surprises and greater control over your transportation budget.

Bringing It All Together

Transportation is not a commodity to be bid out once a year; it is a dynamic, strategic function that can unlock or erode millions of dollars. The path to double-digit savings begins with a full transportation analysis that examines every facet of your freight. It continues with the implementation of a modern TMS – whether through an MTS partner or an in-house solution – that turns analysis into daily optimization. It demands rigorous freight and parcel auditing to eliminate billing errors and recover overcharges. And it requires disciplined contract negotiation and continuous monitoring to keep surcharges and accessorials in check.

When you combine these initiatives, you create a transportation program that not only cuts costs by 10-20% – or more – but also improves service, agility and resilience. You free your team to focus on strategic growth rather than firefighting. Most importantly, you build a logistics network that can weather disruptions, adapt to market shifts and support your company's long-term goals.

From Revolution to Results

The revolution in network optimization is already underway. What began as a technical exercise in facility placement has evolved into a strategic imperative driven by transportation intelligence and demand variability. Together, these forces are rewriting the fundamentals of how supply chains are designed, operated and continuously improved.

The insights shared across this paper – from Jim Tompkins’ vision of transportation-led network design, to Sara Shingleton’s real-world analysis of B2C and B2B trade-offs, to Mike Royster’s proven roadmap for achieving double-digit savings – point to a single truth: transportation and demand are not variables to be managed; they are levers to be mastered.

The organizations that act now will define the next generation of supply chain excellence. By rethinking transportation as the foundation of your network, integrating demand variability into your planning models and executing through modern Transportation Management Systems, you can unlock sustained improvements in cost, service and agility.

At Tompkins, we’ve spent decades helping companies move from theory to transformation. Whether you need a complete transportation analysis, a managed transportation partner, or guidance on network design strategy our team and our partners bring the engineering expertise and market insight to deliver measurable results.

[Connect with the Tompkins team](#) to start your own revolution in network optimization – and build a supply chain that performs efficiently today while adapting intelligently to tomorrow.