From cash to contactless: Open Payment improving the way passengers travel in Lyon.
The city.

Lyon Metropole area is the second largest metropolitan area in France. The overall TCL transport network serves 73 municipalities, 1.3 million people and covers 1.8 million journeys per day\(^1\). The network has more than 2,000 vehicles across 4 metro lines, 7 tram lines, 100+ bus and trolleybus lines and 2 funicular lines\(^2\).

The challenge.

SYTRAL Mobilités was looking to provide frictionless travel and drive the usage of public transport across the city. SYTRAL's ambition was to streamline the customer experience by simplifying ticket purchases and embracing digitalization.

By introducing contactless open payments, SYTRAL Mobilités wanted to boost the adoption of public transport by attracting new customers, as well as supporting modal shift and decarbonation by encouraging travelers to choose public transport over the personal car.

The solution needed to be innovative and leverage advanced payment technologies including strong revenue protection capabilities and be able to provide revenue sharing between transport operators.

Scalability was a key requirement, to cope with peak usage during special events like the "celebration of lights" where up to 2 million people visit Lyon during the 3 days celebration. Additionally, the solution was expected to work alongside and be integrated into the existing ticketing system as well as fleet management systems and operator back office.

Therefore, a strong coordination with the other stakeholders of the upgrade program was required.

The solution.

Worldline deployed its cloud-based Open Payment platform - Worldline Tap 2 Use, connected to the French acquirer BPCE (Banque Populaire et Caisse d'Épargne). The solution is built on an open and modular architecture, leverages Worldline's state of the art payment technology and is fully compliant with mass transit requirements.

It utilizes an aggregated fare model with the ability to provide customers with daily capping. Today, customers will never pay more than the price of a daily travelcard when travelling on all public transport throughout the Lyon Metropolitan area.

Moreover, Worldline provided more than 3,500 EMV and PCI-PTS certified validators and installed them on board buses and trams, in metro stations, elevator gates and in Park and Ride entrances so that users can tap their card, smartphone or any other EMV enabled device and be granted access to the service.

Also, 330 android-based inspection devices have been provided to agents to perform ticket inspections.

1. https://www.tcl.fr/a-propos-de-tcl/e-reseau-tcl
“Thanks to ease of use and reliability of the Open payment solution developed by Worldline, in cooperation with BPCE, this sales channel has become the main means of purchasing single tickets on the Lyon urban public transport network, in less than one year.”

Jean Chaussade, SYTRAL Mobilités project director

Main features.

The Tap 2 Use solution covers all the areas of the open payment value chain, from the validator and back office to inspection, customer portal, operator’s portal and payment processing.

Tap 2 Use has several key functionalities, including:

- Wide acceptance of contactless payment media
- Fare calculation at the best rate
- Optimized revenue protection
- Customer-care and administration
- Multi-operator management
- Secure and fully certified solution

Bank cards, mobile wallets and wearables from different payment schemes.

Multi-modal journeys, aggregated fare model, capping, special fares for specific events such as festivals, sports or environmental related events.

Risk management, shared liability support and all debt recovery types enabled.

Queries management, debt payment, refunds when applicable, monitoring and configuration of the system, reporting among others.

Frictionless journey for the traveler and automated revenue sharing between several operators.

End to end encryption, PCI PTS certified terminals, PCI-DSS payment gateway, L3 certification with our partner acquiring bank BPCE (Banque Populaire et Caisse d’Épargne).

The benefits and results.

For customers
- Seamless and easy journeys
- No need for cash
- Integrated travel through a single payment for multiple modes
- Reassurance that every journey will be charged at the best value fare

For transport operators
- Boosted ridership
- Increased customer satisfaction
- Operational efficiency with reduced boarding time
- Accurate travel usage statistics

Taking the user experience to the next level.

To provide the simplest and most user-friendly experience, these additional features of Tap 2 Use were enabled in Lyon:

- **Apple Pay with Express Mode.** This functionality allows customers to pay even faster, as there is no need to use Face ID or Touch ID to access the Apple Pay wallet. iPhone Customers can just tap their phone or Apple Watch on the card reader and go. Additionally, if the iPhone is out of battery, customers can still use the device to tap with Apple Pay Express Mode for up to five hours using the automatic device Power Reserve.

- **Multi-Validation** - For family and group travel, the solution allows multi-validation. Customers can travel in groups of up to 5 people using the same EMV media, by following a series of taps and instructions on the validator devices, also working in the metro mode (closes by gates). The solution also allows adding and removing travelers throughout the journey which makes it unique in the market.

- **Customer Portal** - Should customers need to see their travel history, download statements of their payments or pay their debt, they can access this information through a dedicated customer portal.

- More than 10 million of total taps by May 2023 – in the first year of operation.
- 45 000 of average daily taps.
- More than 2 million different cards (or mobile wallet) already registered in our systems.
- Nearly 300 000 new users every month.
- 51% of single tickets sales are made with Open Payment – by early 2023.

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Summary.

This innovative and large-scale project is providing seamless and cashless journeys to thousands of passengers in Lyon every day. It is strongly improving the user experience for occasional travelers, making public transport a more attractive alternative and in turn reducing the individual car usage. This is one important step in promoting sustainable travel behaviours, and mitigating environmental pollution from single occupancy car use. Open Payment has the additional benefit of improving the environmental credentials of transport payments by removing the need for paper tickets as part of the transaction.

From the client side, the solution has helped modernise the revenue collection system and boost ridership. The scalable architecture of Worldline Tap 2 Use enables SYTRAL to easily extend the scope of the project in the future either by adding new lines or new operators.

Worldline Tap 2 Use, a state of the art, modular and reliable open payment system, makes public transport a more attractive option than ever before.

Visit the Worldline Tap 2 Use website for more information.

About Worldline

Worldline [Euronext: WLN] is a global leader in the payments industry and the technology partner of choice for merchants, banks and acquirers. Powered by c. 18,000 employees in more than 40 countries, Worldline provides its clients with sustainable, trusted and innovative solutions fostering their growth. Services offered by Worldline include in-store and online commercial acquiring, highly secure payment transaction processing and numerous digital services. In 2022 Worldline generated a revenue close to 4.4 billion euros.

worldline.com

Corporate purpose

Worldline's corporate purpose ("raison d'ètre") is to design and operate leading digital payment and transactional solutions that enable sustainable economic growth and reinforce trust and security in our societies. Worldline makes them environmentally friendly, widely accessible, and supports social transformation.