

TRANSPORT AND SMART CITIES, AN INDUSTRY IN TRANSFORMATION

'We believe in smart, digital, connected cities where citizens can openly move and live at the touch of a button, a tap or a swipe, without the need for cash.' Mobility is one of the key success factors for economic growth; therefore, it is increasingly becoming an issue that governments and public transportation companies need to address.

With world-leading cities as role models, delivering a smart city experience is a top priority for government leaders across the globe. Delivering on this vision implies improving the lives of citizens and visitors, in the way they move, commute, experience and live. Investing in high quality public transport infrastructure is only part of the equation. Giving citizens and tourists more freedom involves removing friction and barriers, including for payments, which are a core part of the

experience. As a result, operators of transport services are looking for efficient ways to simplify the collection of fares to provide payment choices to make their service attractive to all passengers, while keeping costs in control and maintaining profitability.

Mass transit plays a significant role in a functioning city, it's not a regular public service, but a vital industry requiring a new boost for ticketing efficiency. Smart digital cities bring capability and success to operators, seamless journeys to citizens, inclusivity and transparency to governments for the growth of a modern city.





OUR SOLUTION IS BUILT ON



Removing payment barriers to let people move freely across the city, improving payments transparency and having easier access to public services.

Offering a simple to use service that is both fair and understandable by all, removing the complexity of fare calculation.

Making it possible to live and move through the city using a single device or a card that you already have in your pocket, making services offered by businesses more accessible for the users.

Transforming the way of payments across the city, driving a cashless society and the adoption of digital payment services, paving the way for everyone in the city to join the movement.

O-CITY AS A VISION

O-CITY is used by more than 130 cities globally, helping country leaders, cities and transport operators of all sizes in developed and developing countries provide a best-in-class digital payment experience to passengers while scaling up efficiently.

O-CITY represents our vision for open cities with zero paper and zero barriers, removing the need to queue at payment counters. It is also a reference to the new open-loop digital payment technology that allows citizens to pay the way they want to.

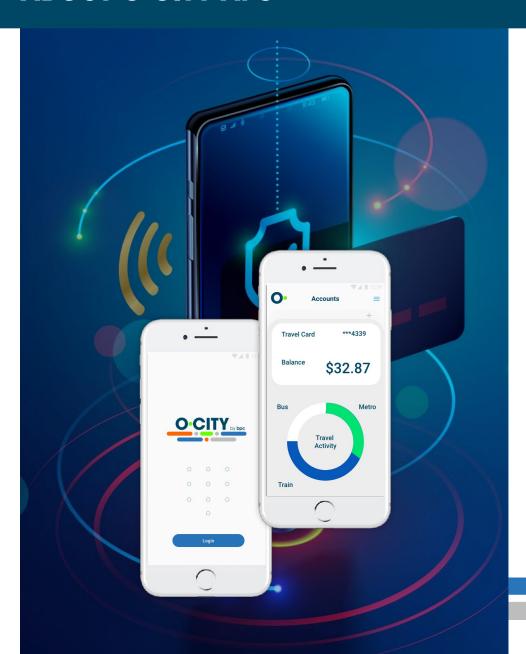
We believe that the digital revolution is opening up new opportunities for all ecosystem players. Our journey has taken us to digitalising national payment systems, as well as banking services for city transport systems and visitor attractions. As a payment expert at our core, we understand that

- Data and insights can help manage city networks more efficiently while citizens get a hyper-personalised service that anticipates their requirements
- High-speed broadband can help connect cities, citizens and infrastructure
- Ticketless experiences will drive the move towards a cashless and paperless society

Through the use of smart technology, we have designed O-CITY, a single platform to manage the payment experience from transport to visitor attractions. With O-CITY, everyone wins - citizens, passengers, transport operators, municipalities, public transport regulators and local payment system suppliers.



ABOUT O-CITY AFC



O-CITY is an automated fare collection platform designed with both residents and operators in mind. The platform utilises innovative technology such as EMV open loop systems to deliver a seamless and frictionless payment experience. O-CITY is built on Account Based Ticketing principles, making it attractive to use in SmartCity ecosystem, providing seamless access to the services for commuters.

The platform is hardware agnostic, which makes it easy to deploy across any type of transport or merchant terminal.

The platform can be deployed in multiple ways to suit a preferred operating model. Aside of O-CITY's availability on-premise, it leverages any cloud SaaS model to ensure centralised management across the city payment network, while enabling operators to scale up without making additional infrastructure investment.

The solution provides a seamless journey across multiple modes of transport and operators, connecting rural and urban networks while creating a stepping stone to a complete smart city network.



BETTER UNDERSTANDING THE PAYMENT SYSTEM LANDSCAPE

With O-CITY, we made the strategic decision to use open-loop account-based fare collection technology for its ability to offer greater levels of interoperability, transparency and reduce fraud, theft and corruption while helping to reduce ticket prices through lower operational costs. However, O-CITY can be configured to work as a closed-loop system or hybrid, simultaneously supporting local transport cards issued by the city and open-loop ones.

Open-loop systems enable payers to use a single account with multiple payment methods - plastic card, Digital ID, eWallet, dynamically generated QR code, Bluetooth, biometrics or co-branded and contactless cards using Mastercard, Visa, UPI or any local networks. These methods of payment are all accepted across multiple merchants and transport operators, making it possible for anyone to use public transport or services without needing to queue to purchase a ticket. While the O-CITY platform supports the widest range of payment methods as well as mobile ticketing, these can be embedded into a white label mobile app tailored to the transport company's brand, including its logo, colour codes and any additional brand elements.

Most importantly, open-loop technologies give the payer a single account view even if they use multiple payment methods across multiple merchants. Such solutions can be deployed at toll gates, parking facilities, tourist attractions, museums, fitness clubs and event organisations – anywhere a micro-payment and access control and electronic ticketing is performed.

OPEN-LOOP TECHNOLOGY • MULTIPLE PAYMENT METHODS



MICRO-PAYMENT

MULTIPLE MERCHANTS

SINGLE ACCOUNT

USERS OF O-CITY - TRANSPORT OPERATORS

O-CITY is a holistic solution that caters for each ecosystem user, be they commuter, transport operator, municipal authority or merchant.

Each user gets access to a dedicated portal, which enables them to track, manage and control all historic and real-time data from journeys and payments.



TRANSPORT OPERATORS

The platform is tailored to the needs of transport operators. O-CITY supports Rail (long and short distance), Bus (city, rapid-transit, intercity), Trolleybuses, Trams, Ferries, Light Rail, Metro, Bikes, Taxi, Minibuses of any kind.

Convenient portal

O-CITY grants the service operator a portal accessible through PC or mobile that acts as a central point for management, control and analysis of all data from a connected network.

Flexible fare configuration

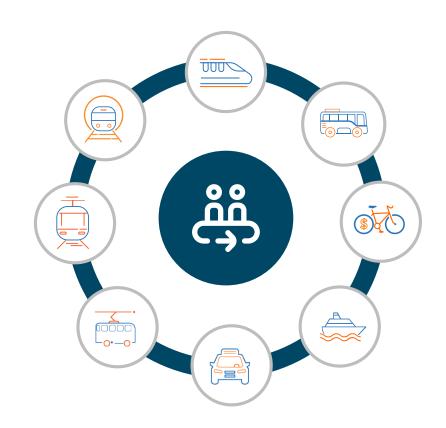
As a service provider you gain unparalleled business benefits such as the flexibility to set fare rules; Manage and set fares centrally, vary fares by ticket types, passenger segments, entry zone types or seats.

Data management

Digitalisation of ticketing allows transport service providers to manage and analyse it. Track volume and popularity of routes, transaction volumes and passenger volumes for each transport mode; track vehicles' geolocations in real-time; analyse and report on the usability of the network; and take informed decisions based on indepth data.

Online Offline work

The platform supports working in any environment, including low or none internet connection areas, providing seamless journey experience for the commuters even when validating machines can not connect to the network.



USERS OF O-CITY - CITY SERVICE OPERATORS



O-CITY caters for all kinds of service providers, including those, who serve citizens in various forms for example parking and toll operators. An automated fare collection system on toll roads and parking is an integral part of the modern urban environment. O-CITY provides flexible management and payment tools to support smooth fare collection and contactless commuter experience.

Various configuration options

City service operators gain the ability to customise fares and e-ticketing prices taking into consideration factors which are specific to their business. The operator can set rules to automatically modify fares based on time of the day or day of week, type of vehicle, type of event, payment method and more.

Vast databases

O-CITY can be integrated with other services and databases through open APIs, which enlarges the possibilities for the service providers when it comes to vehicle tracking or parking spot tracking as well as allows to introduce loyalty or partnership programs.

Parking app

O-CITY has specifically developed a street parking application that allows commuters to find, pay for their parking and prolong their parking experience through a few clicks.

Vehicle plate recognition for toll gates

Drivers can pay for toll gate fees using their plate number as an alternative and improved method of payment, compared to conventional contactless cards or devices. Information about the vehicle is instantly communicated to the O-CITY platform, which quickly validates the request based on the driver's account information, thus successfully processing the transaction.

Payment options to value

added services, ready-to-use packages, memberships, anywhere-anytime top-up options and usage transparency.



USERS OF O-CITY - GOVERNMENT AUTHORITIES



Governments, ministries of transport, municipalities and national public transport operators across the globe are using O-CITY. Built on the powerful and highly scalable SmartVista solution, O-CITY is the optimal choice when developing a smart city environment.

Unified ticketing for all

By leveraging on O-CITY, municipal operators equip themselves with a convenient platform for establishing a true Smart City network which can extend to various networks across departments, counties, national to regional alliances.

Green agenda

O-CITY supports national's green agenda allowing for the digitalisation of transport and ticketing, transforming fare collection to a ticketless, paperless and energy-saving industry. Based on open-loop technology and following account based principles, O-CITY provides an endless variety of digital payment methods from cards to QR-codes.

Centralised fare management

This solution makes it easy to supervise mass transit networks, improve the accessibility of socially important routes and set additional benefits for different social groups, in line with government agendas.

Easy subsidy allocation

With O-CITY, governments can manage subsidies allocation to social segments of commuters, making the fare policy transparent, while public transport available to broader groups of users. Municipalities can align their vision to improve the well-being of their citizens and visitors with that of making the city more attractive with self-service digital functionality.



USERS OF O-CITY - COMMUTERS



O-CITY was designed to cater for commuter needs as well, bringing journey experience in the centre of attention, allowing both tech gurus and new to technology passengers equally enjoy transparent, accessible and quick digital services.

O-CITY provides a wide range of benefits for citizens, from multiple payment options to value-added services, ready-to-use packages, memberships, anywhere-anytime top-up options and usage transparency.

White label application

O-CITY offers a white label application for mobile and desktop, fully branded by the operator of the network. Commuters use the platform to manage their payment methods, view their journey history and engage with the operator for customer service and dispute management.

Wallet integration

The platform is capable of integrating with third party applications through open API, such as e-wallets, allowing commuters to pay with the most familiar payment method and improving the retention rate to the service.

Multimodal experience

Introducing O-CITY instantly increases the payment methods available to commuters. The platform utilised EMV technology, which allows users to pay with any type of bank card, as well as with multiple devices on any transport mode connected to the system.

Transparency and security

The application has prompted a positive behaviour shift towards the usage of digital payment instruments. Introducing digital ticketing allows tracking of fares, routes and historical payments for the journey; User travel experience becomes safer while the payments on transport are more transparent.



O-CITY PLATFORM



GOVERNMENT

A platform to increase the well-being of residents across the city

- ment
- agement
- Manage and settlement with business
- Green agenda
- Centralised fare manage- Targeted support to categories of consumers
- Centralised subsidy man- Route monitoring and management
 - Easy integration of new system participants

CONSUMERS

A mobile app for seamless journeys and payments across the city

- Mobile application
- 360 degree view of services from a single device • E-tickets marketplace
- Reporting and analytics Secure payment methods
- Multi-modal travelling
- Immediate response to tap on terminal
- · Quick recovery of lost card
- Customer Portal

- Parking support through
- Hierarchy setting through
- Payment with QR codes, cards, BLE (Bluetooth Low Energy), mobile

TRANSPORT OPERATORS

A centralised system, facilitating management of payments across all modes of transport

· Reporting and analvtics

- EMV support
- Open APIs
- Online-Offline work
- Multi-currency compat- Transport operator ibility
- Marketing and promo- List management
- Hardware agnostic solution
- · Seat and e-ticket management
- Easy integration of new

- system participants
- Interoperability
- Intermodality
- · Fraud management
- Automatic repayment rules
- portal
- Loyalty management
- Transaction processing
- Loyalty management
- Transaction processing

CITY SERVICES OPERATORS

- processing
- Open APIs
- Smart Segmentation
- Mobile Application
- Centralised transaction
 Easy integration with existing infrastructure
 - · e-Ticketing management

PARTNERS AND AGENTS

Flexible ways to configure the system for own services

- Open APIs for develop- Easy integration of new ment of own customised services
 - system participants

BENEFITS

GOVERNMENT

- Manage and set fares centrally
- Increase comfort and accessibility of public services
- Safety improvement for payments
- Increase safety of public transport
- Boost city economy
- Modernisation of city infrastructure
- Reduction in fare evasion

TRANSPORT

- Increase revenues and control of business
- Increased passengers retention rate
- Low starting Investments
- Automate fare collection
- Turnkey AFC to small, medium and big transit operators
- Cross-channel selling
- Reduction in fare evasion.

CONSUMERS

- Single access to multiple public services
- Seamless journey
- Secure payment
- Less time in transit system
- Transparent fares
- Improved journey experience

PARTNERS, AGENTS, MERCHANTS

- Easy enrollment of citizens
- Partnership programms
- Reduction in fare evasion
- Reduction in cost of processing cash
- Automation of ticketing
- Paperless business

PARTNERS, AGENTS, MERCHANTS

- Improving attractiveness for prepaid cards
- Improving digital banking popularity
- Increased demand for contactless products
- Increasing number of transcriptions and customers



O-CITY, A PROVEN SOLUTION SUITABLE FOR ALL CITY SIZES

CITY PAYMENT EXPERIENCE BY PAYMENT EXPERTS

Payments cannot be improvised; they need high-security, instant and real-time processes. With O-CITY, you rely on a team of experts that enable payment fulfilment at national level and deliver a best-in-class ecommerce checkout experience.

O-CITY AS A SAAS OR JOINT VENTURE MODEL

O-CITY is being used as a solution or in a joint venture model, which provides us with valuable insights into how to efficiently manage payments - knowledge our team will share to successfully deliver your project.

O-CITY FOR DIVERSITY

Our solutions are used in cities of all sizes and regions. Beyond our solutions expertise, we understand how to make city payments user-friendly for all segments of the population from the tech savvy to the new user. Our research has demonstrated that starting with city payments across transport leads to increased usage of digital payment at merchants as well as higher digital banking adoption, thus driving cashless behaviours.

BUILT ON A ROBUST TECHNOLOGY

O-CITY leverages innovation from BPC, an award-winning payment solutions provider. The O-CITY solution has been built from the ground up, thus removing any legacy technology while incorporating the lessons learned from building payment solutions for 350+ financial institutions across 100+ countries.

A COLLABORATIVE APPROACH TO CO-CREATE THE FUTURE OF SMART CITIES

The O-CITY team takes a partnership approach when it comes to engaging on a new project. Our experts are present from inception onwards to to ensure you reap the benefits of O-CITY and we also provide 24/7 support.





ABOUT O-CITY BY BPC

Adopted by more than 130+cities worldwide, O-CITY is an innovative automated fare collection solution designed by BPC, a leading banking and payment firm with in excess of 350+ clients across more than 100+ countries.

Leveraging the expertise of O-CITY's parent company, BPC, an award winning payment provider with more than 25 years of experience, O-CITY experts possess considerable expertise and knowledge about payments automation. The solution combines all modern methods of security and efficient collection of payments with infrastructure support, providing government authorities, city and transport operators with a reliable payment service.

O-CITY was born from the vision of digitalising micropayments as a key driver of a cashless economy while improving the well-being of citizens.

With O-CITY, government, public transport operators and merchants can deliver a frictionless payment experience at every touch point, leveraging smart, digital and open technologies (tollgate, bus, train, metro, parking facility, bike rental or city tourist attraction). Citizens can move freely and make quick payments using their mobile or existing plastic card, removing the need for cash or queuing at a ticket counter.







3 MILLION TRANSACTIONS PER DAY



130 CITIES
ACROSS
THE GLOBE

EVERY 5TH TRANSACTION IN THE WORLD MADE WITH A
BANK CARD IN TRANSPORT IS PROCESSED THROUGH
O-CITY







