INNOVATIVE TRANSPORTATION SOLUTIONS

Jumping on the Bandwagon to Offer Rideshare Solutions in NYC

Fast Facts

Product Features: Free mobile app collects passenger information (destination, number of people per party, and cell phone number) and matches passengers who have complementary destinations. Before riding, users can check profiles, view ratings, and communicate with other users, increasing both transparency and safety.

Environmental Impact: Sharing 2,000 taxi trips that average a distance of 7.15 miles saves 16,480 pounds of CO_2 emissions and 839.1 gallons of fuel.

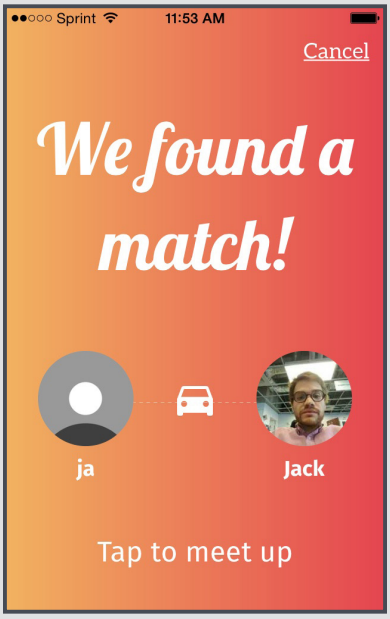
Taxis are an integral part of the transportation mix in New York City, especially near busy travel hubs. But when taxis are scarce at airports or bus terminals during peak travel times, passengers can encounter long lines and significant travel delays. The solution seems like a simple one—just put more taxis on the road. But David Mahfouda of the New York tech startup Bandwagon envisioned a better solution: optimize existing taxi capacity by helping passengers share rides.

Sharing Taxi Rides

Mahfouda and his team, along with advisors at Columbia University and the New York Institute of Technology, created a software program that collects passenger information and matches riders who have complementary destinations. Once the prototype was built, NYSERDA got on board, providing support to help Bandwagon develop the software and deploy a mobile app.

Sharing rides through Bandwagon reduces emissions and wait times at taxi stands at airports and convention centers.

Using geolocation and a route consolidation algorithm, passengers enter their destination and the app matches them to a nearby ride partner who is going the same way. Passengers are connected by text to meet up, and can check rider profiles, view ratings, and communicate with other users via chat. Bandwagon seamlessly splits the fare through the app, which suggests fair portions and tip based on the distance traveled per passenger. By sharing rides, Bandwagon users can save around 40 percent on the cost of their rides.



Bandwagon's app matches passengers that want to share taxis.

Upgrading the Taxi Line

The company's first major project was at LaGuardia Airport, where the high number of travelers and their dependency on taxi service made it a good place to test the program. Specifically, Bandwagon came to the rescue after Superstorm Sandy hit New York in 2012, destroying a great deal of the taxi fleet. Bandwagon matched around 10 trips, or 25 passengers, per hour. At the peak, more than 100 passengers shared trips every hour, reducing the number of independent taxi rides by about 100 per hour. Airport officials described the Bandwagon system as a "critical part of their response effort."

Since then, Bandwagon has developed its capacity to support airports, other transit hubs, and large event centers such as convention centers, reducing wait times at taxi stands, fuel miles traveled, and improving customer service. The company's High Occupancy Passenger, or HOP, lane system enables matched passengers waiting in queues to jump to the front to a priority taxishare line.

With support from NYSERDA and subsequent investors, Bandwagon is reducing the total vehicle miles traveled, greenhouse gas emissions, fuel consumption, and congestion associated with single-occupancy vehicle transportation in New York City.

> "We wouldn't have been able to bring the first smart taxi sharing service for NYC airports to LaGuardia without NYSERDA's help."
>
> *– David Mahfouda, Founder & CEO, Bandwagon*

THE BENEFITS

- Economic Development
- Quality of Life
- Carbon Footprint
- Reducing Barriers

nyserda.ny.gov/Transportation

NEW YORK STATE OF OPPORTUNITY. | NYSERDA

TBI-TRAN-bandwagon-cs-1-v1 11/15