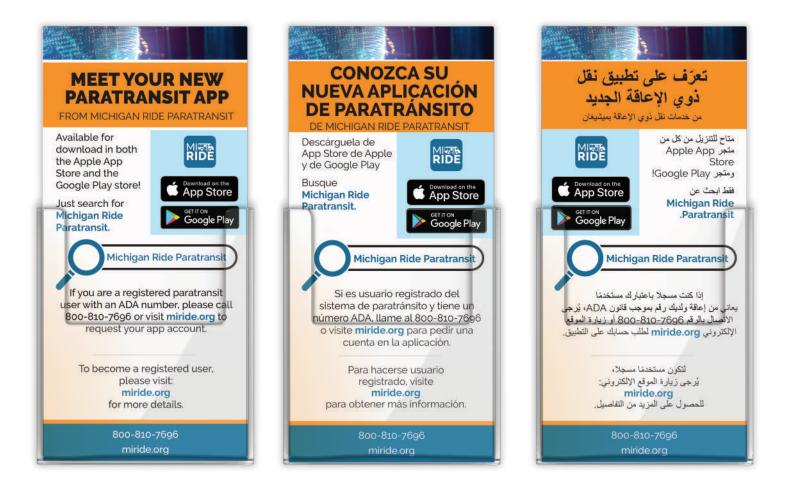# 5 KEY FACTORS to Consider in Cross-Agency Ride Coordination with Technology Integration

Insights from the MI Ride Paratransit Project in Southeast Michigan

Author Valerie Lefler, Founder & Executive Director, Feonix - Mobility Rising

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Introduction

Coordination of services for public transit agencies is critical for efficient and effective service delivery in urban and rural communities. Unfortunately, the nuts and bolts, bits and bobs, and procedures for bringing that coordination to fruition for rider service are rarely discussed and can be likened to be as easy as waving a magic wand. Transit agencies have different policies and procedures (e.g., trip rules) and regulations, making it difficult to combine services for riders. Further adding to this complexity is the fact that each transit agency utilizes different technology solutions that often do not integrate with one another.

In this white paper, we provide some of the behind-the-scenes learnings and factors that were considered, completed, and attempted as part of a $1 million project from the Michigan Mobility Challenge grant competition.

In early 2019, the Michigan Department of Transportation (MDOT) awarded a grant to the Regional Transit Authority of Southeast Michigan to pilot an innovative technology solution that would allow users to manage and book paratransit rides across the region more accurately and expediently. Service coordination is a complex challenge in and of itself, and this project included additional aspects of ensuring quality service delivery within the USDOT Federal Transit Administration regulations for paratransit services and deploying the pilot during a global pandemic. Feonix – Mobility Rising was honored to take the role of project integrator to deploy the technology and coordinate the deployment of services to riders and transit agencies.

In this project, all partners invested a significant amount of time and resources to bring the technology and outcome to reality. Rarely in technology deployment does so much consideration go into defining the problem statement and success factors from the very beginning. In this paper, we will review five of the key factors that were distilled as part of the project deployment and how that process ultimately led to a successful deployment and, most importantly, to rider customer satisfaction and technology adoption.
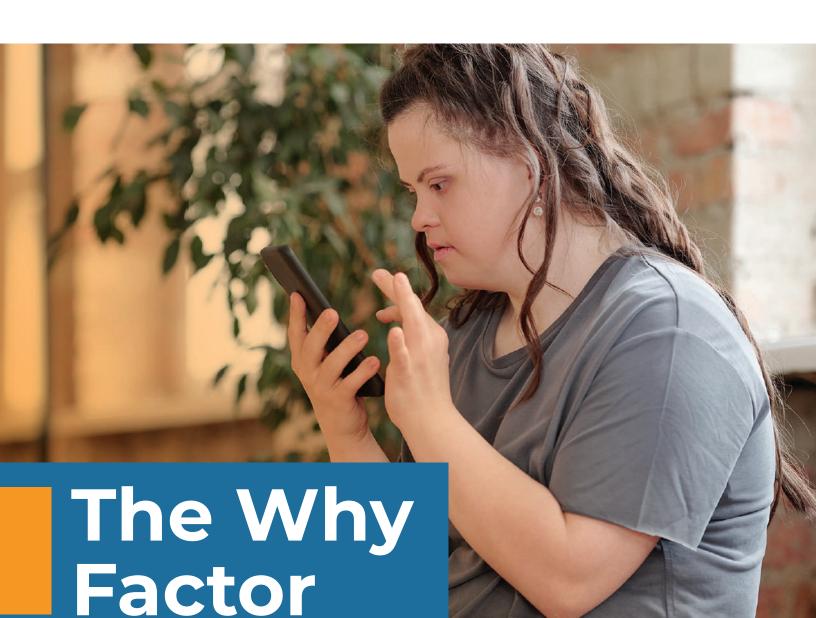
The Why Factor

When it comes to any project at Feonix, we always focus on the "why factor" as our first priority. If we all know the why and are committed to progress and action, layers of red tape can be unwound, regulations deciphered, and to-do lists prioritized to tackle the challenges.

Fortunately, as part of this project, thanks to the hard work of Menlo Innovations, the RTA, and the transit agencies, we had very detailed deliverables for riders, dispatchers and schedulers, and the technology, but at the end of the day, our "why" was to improve the quality of life and rider experience for paratransit riders. What does this look like in detail? In the following pages we'll highlight our findings as part of the Michigan Ride Paratransit project.

The Why Factor

Riders

▶ Experienced long wait times. We wanted to give them hours of their lives back – not waiting on hold. In some cases, riders reported waiting 60–90 minutes each day just trying to get hold of an agent.

▶ Had to schedule rides during business hours. Life happens at 9 pm, 2 am, and 6 am. Being able to request rides 24/7 the minute the need for the ride surfaces was huge compared to having to remember the next morning.

▶ Missed boarding windows. Riders only have three to five minutes to be ready for the driver, and without reminders and notifications, it was significantly challenging for riders to remember their pick-up times without an app to which they could consult.

The Why Factor

Dispatchers and Schedulers

▶ Experienced scheduling limitations in software. There was no current app available for paratransit riders across any of the three transit agencies, nor was there the ability to communicate with riders outside of a phone call. We wanted to expand the communication options for reminders.

▶ Dealt with limited rider capacity. It was often a significant challenge to get rides coordinated and scheduled within the services available. By enabling riders more flexibility to book rides earlier and within seconds, those critical trips were able to get into the system easier, reducing the stress of dispatchers getting ride requests for critical health appointments at the last minute and enabling more flexibility in scheduling trips that might have more flexible ride windows, such as trips for getting groceries or stopping by a 24-hour fitness for a workout
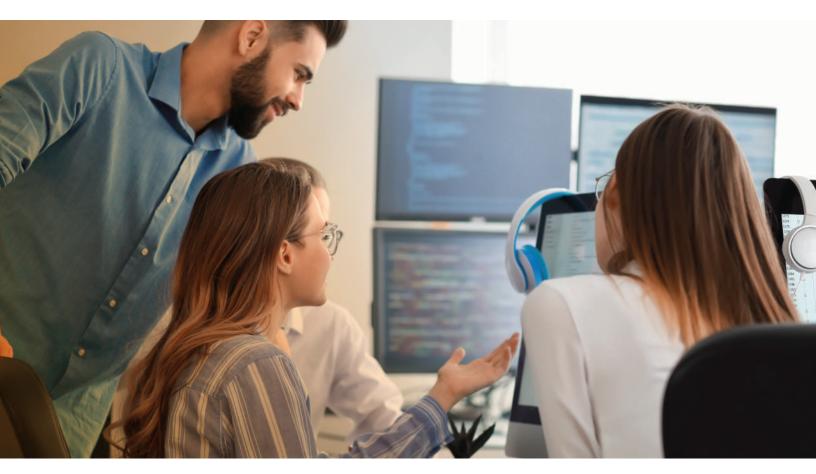
The Why Factor

IT Systems

▶ Different software systems between the services that do not easily integrate with other software created the need for transit dispatchers to spend two or three hours on the phone to coordinate a single ride request at times. With the technologies not talking to one another and without the ability for all transit agencies to see the same information, it was the literal game of telephone. This created significant headaches, not only for agencies but also for passengers and caregivers.

▶ At the end of the day, our "why" was mobility equity for paratransit passengers in the ride booking process and reduced stress for the schedulers and dispatchers within the transit agencies.

Project Partners

It cannot be understated how much each project partner rolled up their sleeves to bring this project to fruition. The transit agencies met biweekly on Friday mornings for almost a year, walking through each step of the deployment. The software companies put in countless hours of in-kind service to continue to ensure accessibility after Apple or Android pushed new features and functionality that wreaked havoc on the screen flow. Everyone gave 110%, and that showed in the project outcomes.

Project Partners

Michigan Department of Transportation (MDOT)

The (MDOT) is responsible for all facets of transportation within the state of Michigan, including oversight and administration of all public transportation. It is one of the most innovative and forward-focused departments of transportation in the United States and leads the nation in developing new and better ways to serve travelers. This project would not have been possible without the funding provided by the MDOT as the sponsor of this grant.

Southeast Michigan Regional Transit Authority (RTA)

The RTA is a 10-member board appointed by governing bodies in the counties it serves, the city of Detroit, and the governor of the state of Michigan. The mission is to manage and secure transportation resources that significantly enhance mobility options, improve the quality of life for residents, and increase the economic viability of the region. Their goal is to create a region with sufficient and stable funding to support improved public transit options that will advance equity by increasing accessibility; satisfy the integrated mobility needs of Southeast Michigan communities; and promote livable, healthy, and sustainable growth. The Southeast Michigan RTA was the direct recipient of the grant funds for the project.

Project Partners

Feonix - Mobility Rising

Feonix is a nonprofit with a mission to create mobility solutions for the health and wellbeing of every person in every community. Feonix serves as a mobility integrator, working at the cross section of technology vendors, transportation providers, community leaders, and riders to improve mobility for all. Feonix supported communication among all of the stakeholders in this grant and provided direct support to passengers and transportation provider personnel as they embraced a new way of managing transportation arrangements through the MI Ride app. Feonix partnered with two different software companies to deploy the technology – Kyyti and SkedGo.

SkedGo

Feonix selected the technology vendor SkedGo to step in as the technology provider for the MI Ride Paratransit Project. Based in Australia and with offices globally, including San Francisco in the United States, SkedGo provides personalized trip planning, corporate mobility, and other mobility-as-a-service technology for governments, corporations, and start-ups.

Their senior developer team creates tailored solutions that leverage their unique API, SDK, and white labels. For this project, they created the white-labeled MI Ride app to integrate directly with each public transit provider participating in the pilot. SkedGo replaced the original vendor, Kyyti - a Finnish based Demand Responsive Transport (DRT) platform, which enabled user-friendly access to sustainable and intermodal mobility. Both organizations worked very hard to transfer responsibilities for the pilot without missing a month of ridership for the pilot riders.

Project Partners

Menlo Innovations

Menlo Innovations is a software design consulting company that focuses on returning joy to technology. Their mission is to end human suffering in the world as it relates to technology. They do this through a process they call High-Tech Anthropology®. The value of High-Tech Anthropology® is in mitigating project risk. They do this by answering three critical questions: 1. What problem are you trying to solve? 2. Who are you solving it for? And 3. What is the right solution for the problem? This risk mitigation process ensures that solutions are meeting a real need and are widely and joyfully adopted by users. For the MI Ride Paratransit project, Menlo brought the user experience front and center, talking to users, involving users in the software design and build, and gathering feedback from users during the testing phases.

The Suburban Mobility Authority for Regional Transit (SMART)

Serving since 1967, SMART is Southeast Michigan's only regional public transportation provider, offering transportation for Macomb, Oakland, and Wayne Counties. SMART's fixed-route and small bus services connect people to employment and educational institutions. SMART is supported by federal and state funding, local contributions through a transit property tax millage from opt-in communities, and bus fares. SMART was one of the providers that allowed their paratransit riders to book and manage transportation through the MI Ride app.

The Detroit Department of Transportation (DDOT)

The Detroit DOT is the largest public transit provider in Michigan that serves the city of Detroit, surrounding suburbs, and neighboring cities, including Highland Park and Hamtramck. The Detroit DOT was one of the transportation providers that participated in this grant program.

Ann Arbor Area Transportation Authority (AAATA),

AAATA, also known as TheRide, is the main public transit provider for the greater Ann Arbor-Ypsilanti area. They were a key transportation partner in supporting the planning in putting the ideas of the MI Ride Paratransit program together.

Five Key Factors to Consider

Five Key Factors to Consider

Now, without further ado, let's dig into these important dimensions of creating cross-agency service coordination.

1. Dispatch Technology and Operational Model Differences

Within the MI Ride Paratransit Project, each transit agency was using a different technology to manage its services. One provider was using an in-house fleet of vehicles and drivers (SMART), and two of the agencies were using third-party subcontractors (DDOT and AAATA). DDOT was using a broker to manage its services, which outsourced rides across several different organizations, and AAATA was using a single subcontractor to control the rides. So, across the project, there was a wide variety of not only technology systems but also operational variances that needed to be taken into consideration. It should be noted that as of Summer 2022, both AAATA and DDOT have brought or are in the process of bringing their paratransit services under in-house management.

Why does this matter? When transmitting trip data across agencies, there can be a lot of room for miscommunication, but the tighter the communication loop, the better the chances that the information provided directly from the rider will get to the drivers across the various agencies.

In the MI Ride Paratransit Project, this was a significant challenge that should not be understated for other agencies looking to offer cross-agency services. Key aspects that need to be defined and clearly communicated are as follows:

a) What information goes to the scheduler, and what information goes to the driver?
Consider not only trip address details but also the rider's support needs and accommodations. All information needs to get to all agencies involved in the trip.

b) What are the transfer points between services and expectations for the rider?
This is often a point of great stress for passengers. It is essential that the drivers for both services have clarity regarding the transfer/pick-up point. This becomes very challenging when one of the legs of the transfer is a third-party organization that might not even be assigned to the trip until hours before the ride. There is very little room/time for questions and communication, and a lot of room for details to fall between the cracks and create delays, confusion, and missed trips.

Five Key Factors
to Consider

c) Passenger communication and dispatch communication for day-of-trip nuances and schedule changes need to be coordinated. In any given cross-agency trip, there is one passenger, two drivers, two dispatchers, and at least two customer service agents.

While changes can be communicated via app, if there is no cell service or if the passenger's battery on their cell phone is dead or any variety of technology challenges that can and will occur, there needs to be a well-coordinated path of communication to ensure that the passenger is able to get where they need to go. This pilot occurred during a pandemic and over the course of both scorching hot and bone-chilling cold weather. Passengers abandoned at a transfer point could result in not only service issues but also serious health concerns. Keeping this factor top of mind is critical for success.

Five Key Factors to Consider

General Workflow

Below is a diagram of the workflow that was mapped out by Menlo Innovations as part of the discovery process for ride booking using the paratransit services across the three agencies.

Rider needs to schedule a ride

Reach out to 3rd party resource (ex. AAAIB)

Contact a Transit Authority

AATA
7000 - 8000 calls/mon.
3000-4000 rides/week

Services offered:
- ARide
- GoldRide
- Wil call
- Same Day

DDOT
800 rides/week

Services offered:
- MetroLift
- New Freedom

SMART
1100 square miles

Services offered:
- Connector Bus
- Various community
- specific services

Someone answers the request

Information Specialist (AATA)
- Take information
- Checks service area
- Determine type (medical/shopping/etc)
- Determine equipment & PCA needs
- May schedule multiple trips and/or multi-stop

CSR/Scheduler (TransDev)
- Takes Information
- Checks ADA legality & service area
- Recommend a service
- Determine trip type (medical/shopping/etc)
- Determine equipment & PCA needs
- May schedule multiple trips and/or multi-stop

CSR (SMART)
- Takes information
- Checks ADA legality & service area
- Determine trip type (medical/shopping/etc)
- Determine equipment & PCA needs
- May schedule multiple trips and/or multi-stop

The trip information is recorded into a system

Trapeze (AATA)
- Find a vehicle that has availability and finds a time slot

Ecolane (TransDev)
- Find a provider that has an open time slot

Strategen Adept
- CSR enters trip request into Strategen and awaits scheduling

Someone sets the schedule.

Information Specialist (AATA)
- Schedule in real time on the phone

CSR/Scheduler (TransDev)
- Schedule in real time on the phone

Scheduler (SMART)
- The pickup window is subject to change and the rider is notified by phone later

Someone optimizes schedule and assigns drivers.

Dispatcher (Ridecore)
- Did not observe on initial visit

TransDev
↕
Providers
- Software many do list pass to set route
- Dispatcher makes adjustments
- Provider many make further changes

Scheduler (SMART)
- Scheduler continually revising schedule up to day before, in order to make best use of capacity.

Trip info is sent to the driver.

Dispatcher (Ridecore)
Vans
- Paper manifest
Sedans
- Info pushed to tablet, updated in real-time
Did not observe on initial visit

TransDev
- Dispatchers send info to driver tablets using Ecolane
Did not observe on initial visit

SMART
- Manifests are sent electronically to the drivers
- Paper backups kept in case of system issues
Did not observe on initial visit

Riders picked up

AATA
- 5 minute boarding window

DDOT
- 5 minute boarding window

SMART
- 3 minute boarding window

Riders dropped off

Final destination

Rider picked up for continuation of trip

Five Key Factors to Consider

For success in a perfect technological situation, information that the passenger enters directly into the app would go all the way through to the driver, and the driver on the day of the trip could communicate with the passenger directly. However, because there was a different software platform used by each agency and three different operational models – each agency was using the MI Ride Paratransit platform as a shadow system, that level of automatic data transfer wasn't quite possible. This is one reason why the Uber or Lyft operational experiences are often highly preferred: you are able to communicate with your driver at the pick-up point.

While we were able to successfully perform cross-agency trips between DDOT and SMART, there was still quite a bit of manual coordination between staff. If we had not been conducting the pilot during the pandemic, when the transit agencies had higher priority matters to address, such as transportation to and from COVID testing sites, there may have been more success and utilization of the feature by passengers. From the cross-agency rides that did occur, we certainly learned a lot about the future technology notifications and features needed to ensure the information goes throughout the rider/dispatch/driver pipeline.

2. Scheduling and Dispatch Windows

Another area of consideration when doing cross-agency trip booking is understanding the boundaries of booking rides within established reservation windows. Across the three agencies, each had a different ride-booking expectation for passengers. This included how much advance notice was needed, as well as any variations for rides requested for the weekend or on the weekend. In order to have a technical solution work across transit agencies, there needs to be an agreed-upon compromise around the trip-booking rules and regulations.

The diagram on the next page, created by the High-Tech Anthropology® team, reflects the compromise between the agencies regarding the sequence, timetable, and booking windows supported by the technology. In addition, it should be noted that for the pilot, we also added a buffer to give the customer service and dispatch staff additional time to review the trip details and input them into their respective trip scheduling software.

Going through day by day and walking through the rider scenarios in terms of when they would need to book to receive a ride that day for each service was a critical part of understanding the nuances, especially as they related to weekend trips and weekend customer support availability.

Project Wright: Scheduling Deadlines

Tue	Fri	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Sun
		Ride 6: Submitted @9:00am						Ride 1: Submitted @9:00am	Ride 2: Submitted @9:00am	Ride 3: Submitted @9:00am / Ride 3.1: Submitted @3:30pm	Ride 1: for 9:00am / Ride 4: Submitted @9:00am	Ride 2: for 9:00am	Ride 3: for 9:00am	Ride 4: for 9:00am / Ride 5: Submitted @12:00pm / Ride 5.1: Submitted @12:00pm		Ride 5.1: for 9:00am	Ride 5: for 9:00am / Ride 6: for 9:00am

MDOT — Michigan Department of Transportation

RTA — REGIONAL TRANSIT AUTHORITY OF SOUTHEAST MICHIGAN

SMART

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Five Key Factors to Consider

Deadline/guardrail for scheduling a ride:

Carol can not sumbit a ride request any more than 14 days prior to the ride time being requested (this includes Sundays) -Carol must submit all ride requests no less than 48 hours piror to the ride time being requested. -Due to limited Schedululer/CSR availability on Sundays, the 48 hour rule does not include hours on Sundays. -Due to limited overtime hours, rides for Saturday and Sunday need to be requested by 12pm by Thursday. -Carol can request a ride for any time of day as long as the ride fits within the above guidelines.

Ride 1 Scenario:	Ride 2 Scenario:	Ride 3 and 3.1 Scenarios:
If Carol wants a ride at 9am Monday the absolute latest she can request it through the app is 9am on the previous Friday. If it is after 9am on friday, Carol will have to call to request a ride for 9am on Monday morning.	If Carol wants a ride at 9am Tuesday morning, the absolute latest she can request it through the app is 9am on the previous Saturday. If it is after 9am on Saturday, Carol will have to call to request a ride for 9am on Tuesday morning.	3- If Carol wants a ride at 9am Wednesday morning, the absolute latest she can request it through the app is 9am on the previous Monday. If it is after 9am on Monday, Carol will have to call to request a ride for 9am on Wednesday morning. 3.1 - Any ride requested on Sunday will follow the rule for scheduling as if it was sumbitted by Monday at 8:00 am.

Ride 4 Scenario:	Ride 5 +5.1 Scenario:	Ride 6 Scenario:
If Carol wants a ride at 9am Thursday morning, the absolute latest she can request it through the app is 9am on the previous Tuesday. If it is after 9am on Tuesday, Carol will have to call to request a ride for 9am on Thursday morning.	5 - If Carol wants a ride at 9am Sunday morning, the absolute latest she can request it through the app is 12pm on Thursday. 5.1 - If Carol wants a ride at 9am Saturday morning, the absolute latest she can request it through the app is 12pm on Thursday. If it is after 12pm on Thursday, Carol will have to call to request a ride for Saturday or Sunday.	If Carol wants a ride at 9am Sunday morning, the absolute earlierst she can request it through the app is 9am 14 days prior

Five Key Factors to Consider

3. Definitions of Mobility Aids

Another area of consideration concerning the operational needs of transportation services is communicating about mobility needs, considering the depth and breadth of terminology used for mobility aids. At one point, there were almost 30 different variations between the three agencies, which we had to synthesize down to 12.

It was critical to ensure that there was consistent terminology for the passenger and the transit agencies while maintaining service expectations in accordance with the approved accommodations requested.

To increase efficiency, we decided that each passenger participating in the pilot would pre-select their mobility aids, as defined by their paratransit eligibility assessment, while creating their app profile rather than at the time of booking each trip. This meant that passengers went through the process of selecting their mobility aids one time instead of repeatedly, unless they needed to make a change. For example, if a passenger had already defined that they had a service animal while creating their passenger profile, that information was preloaded into the system and automatically appeared when they went to book the trip. They could uncheck it if the service animal was not on the trip with them. This reduced the number of mobility aids that the software would read if the user was utilizing a screen reader. If a rider needed to add additional accommodations as part of their paratransit experience, the transit agency could visit with the passenger directly to understand the requested change or addition.

SMART	DDOT	AAATA	
Wheelchair	Wheelchair	Manual Wheelchair	
Lift Needed			
2 Reg Wheelchair			
Wheelchair Large			
Scooter	Scooter	Scooter	
Medigo Large Wheelchair			
Scooter Large			
Reasonable Modifications			
Cane/Blind	Cane	White Cane	Oxygen
Cane/Orthopedic	Walker	Cane	Segway
Walker	Crutches	Walker	Hearing Aid
Crutches		Crutches	Lap Belt Refusal
Leg Braces		Braces	Message Board
		Electric Wheelchair	Personal Care Attendee
Door to Door		Prosthesis	Required Personal Care Attendee
	Animal / Oxygen	Door to Door	
Other/Segue	Stroller	Service Animal	

MDOT Michigan Department of Transportation · RTA Regional Transit Authority of Southeast Michigan · RIDE SMART · D. · TheRide · MENLO Innovations · Feonix Mobility Rising

Five Key Factors to Consider

We followed a process similar to that described above to address how to capture "trip purpose," a piece of data that two of the three agencies request at the time of booking. The consistency and clarity of these nuances to ensure reporting accuracy within the app are important to ensure data management accuracy across agency partners.

4. Rate Schedule Coordination and Clarity

Although fares were not collected within the app during this pilot, we noted that there were variations in how passes were sold and nuances regarding which options were available across fixed route and specialty services. Some agencies offered monthly passes, while others offered weekly as well as other variations for older adults (60+ vs. 65+), youth, students, and individuals with disabilities.

The rates for the paratransit services also varied. DDOT MetroLift was $2.50. SMART Paratransit and AAATA A-Ride were $3.00, and during part of the pilot, fares were waived due to the pandemic and COVID funding.

It is critical to ensure that passengers and internal staff are aware of these cost nuances, the technology has accurate fares, and the drivers are aware of the variances. Often, the passengers will ask the drivers about the services, trip details, prices, etc., and in many cases, the drivers really have no idea. This is a point of confusion and possible stress if the passenger doesn't bring the proper fare or exact change. While customer support, family, and friends can do their best to educate the passenger, if they are stressed about an aspect of the trip, such as going to a critical doctor's appointment, or perhaps they are struggling with early onset dementia, the passenger may not be able to recall trip or service details. Educating drivers about the coordination of services is key; however, this can be a very challenging undertaking with so many operational models.

Five Key Factors to Consider

5. Passenger Communication

As indicated throughout the material, it is critical to ensure that the passenger has clear communication via the app and also throughout their booking and ride experience. During the pilot, there were several points where members of the Feonix team communicated with the passengers: first, when enrolling them in the pilot, training them to use the app, and booking test trips, and then for troubleshooting any technical barriers, as well as quality assurance and follow-up with any issues. This sense of support and security was essential to creating a technology framework that passengers could trust. In addition, the team from Menlo Innovations visited the passengers to learn about their user experiences, expectations, and level of satisfaction with the program. Establishing trust and knowing that the app had a human presence behind it was invaluable for passengers who were new to using an app to book their transportation.

Across the two different technology frameworks used—Kyyti and SkedGo—the passengers' ability to chat directly with the transit agency's customer support varied, but when it was available, it was useful in some cases. Sometimes, the transit agency still needed to make a phone call to the passenger to clarify the information. We would suggest further testing with this feature/functionality to fully vet the value of this function for passengers and transit agencies.

One of the greatest points of user satisfaction within the app was the ability to cancel a ride without having to call the transit agency. A process that took between three and twenty minutes, depending on the call-in time, was reduced to seconds. While passengers were not able to change trip details once the ride was booked in the system, this user enhancement was well received. From a transportation provider perspective, it is important to note that this feature meant that the scheduler and dispatcher needed to watch the MI Ride Paratransit portal carefully to ensure that they updated their manifest accordingly.

Another element of the app that brought unexpectedly high value was the reminder functionality. The ability for passengers to get trip reminders consistently and regularly enabled them to not only cancel or adjust their rides with more notice but also to be ready to go on time for their pickup. This reduced stress for the rider, as they only have three to five minutes to be ready when the driver arrives, and if they are trying to check out at the grocery store, finish a workout at the gym, hike down three flights of stairs and down a long hallway at a university building, or myriad other situations, having these reminders is key.

Challenges of the Pandemic

Deploying a pilot during the pandemic presented unique opportunities and challenges. While all three transit agencies were fully engaged in the development and planning process, when the app was deployed, service was limited to SMART and DDOT due to budget and operational capacity. In addition, staffing changes, driver shortages, and workflow changes for agents working from home vs. in an office created additional hurdles during an already complex project.

Outcomes and Lessons Learned

The MI Ride Paratransit Project booked almost 3,000 paratransit trips during the pilot, with a very diverse rider base. For example, during the first year of the pilot, 26% of riders utilized a wheelchair as a mobility aid, and 21% of riders utilized a screen reader to access the app and book trips.

Nothing speaks more to the outcomes than the riders themselves. Of all the riders, Dovenetta took the most cross-agency trips during the pilot, and below, we've highlighted her experience.

Beta app user Dovenetta used to wait on hold every week to request rides to her weekly physical therapy appointments and family gatherings. She would wait anxiously, worrying that if she didn't get through, she would have to cancel her appointments or plans with her family. This was especially difficult because her appointments are in a different service area than her home, so she would have to spend extra time waiting while SMART and DDOT coordinated her transfer. Worse yet, if she needed to cancel a ride but couldn't get through to the services, she would risk losing her riding privileges.

Once Dovenetta learned that a mobile app was in development, she jumped at the chance to help with the beta launch. As a beta user, Dovenetta generously volunteered her time to help the Michigan Ride Paratransit app development team ensure that the application worked well for riders like her. Her valuable perspective led to the development team streamlining the ride request process to create a more joyful experience for riders requesting a transfer ride through the app.

She used the Michigan Ride Paratransit app on her phone to quickly and easily request rides to and from physical therapy and to visit her daughter and grandchildren nearby. She spent just a few minutes each week entering her requests in the app instead of calling in and waiting. She could see updates to her ride status, communicate with SMART and DDOT, and even get notified when her pickup time was near—all through the app!

Dovenetta enjoyed the convenience and ease of using an application that was created with her in mind. During her interview, she remarked, "The good thing was that I didn't have to listen to that horrible music. I just tapped it into the app and was done."

Recommendations

If your agency is looking to coordinate services using technology, we have the following recommendations for a successful outcome:

▶ Make sure everyone is fully vested in the outcome and knows that this is going to be a multi-phased process. There will be hours of meetings, several whiteboard sessions, detailed discussions, and discovery sessions with all levels of the operation. This is not a time for smoke and mirrors—the good and the not-so-great parts of the operational model must be shown, and workflows need to be detailed to ensure the passengers and business model are not set up to fail and the critical data needed can still be collected for each respective agency. Plan for a minimum of six to nine months to walk through all the details, get authorizations, review and gain agreement, and develop a resolution to those facets of the coordination that are hard to navigate.

▶ The rider experience is the driving force, and from ride request to ride completion, the rider's every tap, call, text, or push notification needs to be factored in. Details matter, and unfortunately, when iOS and Android push native updates to their system settings, you will have to adjust and ensure that there is room in the budget for these contingencies. For example, the native time picker for iOS changed without warning, and when that was deployed to the app, it was a nightmare for the screen reader to navigate, and the users almost gave up. Fortunately, there was a global outcry about the poor functionality of this update, and two weeks later, iOS restored the old time picker. While that crisis was avoided, you will run into technology inconsistences, and all parties need to realize that this type of coordination will involve navigating updates that are pushed from each software and each operating system.

▶ Celebrate the small wins. You may not get all the parts of the technology integrated exactly how you envisioned it, but celebrating the marginal improvements, as well as the major victories and enhancements in improving and coordinating your rider service, is key. This will be an ongoing journey; it won't happen overnight, and there won't be a time where you check the box and say, "all done". It's similar in the cybersecurity sector, where they never say their systems are completely secure, and they're constantly monitoring, updating, training, and preparing for changes. You will always be coordinating between teams, training new staff, and educating new drivers, and rider expectations will continue to increase. One day at a time, though, it will get easier, and the agencies will settle into a rhythm. Even then, it will be important to stop and celebrate the hours, memories, and independence that you gave to the passengers.