How did the Orleans
Metropolitan Area
modernise its
Demand-Responsive
Transport network?



ABOUT US

Since 2014, Padam Mobility develops digital on-demand Public transport solutions (DRT and Paratransit) to transform peri-urban and rural territories and bring communities closer together.

To do this, the company offers a **software suite of smart** and flexible solutions that improve the impact of mobility policies in sparsely populated areas for all types of users. To get users, operators and communities on the move. This software suite is based on powerful algorithms and artificial intelligence. It includes:



Booking interfaces (mobile app, website) for users and call centres



A navigation interface (mobile app) for drivers



A management interface for operators and Public Transport Authorities



A **simulation tool** for designing and setting up mobility services

Public Transport Authorities, operators and private companies trust us to help them **open up territories, optimise the mobility offer** and facilitate its operations, to **accompany them towards operational excellence**, and finally to act in favour of an **environmentally-friendly mobility**.

+1M users

transported in 2021, **+1.7M** users transported since our creation

3,3 x cheaper

than a conventional fixed-line bus service, according to our clients

+80 territories

deploy our solutions in France, Europe and around the world

33%

of our users previously used private cars, **19%** were on foot or could not move around

80% passenger pooling rate

on average

4,8/5

average rating given to our services by our users





ORLEANS

Keolis Métropole Orléans 2018 Résa'Tao



- Train station
- Tramway line
- Tramway stop interconnected with the Résa'Tao DRT service
- Résa'Tao DRT service areas



CONTEXT

The Orleans Metropolitan area authority (Orleans Metropole), which governs the city of Orleans and 21 other municipalities of its urban area, is equipped with a public transit network under the name of TAO (Transport de l'Agglomération Orléanaise). The network operation is entrusted to Keolis Métropole Orléans, a subsidiary of the Keolis group. The Orleans Metropole Demand-Responsive Transport (DRT) service, Résa'Tao, serves since its implementation several peripheral areas from and to predefined stops.

Initially, access to the service was possible by booking at least 2 hours in advance by phone or through a dedicated website. Departure or arrival times at feeder stops were predefined.

In 2017, Orleans Metropole found its DRT service was underused compared to its actual operating costs. This lack of attractiveness could be explained in particular by:



Time constraints, with fixed departure and arrival times at feeder stops



Booking deadlines (of at least 2 hours in advance) to observe



Itinerary constraints (possible only from or to feeder stops)



Poor ergonomics of the service and lack of mobile app

Faced with these limitations, Orleans Metropole decided to experiment a real-time and dynamic Demand-Responsive Transport. Padam Mobility technology was selected in this context to modernise the Résa'Tao network and improve its attractiveness. An initial experiment was carried out from April 2018 on the eastern part of the network (Résa'Est).

11

The system in question [was] too constraining, because of the fixed schedules, the sometimes complicated booking or the lack of real-time information.

Previously, in order to be picked up by a Demand-Responsive Transport van, the user had to book two hours in advance, which discouraged many inhabitants and led some of them to prefer their private car.

77



Bruno Malinverno, ex Vice-President in charge of transport and travels, Orleans Metropole

SOLUTION

Thanks to Padam Mobiliity's simulation tool, which allows to faithfully simulate the operation of a DRT service on the basis of specific algorithms, the Résa'Est network has been adapted:



Merger of the 3 initial service areas and optimisation of the zonal coverage



Removal of itinerary constraints to and from feeder stops



Flexibility of booking schedules now completely free and dependent on bookings and vehicle availability only



Real-time booking enabling last-minute rides



Enhanced user, driver and customer relationship centre (call centre) experience



Following these improvements, an initial assessment was carried out at the end of June 2018. Although all the service monitoring indicators went green, both in terms of user satisfaction and ridership, it was nevertheless noted that there was still room for improvement in terms of vehicle occupancy rates. Adjustments were made:



Extension of the service area to 3 new areas at the request of local elected officials



Authorisation of rides in competition with fixed bus lines



Extension of service opening hours (6:15 am instead of 7:00 am)



Optimisation of parking areas for vehicles awaiting bookings to limit empty kilometres and better distribute the fleet over the service area

In September 2019, more than a year after the first improvements brought by Padam Mobility to Résa'Est, **the Padam Mobility technology was extended to all Résa'Tao subnetworks**. The service was improved. The fleet of vehicles was expanded from 4 to 13 throughout the urban area. The service area was optimised and extended.

The Résa'Tao service was gradually extended to other areas of the Orleans Metropolitan area, covering 9 areas in total with a fleet of over 19 vehicles.

Based on these conclusive experiences in terms of both ridership and user satisfaction, Orleans Metropole decided to extend the service on January 3rd, 2022 to 4 new, redesigned areas, with some forty vehicles in service 7 days a week. These North, South, East and West areas have been defined in order to respond appropriately to the mobility issues of the municipalities beyond the urban core of the Metropolis. This extension will continue to allow all the inhabitants of the Metropolitan Area to travel from their nearest stop at the same price as on the rest of the TAO network. The DRT offer deployed by Orleans Metropole is a tool for equity and proximity. Résa'Tao is thus becoming a real gateway to the Metropolis' main transport services.

11

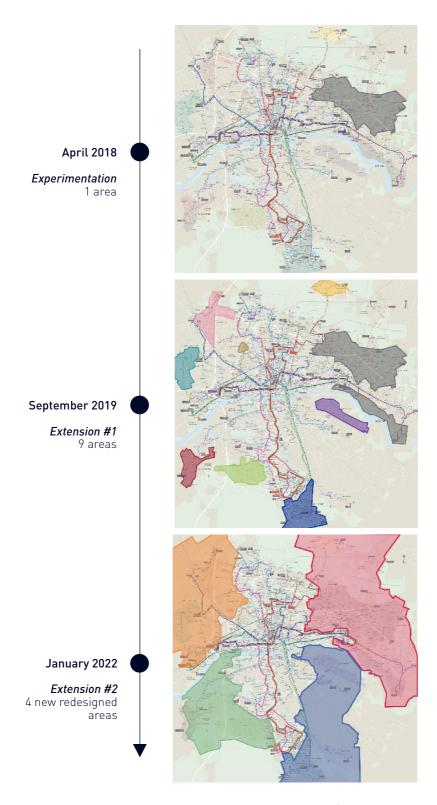
It is a shared local service at an ultra-competitive economic cost because it is no more expensive than traditional public transport.



Romain Roy,Vice-President in charge of transport and travels,
Orleans Metropole

11

Some people who work in the building industry use the service in the morning to go to the tramway and then go to the city centre to get to their work. I see all kinds of people come through: nurses, lawyers, doctors, etc. They are always very happy to be dropped-off on time.



Evolution of the areas served by the Résa'Tao DRT optimised by Padam Mobility.

In order to make it easier for users to get around and to meet the growing demand, the Metropolitan Area has made particular efforts to:

- **Increase** the availability of the service, thanks to new time slots for ride proposals.
- **Extend** the booking time slot (now from 6:00 am to 9:00 pm).
- Facilitate connections with the main Orleans public fixed transport lines in (tramway and bus) by increasing the number of interconnected stops with the existing network.

In addition, the service actively contributes to employment reintegration by using an integration company for its drivers.

11

We have the feeling that we are investing taxpayers' money better, especially as Orleans Métropole's strategy is not to make economies of scale, but to offer a better service. Demand-Responsive Transport, an innovative solution that does not exclude anyone, not only complements the classic offer, but goes further by connecting 100% of metropolitan residents to the transport offer...



Romain Roy,Vice-President in charge of transport and travels, Orleans Metropole

11

Our strategy is to offer a service that we feel is very much in tune with the times. The fact that it is a responsive and intuitive local service allows users to get into a DRT for the first time and to easily understand it.

For us, it is a weapon for winning over new users as well as connecting 100% of the metropolitan users. It is truly the armed arm of conventional public transport.



Romain Roy, Vice-President in charge of transport and travels, Or leans Metropole

66

I use the service every day to go to school, it's practical because I don't live very far from the stop. Sometimes I use it to go to town because it serves the main bus and tramway lines well, so I can go just about anywhere.

A user of the Résa'Tao service

RESULTS

Padam Mobility technology has enabled Résa'Tao to meet the needs of its users:



Empowering booking thanks to the introduction of a mobile app.



Facilitating the itinerary search thanks to stops autosuggestion.



Making bookings more flexible with the introduction of real time, enabling last-minute rides.



Increasing service availability by optimising itineraries and extending service hours.

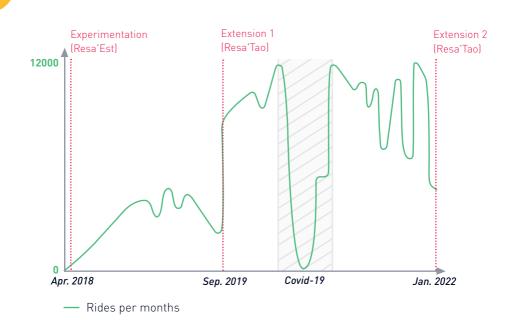


Improving the user experience with realtime monitoring of the vehicle's progress on the smartphone and the sending of booking confirmation, pickup reminders, confirmation of the final schedule by notifications, SMS or emails.

Very satisfactory results were observed as soon as Padam Mobility started optimising the service:

- The Résa'Tao service by Padam Mobility was adopted very quickly. In 6 months of operation, its ridership rate has increased threefold. Today, the service records up to 12,000 rides per month.
- The service has recorded more than 270,000 rides since its launch

- Users pooling rate has increased, with more and more rides with 2 or 3 passengers on board, reaching almost 70% today.
- Booking habits have been impacted: today, 80% of bookings are made via the mobile app (compared to 45% when service was launched in 2018). As a result, the call centre workload has been considerably reduced, improving the quality of service provided by the teleoperators, particularly towards people requiring specific assistance.
- Following the service optimisation, user satisfaction rates have improved significantly: 94% find the service easy to use, 88% are satisfied or very satisfied with it, 86% are ready to recommend it (Keolis Val de Loire survey, October 2018). Today, Résa'Tao users rate their ride 4.7/5 on average.
- Of the 11.6 million kilometres purchased from the operator Keolis Metropole Orleans, 600,000 kilometres were transferred to the DRT service, making it possible to achieve a balanced economic equation.



Evolution of the ridership of the Résa'Tao service

11

Making available multiple booking channels to connect people to transport from home and allowing them to book transport solution that didn't exist before is bound to bring out a new audience [...].

1 km driven by a large conventional bus, which can also run empty, costs between 3 and 4 euros.
1 km driven by a smaller van, which is rarely empty because it is on-demand and shared, is less expensive.



Romain Roy, Vice-President in charge of transport and travels. Otleans Metropole

WHAT'S NEXT?

Scholars, People with Reduced Mobility, the working population or occasional travellers, the Orleans Metropole DRT service now connects all users in the peripheral areas of the territory. In addition, the abolition of fixed bus lines that were not finding their audience and the use of a partly electric fleet would have a positive impact on the environment. Orleans Metropole hopes to increase the number of rides made by the service and reach 250,000 by 2022, compared with more than 100,000 in 2021.

In the longer term, Orleans Metropole would like to continue transferring kilometres of traditional bus lines to DRT. The Metropole is also considering pooling the 4 main zones of the Resa'Tao network into 2 twin zones. To improve the attractiveness of its territory, it would also like to study the possibility of deploying the Padam Mobility solution for a night DRT service to boost the nightlife on its territory.

11

Combined with the gradual replacement of our bus fleet with electric vehicles, this new service should enable us to enhance the attractiveness of public transport while significantly reducing our carbon footprint.



Bruno Malinverno, ex Vice-President in charge of transport and travels, Orleans Metropole





Contact

+33 9 83 23 04 00 contact@padam.io

www.padam-mobility.com



Access the digital version of this document by scanning this code