

FREIGHT CONNECTIVITY

Modernization Framework

For technology and digital transformation leaders.

Modernize freight operations without replacing your **TMS, ERP or WMS**.

A full TMS replacement runs 12 to 18 months, costs six to seven figures, and retrains the operations team — usually to close a gap in rating, carrier connectivity or freight audit. A connectivity layer closes the same gap in 4 to 12 weeks and leaves the system of record in place. This framework is how technology leaders tell the two apart.

01 Where the layer sits

Nothing above the connectivity layer changes.

YOUR SYSTEMS OF RECORD

ERP (SAP, Oracle, NetSuite, Dynamics) · WMS · TMS · order management / eCommerce

Preserved — unchanged

↓ Orders, weights, class, addresses

↑ Rates, PRO numbers, PODs, audited invoices

P1 SYSTEM PRESERVATION · P4 AUDIT AUTOMATION

CONNECTIVITY LAYER — LIVE CONNECT®

Rate · tender and execute · track · retrieve documents · audit and flag exceptions. Runs behind the stack over API and EDI.

ADDED

P2 MULTI-MODE COVERAGE GOVERNS THE BREADTH OF THIS LAYER

↓ Rate requests, tenders, pickup requests

↑ Quotes, status events, accessorials, BOLs

P3 DIRECT-TO-CARRIER CONNECTIVITY

CARRIER NETWORK

LTL · Truckload · Parcel · Final Mile

300+ direct integrations

02 Four pillars, four questions for the vendor

Each pillar governs one interface in the diagram on page 1.

PILLAR 1

System Preservation

Your ERP, WMS and TMS hold years of configuration and operational muscle memory. A platform that replaces one of them is a migration, not a modernization.

Ask: Does this integrate behind the systems we already operate, or replace one of them?

PILLAR 2

Multi-Mode Coverage

Most mid-market shippers and 3PLs move LTL, truckload, parcel and final mile in the same week. One-mode platforms force parallel tools and parallel workflows.

Ask: How many of our modes are native, and how many arrive through a third-party connector?

PILLAR 3

Direct-to-Carrier Connectivity

Aggregated rates arrive slower, dirtier and one party removed from the carrier. Direct API and EDI connections mean fewer rebill exceptions and an honest view of carrier performance.

Ask: Are the carrier connections built and maintained in-house, or sourced from an aggregator?

PILLAR 4

Audit Automation

Accessorials, reclasses, reweighs and rebills consume a measurable share of freight spend wherever invoices go unaudited. Catch them at rating, not at accounts payable.

Ask: Is freight bill audit part of the rating workflow, or a separate tool we buy next?

03 The sequence

Run in parallel — no big-bang cutover.

WEEKS 1-2 Baseline	WEEKS 3-6 Connect	WEEKS 7-12 Cut over by mode	QUARTER 2 → Measure
• Inventory modes, carriers and every place rating happens today • Record annual spend, quote-to-bill variance and hours spent in carrier portals • Name the system of record that stays	• Stand up carrier connections and the ERP or TMS integration • Load contracted rates and accessorial rules • Shadow-run against the current process; compare quotes daily	• LTL first — it carries the most classification and accessorial exposure • Then truckload, parcel, final mile • Switch audit rules from advisory to enforcing	• Cost per shipment by mode against the week-one baseline • Quoted vs. billed variance and recovery • Portal hours eliminated and exception rate per 1,000 shipments

04 Before you sign: the governance questions

Ask these of any connectivity vendor.

- 01 Who owns the rate, shipment and document data, and how do we export all of it if we leave?
- 02 What happens to rating when a single carrier API goes down — fail over, cache, or fail the quote?
- 03 What is the published uptime commitment, and what is the remedy when it is missed?
- 04 Who can change a contracted rate table, and is every change logged and attributable?
- 05 Which security attestations and reviews can you produce today, not at renewal?
- 06 What are the API rate limits, and what do they cost us at 3× today’s shipment volume?

05 What the model has returned

Across the Banyan client base.



Figures reflect Banyan client averages; results vary with mode mix, carrier base and current audit maturity. Savings come from three places: rate selection across direct carrier connections, accessorial accuracy at the time of rating rather than at invoice, and recovery of the variance between quoted and billed.

DO THIS FIRST

Score your current stack

Run the four questions against the platform you use today, then against any vendor on your shortlist. The gap between the two scores is your modernization scope.

[Learn More →](#)

WHEN YOU'RE READY

Thirty minutes, not a demo

Walk your current stack, the gaps you are closing and where a connectivity layer fits with a member of the Banyan integration team.

[Schedule a conversation →](#)

06 Vendor scorecard

PRINT ONE SHEET PER VENDOR

Score each question 0-2. Eight points possible. Run it against the platform you use today, then against every vendor on the shortlist — the gap between the two totals is your modernization scope.

VENDOR

REVIEWED BY

DATE

QUESTION	0 POINTS	1 POINT	2 POINTS	SCORE
P1. Does it preserve the system of record?	Requires replacing the ERP, WMS or TMS	Coexists, but the team works in a second interface	Runs behind the stack; existing workflows unchanged	
P2. How many of our modes are native?	One mode; the rest need other tools	Some native, some through third-party connectors	All over-the-road modes on one connectivity layer	
P3. Who owns the carrier connections?	Rates resold through an aggregator	Mixed — core carriers direct, long tail aggregated	Built and maintained in-house, carrier by carrier	
P4. Where does freight audit happen?	Not offered, or a separate purchase	Post-invoice audit, after the bill lands in AP	Accessorials priced at rating; quoted vs. billed compared automatically	
TOTAL			/ 8	

HOW TO READ THE TOTAL

- 7-8A connectivity layer is the right instrument. Move to a scoped 4-to-12-week integration.
- 4-6Real gaps. Ask for the roadmap with dates, and price the workaround you will run until then.
- 0-3Either it is a rip-and-replace wearing an API, or your system of record is the actual problem.