

# Evolving Convoy's business for medium and large carriers

**Karena Vongampai**

Case study from my time at Convoy

# The freight industry is complex

Successfully transporting goods relies on the smooth coordination of various job performers and decisions that take place across an array of disconnected tools.



## Shippers

Businesses that have a transportation need to move goods from one place to another



## Brokers

Intermediary that manages relationships and arranges the transport of goods



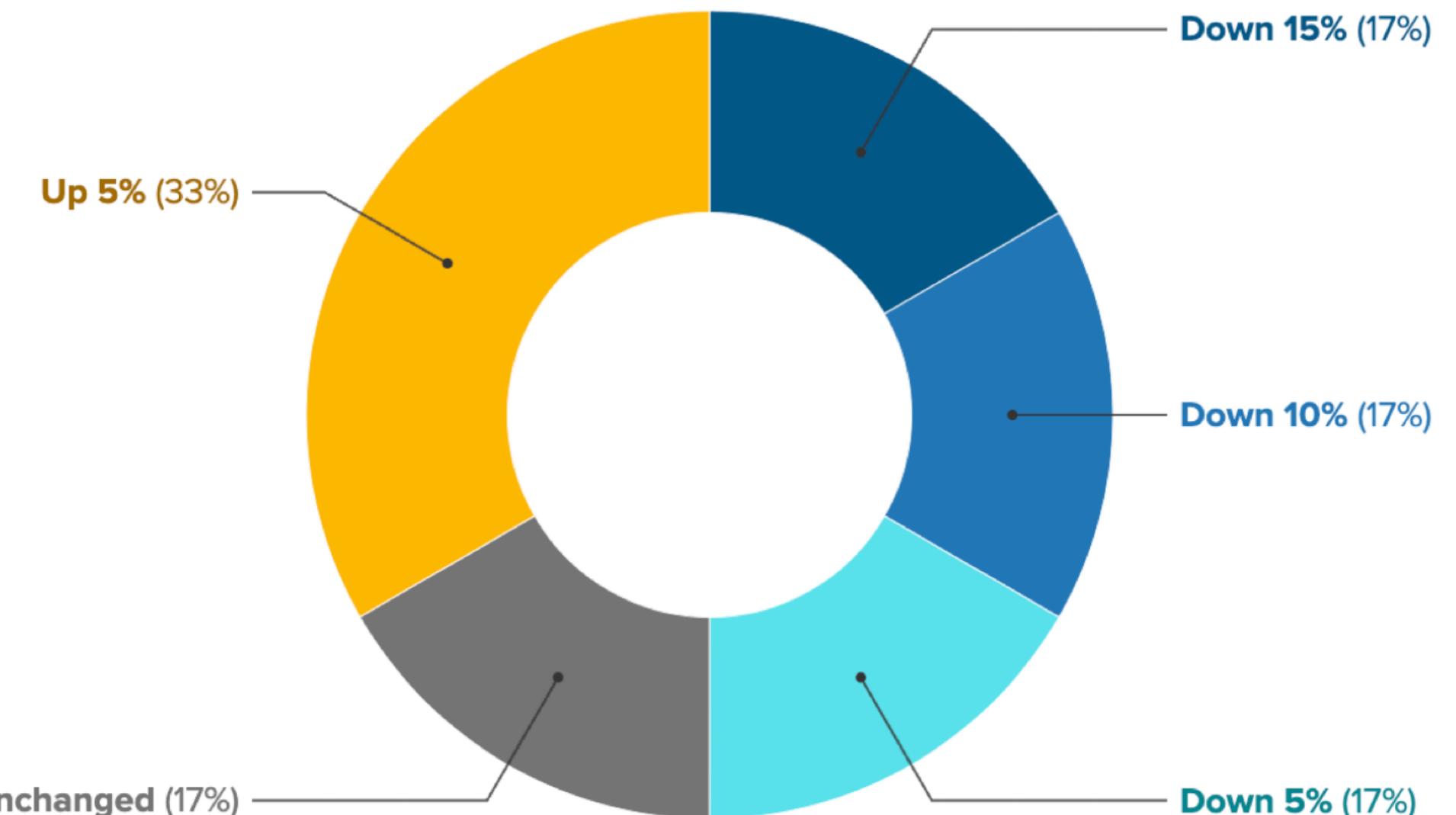
## Carriers

Businesses that have the equipment and drivers who travel the country moving goods

# Charge shippers less, to keep up with the softening market

The pandemic attracted a number of new carrier businesses to come on the market. Supply was more saturated than ever, and brokers like Convoy were struggling to keep pricing competitive.

**In the first quarter of 2024, full freight rates will be:**



[CNBC article](#)

# Work with carriers with lower cost structures and rates

Only 5% of Convoy's total shipment volume was run by medium and large sized carriers, who had lower cost structures and the advantage of economies at scale.

Table 14: Average Marginal Cost per Mile by Fleet Size

Motor Carrier Costs	Small Carriers 2021	Small Carriers 2022	Large Carriers 2021	Large Carriers 2022
<i>Vehicle-based</i>				
Fuel Costs	\$0.444	\$0.723	\$0.408	\$0.612
Truck/Trailer Lease or Purchase Payments	\$0.305	\$0.330	\$0.279	\$0.336
Repair & Maintenance	\$0.197	\$0.212	\$0.161	\$0.186
Truck Insurance Premiums	\$0.102	\$0.136	\$0.082	\$0.072
Permits and Licenses	\$0.016	\$0.016	\$0.016	\$0.014
Tires	\$0.047	\$0.051	\$0.040	\$0.045
Tolls	\$0.031	\$0.024	\$0.031	\$0.031
<i>Driver-based</i>				
Driver Wages	\$0.603	\$0.693	\$0.629	\$0.734
Driver Benefits	\$0.135	\$0.117	\$0.185	\$0.193
<b>TOTAL</b>	<b>\$1.880</b>	<b>\$2.300</b>	<b>\$1.831</b>	<b>\$2.223</b>

Small fleets spent 7.7 cents more per mile than large fleets in 2022. This gap was 2.8 cents larger than in 2021, but it was still less than in 2020 when small fleets spent 16.3 cents more than large fleets per mile.

My objective

As the lead designer, I...

**Led my cross-functional team through a design sprint to develop a user-centered strategy to achieve our business goals**

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**4 weeks**

Timeframe

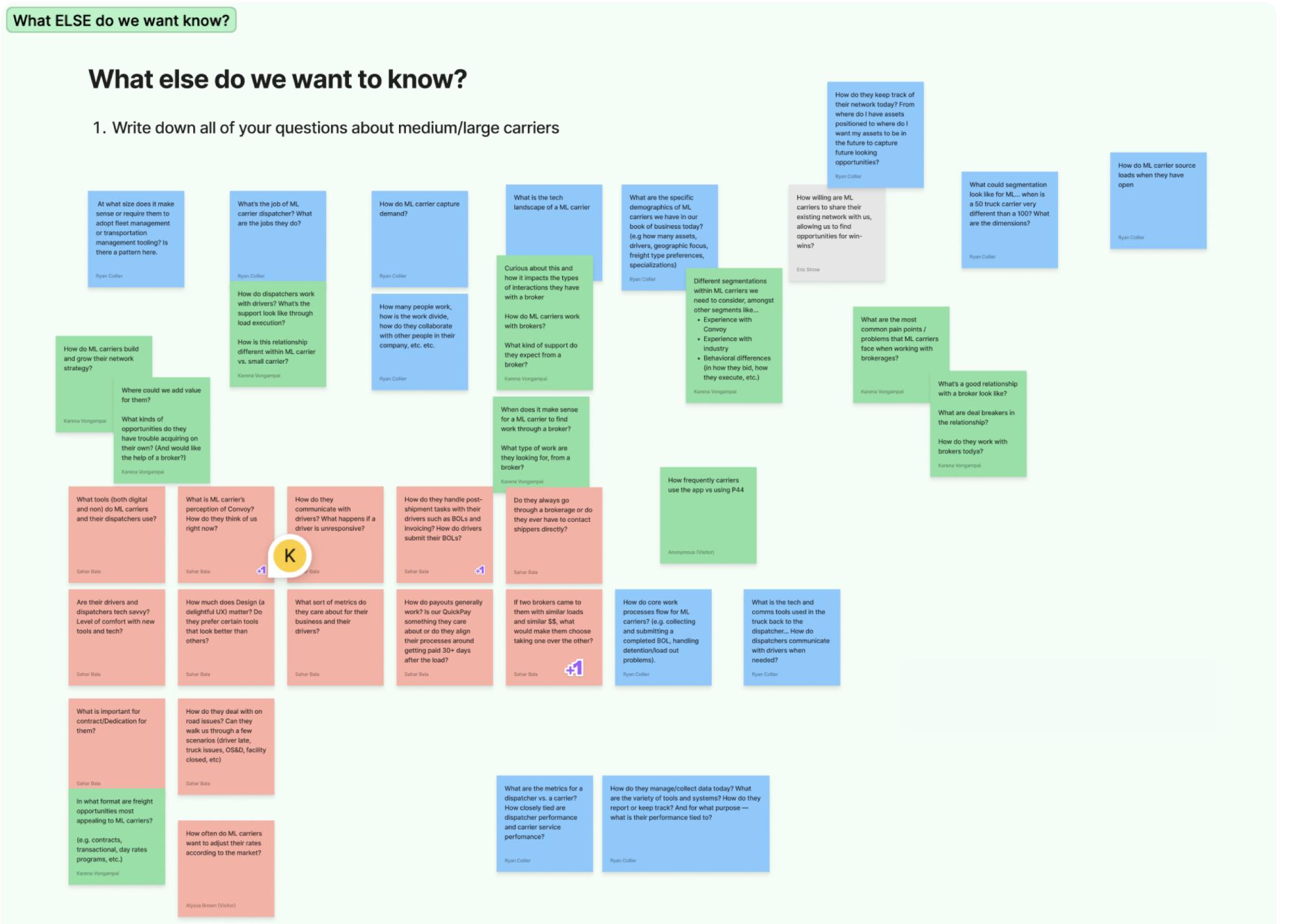
**Product, Engineering, Sales/Account Management**

Team

01

# Problem setting

# Learn about the target carrier

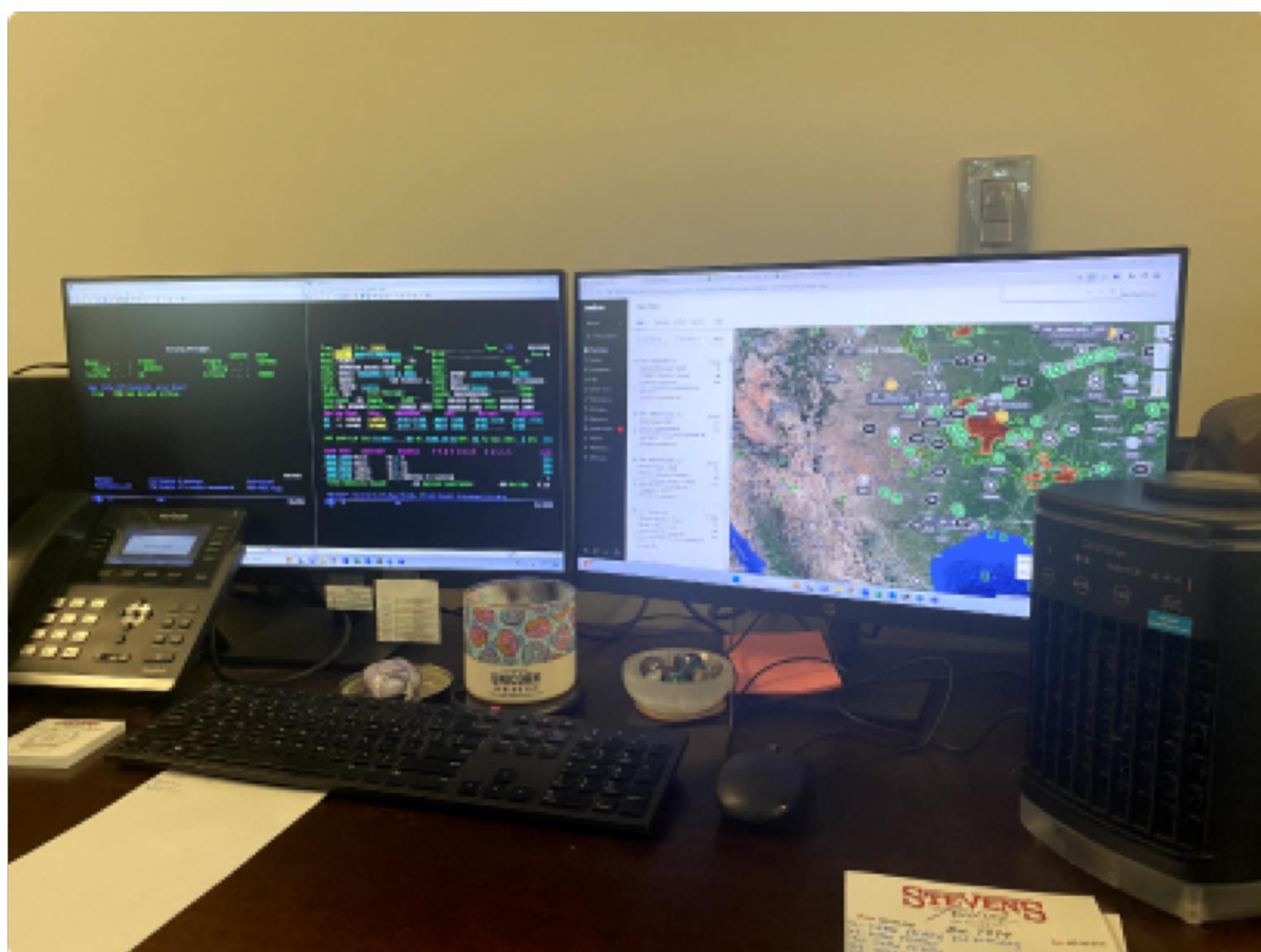
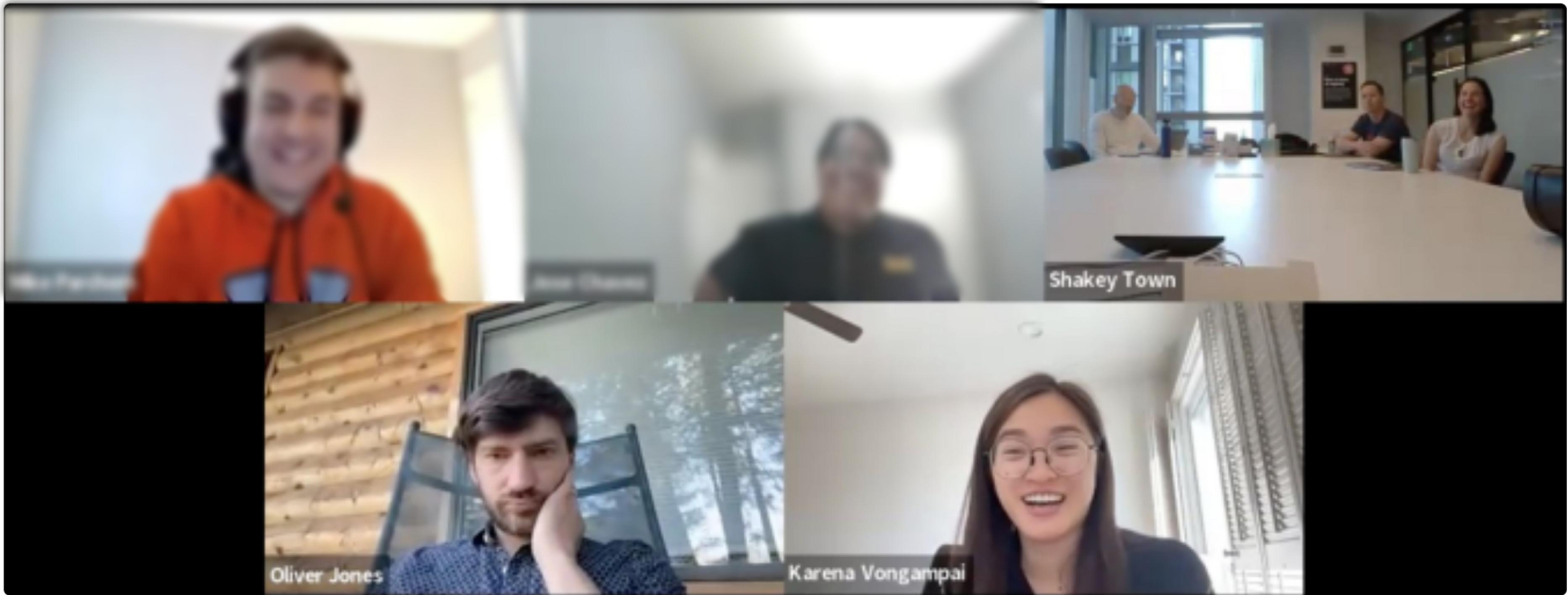


**02** How do they work with freight brokers?

**03** How do they find shipments to run?

**04** How do they measure success for their business?

**05** Why do they perform tasks the way they do?



# Clarify user outcomes

I employed the Jobs to Be Done framework to outline the core user goals for transportation coordinators at carrier companies with 50-350 trucks in their fleet.

## User goals

Minimize the time and effort required to find loads that match truck availability

Minimize the time it takes to know whether a broker has the loads I need

Minimize the effort it takes to make sure drivers setup to haul a broker's load

## Pain points

Searching through every broker's network (online and via phone) is time consuming and it's not clear when the types of loads I'm searching for come onto the market

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It's costly to equip trucks with a device and data plan and to spend time training drivers on how to use 40+ broker applications

# Prioritize problem space

We weighed the impact vs. cross-functional effort to prioritize which user goals we should explore first.

## User goals

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# How transportation coordinators find loads that match truck availability

Gustavo Duarte <gus@floridabeauty.us>  
to Gustavo.

SOLO EMPTY WED 8AM IN GRANDVIEW, WA NEED A LOAD TO ANYWHERE

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SOLO EMPTY WED 9AM IN EDISON, NJ NEED A LOAD TO THE MIDWEST

SOLO EMPTY WED 9PM IN DUNN, NC NEED A LOAD TO FL

**Share truck availability with freight brokers**

Email, call, or instant message

**C.H. ROBINSON**

**CONVOY**

**COYOTE LOGISTICS**  
a UPS Company

**ARRIVE LOGISTICS**

**ECHO**

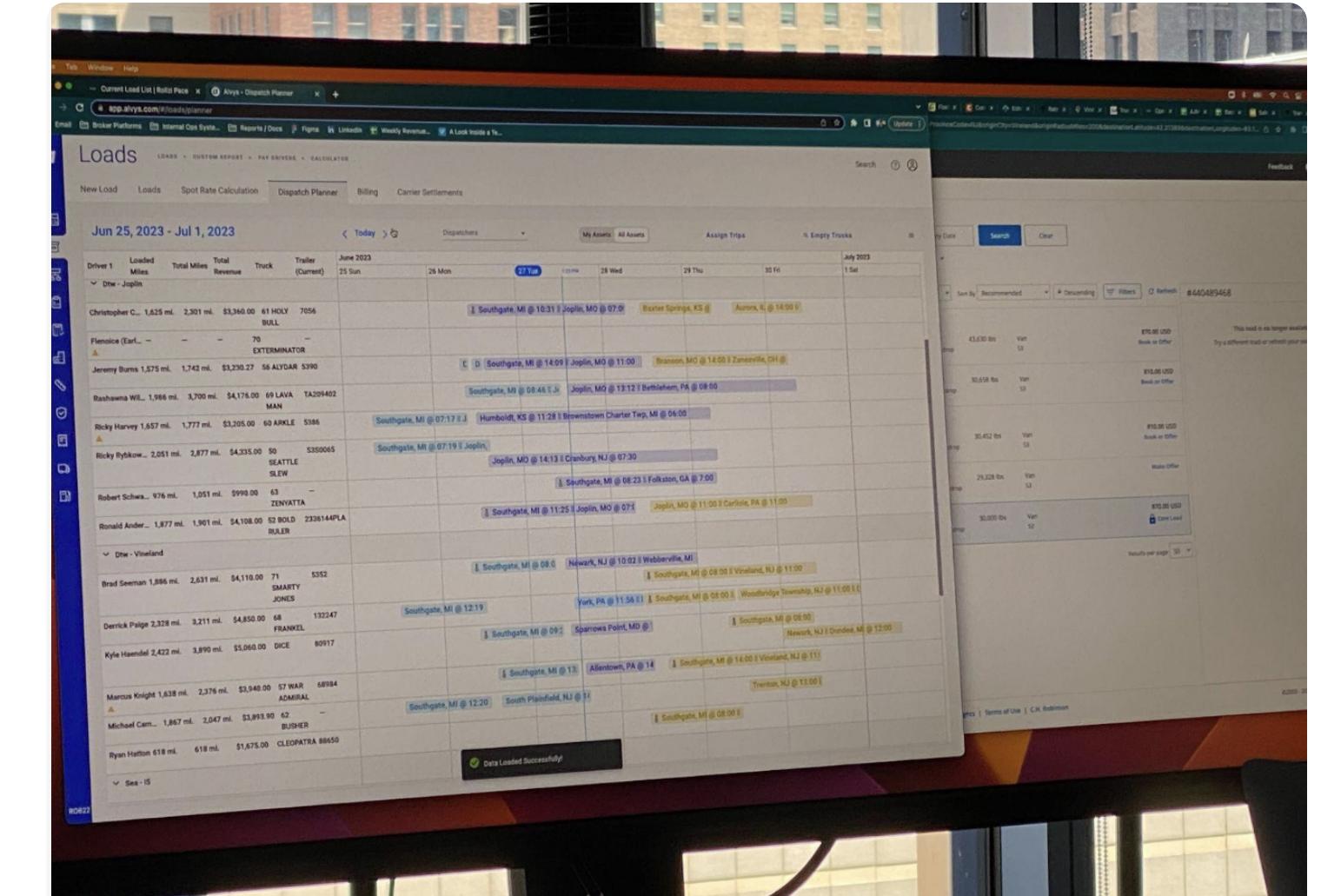
**Uber Freight**

**DAT**

**XPOLogistics**

**Search broker boards for load matches**

Self-serve online portals



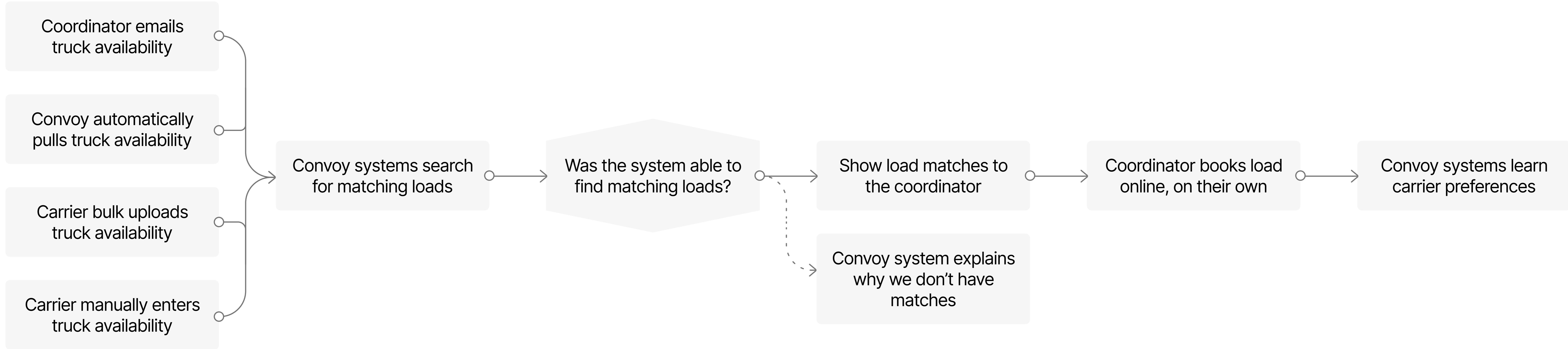
**Assess transit feasibility, then book**

Empty miles, schedule, regulations

02

# Ideal state explorations

# Outline the user flow



# Wireframes to visualize the user flow

## Upload truck availability



Welcome to Convoy!

**Find loads** Compare where we haul

4,000 total loads available right now across our entire network

Have us find loads for you

We'll find loads that match your truck availability

Upload or drag a .csv, .xlsx, jpg, png here and we'll find loads that match your needs.

Request API integration

Search for a load yourself

This wireframe shows the initial step of finding loads. It features a prominent input field for CSV files and a sidebar with various search and integration options.

## Show load matches



< Back

OK, here's what we found

# of stops: Any Broker: Any Opportunity type: Any

Matches for availability (32) No matches (4)

Truck availability	Mon 07/20	Tue 07/20	Wed 07/20	Thu 07/20	Fri 07/20	
	AM	PM	AM	PM	AM	PM
<b>#1023 Reefer</b> Cleveland, OH → Richmond, VA Available starting Mon 07/20 @ 13:30			Pickup @ 19:0 C... Book			
			Pickup @ 24:00 C... Book			
			Pickup @ 21:30 C... Book			
<b>#3923 Dry Van</b> Houston, TX → Jacksonville, FL Available starting Mon 07/20 @ 13:30					Pickup @ 14:30 CST, Deliver @ 1... Book	
					Pickup @ 06:30 CST, Deliver @ 1... Book	
<b>#208 Dry Van</b> Tampa, FL → Albuquerque, NM Available starting Mon 07/20 @ 13:30			Pickup 1 @ 08:00 EST, Pickup 2 @ 11:00 EST, Deliver @ 15:30 CST			Book
			Pickup @ 08:00 EST, Deliver @ 17:30 CST			Book
<b>#3402 Dry Van</b> Atlanta, GA → Albuquerque, NM Available starting Mon 07/20 @ 13:30			Pickup @ 11:30 EST, Deliver @ 15:30 CST			Book
			Pickup @ 11:30 EST, Deliver @ 15:30 CST			Book

This wireframe shows the results of the search. It lists available trucks with their details and specific pickup/delivery times. Each entry includes a booking button.

# Wireframes to visualize the user flow

→ Explain why there are no matches    O - - - - - → Notify when loads come on the market    O - - - - - →

< Back

OK, here's what we found

# of stops: Any   Broker: Any   Opportunity type: Any   Refresh

Matches for availability (32)   **No matches (4)**

We'll email you as loads come on the market in the next 48 hours   Disable for all trucks

Truck availability	Insights into L12W volume
<b>#1039 Reefer</b> Cleveland, OH → Richmond, VA Available starting Mon 07/20 @ 13:30	Avg loads per week <b>34</b> Hot market time <b>Monday mornings</b> Est. carriers interested <b>12</b> Somewhat competitive
<b>#1043 Dry Van</b> Houston, TX → Jacksonville, FL Available starting Mon 07/20 @ 13:30	Avg loads per week <b>34</b> Hot market time <b>Monday mornings</b> Est. carriers interested <b>4</b> Less competitive
<b>#502 Reefer</b> Tampa, FL → Albuquerque, NM Available starting Mon 07/20 @ 13:30	Avg loads per week <b>8</b> Hot market time <b>Monday mornings</b> Est. carriers interested <b>2</b> Less competitive
<b>#2039 Dry Van</b> Atlanta, GA → Albuquerque, NM Available starting Mon 07/20 @ 13:30	Avg loads per week <b>2</b> Hot market time <b>Monday mornings</b> Est. carriers interested <b>24</b> Highly competitive

**CONVOY**

icn

Woohoo! New loads have come on the market that match your truck availability

This is based on what you've told us in the last 48 hours

Truck availability	Availability date/time	Total available loads
Reefer Cleveland, OH → Richmond, VA	<b>08/17/23</b> 13:00 PST	Convoy loads <b>12</b> Partner loads <b>12</b>
Reefer Cleveland, OH → Richmond, VA	<b>08/17/23</b> 13:00 PST	Convoy loads <b>12</b> Partner loads <b>12</b>
Reefer Cleveland, OH → Richmond, VA	<b>08/17/23</b> 13:00 PST	Convoy loads <b>12</b> Partner loads <b>12</b>

Log in to book

Ideal state explorations

# Wireframes to visualize the user flow

→ Assess feasibility, then book

The wireframe illustrates a user flow for booking a truck load. It starts with a search results page on the left, followed by a detailed booking confirmation page on the right.

**Left Panel (Search Results):**

- < Back
- OK, here's what we found
- Matches for availability (32)**   **No matches (4)**
- Truck availability**: Mon 07/24 AM PM
- Reefer**: Cleveland, OH → Richmond, VA. Avg transit time ~13 hrs. Options: Cleveland, OH; Cleveland, GA; Cleveland, TX.
- Dry Van**: Houston, TX → Jacksonville, FL. Avg transit time ~13 hrs.
- Dry Van**: Tampa, FL → Albuquerque, NM. Avg transit time ~13 hrs.
- Dry Van**: Atlanta, GA → Albuquerque, NM. Avg transit time ~13 hrs.

**Right Panel (Booking Confirmation):**

### Finish booking

Available load to book

**Load details**

Convoy ID	Total miles	Out of route mi
89302932	1,093	Less than 20mi
Total weight	Trailer type	Total stops
37,900	53' Dry Van (no Reefer)	2

How this load fits into your schedule

- Houston, TX → Phoenix, AZ  
Avg transit time ~15 hrs  
Requires HOS reset  
Available for next load Wed 8/16
- Drive to pickup for next load  
Avg deadhead 30 mi on I5 highway
- Phoenix, AZ  
123456 Peachtree Industrial Boulevard  
Cleveland, OH 30295
- Live pickup | Thu 8/17/23 09:00 PST
- Atlanta, GA  
123456 Peachtree Industrial Boulevard  
Richmond, VA 30295
- Live pickup | Thu 8/17/23 09:00 PST

Compare to my truck availability It's a match!

Pickup	Delivery	Trailer	Pickup date	Pickup time
Cleveland, OH ✓	Richmond, VA ✓	Dry Van ✓	Tue - 08/23/23 ✓	09:00 PST ✓

Place a bid   Book now \$1,390

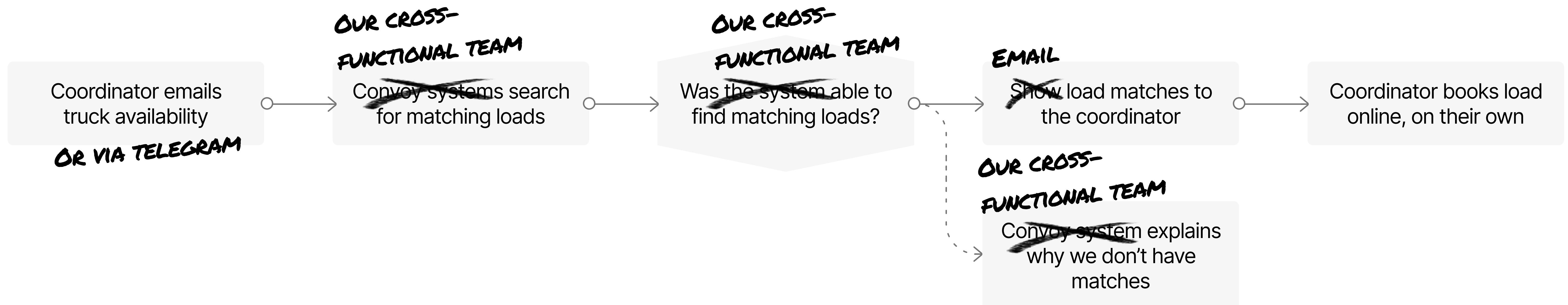
03

## Evaluate our concept

Evaluate our concept

# Scope out pilot experience

In under a day, the engineers, product manager, and I had scoped out a low-effort experience that we could pilot with a handful of carriers.



Evaluate our concept

# Pilot experience MVP design

Coordinator sends truck availability



Team member searches Convoy systems



The screenshot shows an email inbox with one message from 'Gustavo Duarte <gus@floridabeauty.us>' titled 'AVAILABILITY'. The message body contains a table of truck availability and some descriptive text.

**Hi,**

Please find the truck list below:

Unit ID	Empty Date	Empty Time	Empty City/St
102	5/31/23	11:00 AM	La Crosse, WI
112	6/1/23	9:00 AM	Dallas, TX
114	6/1/23	9:00 AM	Joliet, IL
115	6/5/23	9:00 AM	Dallas, TX
122	6/1/23	11:00 AM	Germantown, WI
124	6/3/23	9:00 AM	Dallas, TX
2616	6/1/23	7:00 AM	Hampshire, IL

**Sent Date :**

\* Max Weight 43,500

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SOLO EMPTY WED 1PM IN CHICAGO, IL NEED A LOAD TO GAYLORD, MN AREA  
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The screenshot shows the Convoy system interface with a search results page. The title is 'CONVOY' and the subtitle is 'Find loads that match a carrier's truck availability'.

Once you've added the carrier's availability, we'll automatically apply a 100mi radius to find loads that match. If no truck type is included, we'll automatically default the trailer type to Dry Van.

Step 1: Insert multiple truck availability in any format

Step 2: Review information and finish adding lanes

Pickup	Delivery	Trailer types	Pickup date
Tacoma, WA	Fresno, CA	Dry Van X	09-25-2023
Chicago, IL	Fresno, CA	Dry Van X	09-25-2023
San Francisco, CA	Fresno, CA	Dry Van X	09-26-2023
Dallas, TX	Fresno, CA	Dry Van X	09-29-2023
Tempe, AZ	Fresno, CA	Dry Van X	09-29-2023

Clear Process

< Back Continue

Evaluate our concept

# Pilot experience MVP design

→ Team member selects loads to share

**CONVOY**

Select loads to offer the carrier

15 loads selected [Unselect all](#)

Status	Pickup	Delivery	Trailer Type	Pickup date	Available loads	Loads offered <small>i</small>	Requested by																																
> Covered by Convoy	Sacramento, CA	Spokane, WA	Dry Van	10/08/2023	412 total Marketplace 22 Partner 44	3 loads offered Marketplace 2 Partner 1	Janice Boyer																																
<table border="1"><thead><tr><th>Load ID</th><th>Pickup</th><th>Pickup deadhead</th><th>Delivery</th><th>Delivery deadhead</th><th>Weight</th><th>Commodity</th><th>Booking method</th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/> CHY-102932 <a href="#">View offer page</a></td><td>Elk Grove, CA 10/02 @ 19:30 PST</td><td>32 mi Est. 45 min</td><td>Marshall, WA 10/04 @ 08:30 PST</td><td>23 mi Est. 38 min</td><td>32,000 lbs</td><td>Bottled water</td><td>Instant auction</td></tr><tr><td><input type="checkbox"/> VPL-2034 <a href="#">View offer page</a></td><td>Elk Grove, CA 10/02 @ 19:30 PST</td><td>32 mi Est. 45 min</td><td>Marshall, WA 10/04 @ 08:30 PST</td><td>23 mi Est. 38 min</td><td>36,000 lbs</td><td>Pumpkins</td><td>Boost</td></tr><tr><td><input checked="" type="checkbox"/> VPL-2034 <a href="#">View offer page</a></td><td>Elk Grove, CA 10/02 @ 19:30 PST</td><td>32 mi Est. 45 min</td><td>Marshall, WA 10/04 @ 08:30 PST</td><td>23 mi Est. 38 min</td><td>36,000 lbs</td><td>Pumpkins</td><td>Boost</td></tr></tbody></table>								Load ID	Pickup	Pickup deadhead	Delivery	Delivery deadhead	Weight	Commodity	Booking method	<input checked="" type="checkbox"/> CHY-102932 <a href="#">View offer page</a>	Elk Grove, CA 10/02 @ 19:30 PST	32 mi Est. 45 min	Marshall, WA 10/04 @ 08:30 PST	23 mi Est. 38 min	32,000 lbs	Bottled water	Instant auction	<input type="checkbox"/> VPL-2034 <a href="#">View offer page</a>	Elk Grove, CA 10/02 @ 19:30 PST	32 mi Est. 45 min	Marshall, WA 10/04 @ 08:30 PST	23 mi Est. 38 min	36,000 lbs	Pumpkins	Boost	<input checked="" type="checkbox"/> VPL-2034 <a href="#">View offer page</a>	Elk Grove, CA 10/02 @ 19:30 PST	32 mi Est. 45 min	Marshall, WA 10/04 @ 08:30 PST	23 mi Est. 38 min	36,000 lbs	Pumpkins	Boost
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[Compose concierge email](#)

Team member sends an email response

**CONVOY**

Share loads with the carrier

We've taken the loads you previously selected and formatted a message for you.

Email [Telegram](#)

**Available loads that match:** {Optional unique ID} | Reefer | San Mateo, CA 94404 to Sacramento, CA | Empty @ 09:00 PST

<b>Option 1</b> Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	<a href="#">Finish booking</a>
<b>Option 2</b> Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	<a href="#">Finish booking</a>
<b>Option 3</b> Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	<a href="#">Finish booking</a>
<b>Option 4</b> Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	<a href="#">Finish booking</a>

[View more similar loads](#)

[Copy message](#)

[Back](#) [Finish](#)

Evaluate our concept

# Iterations to reduce scope and build faster and cheaper

It's important to realize that at this point Convoy had undergone 4 rounds of layoffs. We had to validate this concept in the scrappiest way possible, given our time and resourcing constraints.

Building this specific aspect of the tool was the most time consuming, so I worked with engineering to reuse older internal tools instead.

**CONVOY**

Select loads to offer the carrier

15 loads selected [Unselect all](#)

Status	Pickup	Delivery	Trailer Type	Pickup date	Available loads	Loads offered	Requested by	
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[Compose concierge email](#)

Evaluate our concept

# Pilot experience reduced scope

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Tempe, AZ	Fresno, CA	Dry Van X	09-29-2023

Clear Process

< Back Continue

Evaluate our concept

# Pilot experience reduced scope

→ Searches saved to the carrier's profile

→ Teammate views load matches and copies ID

**CONVOY**

< Back Peter's Trucking Cleveland, OH | View profile

Compose concierge email Add lane

Preferred Lanes

Include lanes created by carrier Sort by: Network overlap ▾

Pickup	Delivery	Trailer	Pickup days	Convoy loads ⓘ	Carrier loads ⓘ	Carrier bids ⓘ	Created by	Available loads
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius	Dry Van, Power only	Mon, Tue, Wed, Thu, Fri, Sat, Sun	204 loads (32/week)	204 loads (32/week)	4% win	Internal	<a href="#">View loads</a> ⋮
				Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Bids 200 Bids/week 10	Marianne Chen on 07/03/21	Convoy 380 Partner 320
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius	Dry Van, Power only	Mon, Tue, Wed, Fri	204 loads (32/week)	204 loads (32/week)	4% win	Internal	<a href="#">View loads</a> ⋮
				Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Bids 200 Bids/week 10	Marianne Chen on 07/03/21	Convoy 380 Partner 320
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius	Dry Van, Power only	Mon, Fri	204 loads (32/week)	204 loads (32/week)	0% win ⓘ	Internal	<a href="#">View loads</a> ⋮
				Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Marketplace 0 (0) Dedication 320 (10) Partner 0 (0)	Bids 200 Bids/week 10	Marianne Chen on 07/03/21	Convoy 380 Partner 320
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius	Dry Van, Power only	Mon, Fri	204 loads (32/week)	204 loads (32/week)	4% win	Internal	<a href="#">View loads</a> ⋮
				Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Marketplace 14 (10) Dedication 0 (0) Partner 320 (10)	Bids 200 Bids/week 10	Marianne Chen on 07/03/21	Convoy 380 Partner 320
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius	Dry Van, Power only	Mon, Fri	204 loads (32/week)	204 loads (32/week)	4% win	Internal	<a href="#">View loads</a> ⋮
				Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Marketplace 14 (10) Dedication 0 (0) Partner 320 (10)	Bids 200 Bids/week 10	Marianne Chen on 07/03/21	Convoy 380 Partner 320
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius	Dry Van, Power only	Mon, Fri	204 loads (32/week)	204 loads (32/week)	4% win	Internal	<a href="#">View loads</a> ⋮
				Marketplace 14 (10) Dedication 320 (10) Partner 320 (10)	Marketplace 14 (10) Dedication 0 (0) Partner 320 (10)	Bids 200 Bids/week 10	Marianne Chen on 07/03/21	Convoy 380 Partner 320
<span style="color: green;">✓</span> Lane preference successfully saved								

**CONVOY**

Search (enter at least 4 characters) Carriers

Broker Board 2750 / 3637 shipper jobs

Broker  Shipper Program Type  Bids

Shipper	Matching	Prob ↑	Pickups ↑	Deliveries	Rates	Distance
KFT-55846 2 exceptions	<span style="background-color: #007bff; color: white; padding: 2px 10px; border-radius: 10px;">Manual</span>	6m ago	Batavia, IL (60510) Today 07:00 am–14:30 CDT Live Pickup	Mason, OH (45040) Tomorrow 06:30 am EDT appt Live Unload	Book \$1,270 Max: \$1,350 Market Rate: \$998 Now: Reserve: Break: \$1138 Bids: 3 / \$1400 9m ago even: <a href="#">Bid Only</a>	1,420 total r Total out of route PU deadhead DEL deadhead <a href="#">View on Google Sheets</a>
KCL-11110 4 exceptions	<span style="background-color: #007bff; color: white; padding: 2px 10px; border-radius: 10px;">Manual</span>	1h ago	Plainfield, IL (60544) Today 13:00–14:30 CDT Preloaded Trailer Pickup	1. Northlake, IL (60164) Today 15:30 CDT appt Live Unload 2. Joliet, IL (60436) Today 13:00–20:00 CDT Empty Trailer Return	Book \$340 Max: \$400 Market Rate: \$482 Now: Reserve: Break: \$229 Bids: 2 / \$349 1m ago even: <a href="#">Bid Only</a>	1,420 total r Total out of route PU deadhead DEL deadhead <a href="#">View on Google Sheets</a>
CPO-474266 1 exception	<span style="background-color: #007bff; color: white; padding: 2px 10px; border-radius: 10px;">Manual</span>	4h ago	Pennsburg, PA (18073) Today 08:00 am–16:00 EDT Empty Trailer Pickup	Meshoppen, PA (18630) Today 12:00 pm–19:00 EDT Empty Trailer Return	Book Now: \$0 Max: \$280 Market Rate: \$596 Bids: 15 / \$300 1m ago Reserve: None Trailer Costs: \$-75 <a href="#">Bid Only</a>	1,420 total r Total out of route PU deadhead DEL deadhead <a href="#">View on Google Sheets</a>
CPO-474514 Add exception	<span style="background-color: #007bff; color: white; padding: 2px 10px; border-radius: 10px;">Manual</span>	5h ago	Charlotte, NC (28273) Today 12:00 pm–16:00 EDT Empty Trailer Pickup	Mount Holly, NC (28120) Tomorrow 08:00 am–14:00 EDT Empty Trailer Return	Book Now: \$0 Max: \$50 Market Rate: \$409 Bids: 13 / \$175 13m ago Reserve: None Trailer Costs: \$-60 <a href="#">Bid Only</a>	1,420 total r Total out of route PU deadhead DEL deadhead <a href="#">View on Google Sheets</a>
CPO-473634 Add exception	<span style="background-color: #007bff; color: white; padding: 2px 10px; border-radius: 10px;">Manual</span>	1d ago	Binghamton, NY (13904) Today 08:00 am–16:00 EDT Empty Trailer Pickup	Honesdale, PA (18431) Today 12:00 pm–20:00 EDT Empty Trailer Return	Book Now: \$0 Max: \$50 Market Rate: \$525 Bids: 4 / \$250 3h ago Reserve: None Trailer Costs: \$-65 <a href="#">Bid Only</a>	1,420 total r Total out of route PU deadhead DEL deadhead <a href="#">View on Google Sheets</a>
CPO-474590 Add exception	<span style="background-color: #007bff; color: white; padding: 2px 10px; border-radius: 10px;">Manual</span>	1d ago	Columbia, SC (29212) Today 13:30–18:00 EDT Empty Trailer Return	Charlotte, NC (28273) Today 16:00–20:00 EDT Empty Trailer Return	Book Now: \$0 Max: \$600 Market Rate: \$565 Bids: 8 / \$275 Reserve: None	1,420 total r Total out of route PU deadhead DEL deadhead <a href="#">View on Google Sheets</a>

Evaluate our concept

# Pilot experience reduced scope

→ Teammate generates an email response

**CONVOY**

Create concierge email response

If you have received an email from a carrier detailing their truck availability, use this form to generate an email response.

Step 1: Enter the time the truck is available

Time: KHW-19293      Timezone: PST

Preferred Lanes

Pickup	Delivery
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius
Oklahoma City, OK City +50 mi radius	Sacramento, CA City +50 mi radius

Step 1: Enter the load ID for each load you'd like to recommend

Option 1 - Load ID: KHW-19293

Option 2 - Load ID: KHW-19023

Option 3 - Load ID: KHW-19038

[Continue](#)

→ Teammate sends email to share loads

**CONVOY**

Share loads with the carrier

We've taken the loads you previously selected and formatted a message for you.

Email Telegram

Available loads that match: {Optional unique ID} | Reefer | San Mateo, CA 94404 to Sacramento, CA | Empty @ 09:00 PST

Option 1	Delivery location: 83923, Boise, ID 39208	Finish booking
Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	
Option 2	Delivery location: 83923, Boise, ID 39208	Finish booking
Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	
Option 3	Delivery location: 83923, Boise, ID 39208	Finish booking
Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	
Option 4	Delivery location: 83923, Boise, ID 39208	Finish booking
Pickup location: Somewhere, CA 94063 Pickup appt: 08/29/23 @ 16:30 PST	Delivery location: 83923, Boise, ID 39208 Delivery appt: 08/31/23 @ 11:00 XXX	

[View more similar loads](#)

[Copy message](#)

[Finish](#)

04

# Results & Reflections

# Our pilot had high engagement, but our conversion rate was low, but why?

We had onboarded 40 carrier businesses to our pilot and received truck availability information from each at least 1x/week. 50% of the loads we sent to carriers (via email or messaging platforms) were viewed on Convoy's carrier website.

I conducted a series of follow-up phone interviews with pilot participants and learned the following factors that limited transportation coordinators from booking loads:

**Their feasibility requirements fluctuate**

**They've already found a load elsewhere**

**The load they wanted was already taken**

**We sent our load matches too slowly**

**Their truck availability changed**

**Convoy's rates were too cheap**

# Reflections

After we were able to learn from our pilot, Convoy shutdown due to the on-going freight recession.

Though this project ended abruptly, I learned a ton along the way.

**01** The most effective design skills are clear communication and tight collaboration. Taking my cross-functional teammates through my design process made it easy to make decisions and gain alignment easy.

**02** Usability isn't the same as usefulness. I could've spent more time improving the usability of our internal tools so that my team and I could have an easier time running the pilot, but that wasn't what we needed.

Start small and prove success before investing more time and resources into perfecting user experiences. MVPs aren't a bad thing, they're made to validate thinking.

**03** Cost cutting measures like this can take months to years to see returns. Other brokers similarly sized, or larger to Convoy had already diversified their carrier bases.