# O CITY by bpc.

FOR GOVERNMENT AND PUBLIC ADMINISTRATIONS Across the world, public administrations are digitising service delivery in response to demand from citizens and as a consequence of globalisation, urbanisation, economic necessity and technological progress. Government agencies continually searching for instruments to improve social welfare provision and distribution transparency.

A common side-effect of economic development and urbanisation is increased demand for public transport and decreased safety of operations, particularly in developing economies. As a result, transport has become a core component of public digital transformation programmes. However, while efficient transport systems and new infrastructure are essential to connect people to economic opportunities, they are only part of the solution. Increasing the number of trains, buses, trams and bikes in use and making public transport more appealing contributes to economic development. But the success of smart cities lies in making it easy for citizens to use city public networks.

Offering transparent subsidies to service providers, clear fare structures to commuters, and a unified experience of city services is crucial to encouraging greater use of public transport, enabling citizens and visitors to move between different modes of transport quickly without having to worry about who owns the vehicle or their pricing policies.

Innovative technologies create new opportunities to interact with transport organisations and the public, improve the speed at which changes are adopted and provide clarity to end users.

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# **O-CITY FOR GOVERNMENT ADMINISTRATIONS**

O-CITY is an automated fare collection platform that removes customer friction relating to ticketing and waiting times and increases transparency when adding social allowances on fares. It allows cities to introduce:

- A single fare collection mechanism or ticketing system for all modes of transport
- Multimodal travel options
- Targeted subsidies for socially vulnerable segments of the population
- Multiple fare media acceptance

It also forms the basis of future digitalisation and transformation to smart city status. Built using the latest open-loop technology, O-CITY offers account-based digital ticketing. This means passengers can use any digital media mobile phone, QR-code or existing payment instrument such as debit, credit, prepaid or student card - to access public services. While delivering an integrated digital ticketing experience makes city routes more accessible, government agencies can also manage and track their fleets in real time, monitoring passenger flow and traffic volumes.



Key advantages of open-loop systems:

FEATURE	CLOSED-LOOP, CARD-CENTRIC TRADITIONAL SYSTEM	OPEN-LOOP, ACCOUNT- BASED SYSTEM
Interoperability	Limited	Full
Intermodality	Limited	Full
Balance	Stored on the card	Stored in server
Loss of card	Equals loss of money	Easy to recover and replace
Tariff updates	Software update on entire devices network	Automatic update via centralised rules configuration on the server
Top-up infrastructure	Mandatory	Optional (top-up online)
Card issue	Mandatory	Optional (customers can use their banking card instead)
Adding new members	Costly	Plug-and-go

## **BENEFITS OF THE SOLUTION**



O-CITY responds to the challenge of maintaining the balance between provisioning accessible, convenient services to commuters and making these services attractive for new transport service providers, partners and agents to participate in.

O-CITY engages all stakeholders, linking them into one ecosystem and improving commuter transparency and safety while opening additional opportunities for transport service providers and stakeholders. The introduction of a smart city environment provides not only short term benefits in the form of improved control over fares and traffic; it also changes consumer mindsets, boosting demand for contactless products and the wider digital economy.

#### THE ROAD TO SMART CITY



#### ACHIEVING SOCIAL GOALS

The O-CITY solution allows governments to advance their smart city agendas, including connecting rural networks to urban environments, provision of social support to commuters and building transparent subsidy schemes for targeted groups of public service users.

O-CITY has been proven to increase the attractiveness of cities to tourists and citizens alike by simplifying and making payments more accessible, as well as allowing people to move around freely.

# **BENEFITS OF THE SOLUTION**



#### IMPROVE REPUTATION AND DEMAND FOR PUBLIC TRANSPORT

Desire to use public transport comes from a combination of commuter trust, convenience and safety. O-CITY's EMV-featured technology increases payment security for citizens, while user-friendly mobile applications enable users to control their payments. Allowing commuters to use a variety of payment methods (card, mobile phone, QR-code scan) not only gives the operator a competitive advantage over cash-based services, it also supports freedom of movement.



#### SIMPLIFYING PAYMENTS FOR USERS AND BUSINESSES

Contactless technology reduces the time taken to make payments by more than half. We believe that micropayments should be convenient and take no more than two seconds to complete. The O-CITY solution offers the option to pay via different payment methods, which improves speed of transaction, convenience and safety of operations, as well as volume of passengers on public routes, thus decreasing usage of private cars and lowering road congestion.



#### **MORE CONTROL**

Efficient monitoring and control of tariffs, fares and public services is an important step in the transition to smart city status. By using O-CITY to monitor tariffs for different categories of citizens, operators can take control of traffic in their city and improve passenger volumes. Operators can set zonal fares and manage subsidised packages centrally, using daily or weekly reports on routes and traffic volumes to make accurate strategic decisions.



# **BENEFITS OF THE SOLUTION**



#### HARDWARE AGNOSTIC

O-CITY is hardware agnostic, which means it can be installed on top of existing municipal or private fleet validators and payment terminals, greatly reducing implementation time and initial investment costs.

#### SETTLEMENTS TRANSPARENCY

By working with big data, O-CITY's AFC (automated fare collection) solution provides a strong reporting system, which allows for the tracking of changes and calculation of the effective rates on each route based on the number of transactions and customers per day. Within the O-CITY portal, government agencies can find all consent data on transport service providers in the ecosystem, effectively eliminating non-registered public transport providers, creating a fair, safe and structured urban environment.



#### O-CITY FOR ALL TRANSPORT MODES AND BEYOND

We believe in inclusive technology. As a flexible, hardware agnostic system, O-CITY AFC can be simultaneously used across multiple public services (tram, bus, train, trolleybus, taxi, parking lot) providing a seamless user payment experience.

This inclusiveness also extends to transport providers and partners. Plug-and-play technology lowers entry cost barriers, allowing operators to make changes to the fleet covered by the system within 24 hours, while other partners and agents can enrich the consumer experience by building their own customised applications through O-CITY open APIs.



# **OPEN THE CITY TO ITS CITIZENS**

Beyond the frequency of public transport services, citizens and visitors now expect to be able to access and manage services from their mobile device. Waiting in line at a ticket window or self-service machine and dealing with coins and notes, tickets, tokens and/or plastic cards at the point of entry represents friction which technology can render obsolete. Waiting times, physical tickets and coins and notes can all be replaced by digital media, creating an environment for people to move around and enjoy their cities while leveraging open technologies to accept any form of payment, anywhere, anytime.

# QUICK NON-EXHAUSTIVE FEATURES AT A GLANCE

#### Government

- Centralised fare and subsidy management
- Manage settlement with business
- Targeted support to categories of consumers
- Route monitoring and management
- Easy integration of new system participants



#### NO MORE WAITING TIMES • SELF-SERVICE • FULLY DIGITAL

## THE PASSENGER PERSPECTIVE



Passengers experiencing technological advancements in other areas expect a similar experience from public services. At O-CITY we have designed our solution with the citizen and traveller at the centre of the experience, allowing tech savvy and novice users alike to enjoy a fully digital experience. Our approach has helped operators move from cash to digital payments in just weeks, promoting the benefits of a digital, smart city service from transport agencies and merchant partners to drivers and end users. Beyond technology, O-CITY offers best practice for cities and their citizens experiencing fully digital services for the first time.

#### **MULTIPLE PAYMENT OPTIONS**

With O-CITY passengers no longer need to queue to purchase paper-based tickets or spend time calculating tariff rates. Allowing commuter to pay for their fares from an account with a payment instrument of their choice boosts user loyalty:



#### PAYING BY CARD

Allowing payment by plastic card not only reduces freeriding, it also increases public opinion of city services and encourages greater usage. Plastic cards are accepted with a single tap on the validator or terminal.

#### PAYING BY MARKETPLACE TICKET

Sometimes it is more convenient to buy tickets online before a journey. With O-CITY, passengers use dedicated portals to purchase verification codes (for example, QR-code or barcode). Scanning the code at a public transport terminal confirms the validity of the ticket, saving passengers time and increasing the safety and transparency of the transaction. Moreover, e-tickets decrease boarding times, reducing overall journey length and boosting digital inclusion.

# THE PASSENGER PERSPECTIVE



#### • E-WALLET

E-wallets have become a common means of payment in line with the increased popularity of mobile payments. Allowing passengers to pay with their e-wallet is a more convenient and safer option for visitors who may not have purchased local travel cards or feel safe enough to use their bank card.



#### WEARABLES

The use of smartwatches and other electronic devices for payments continues to evolve. By accepting NFC and RFID technology, O-CITY makes commuters feel part of the smart city environment. The ability to accept payments from NFC and RFID devices significantly increases commuter satisfaction.

#### **IMPROVED PAYMENT SAFETY AND COMFORT**

O-CITY improves traveller and payment security by providing transparency of operations and cost control to commuters with account-based technology. A single, 360-degree view of their account enables commuters to track historical costs, plan routes and monitor their spending through a mobile application. With contactless payment, which is more secure than PIN-based or cash payment, there is no need for travellers to carry anything other than their mobile phone to pay for services. By linking together all modes of transport, O-CITY allows people to travel with only their bank card or mobile phone, track changes on their routes and feel included in the smart city environment.

#### ACCOUNT TOP UP WITH PAYMENT INSTRUMENT OF CHOICE

Introducing O-CITY automatically increases the number of top-up points available to commuters. As an account-based technology, O-CITY invites users to register an account from where they can track tariff, payment and journey information. Inviting more agents onto the network extends the number of potential top-up points for commuters, including ATMs and mobile or desktop devices. Making top-ups easier and more accessible increases commuter adoption, enhancing fare collection while decreasing the proportion of non-paying customers.



#### AUTOMATICALLY GET ACCESS TO BEST RATES

Commuters often stop using services with complex or variable tariff policies. Users of the O-CITY application do not need to spend time calculating tariffs, especially if these tariffs are zonal rather than fixed or subsidised, reducing the time operators spend explaining variations to confused commuters. End users can also track the time to their destination and select the most convenient journey option.

#### MULTI-MODAL TRAVELING

It is common for passengers to use more than one mode of transport to reach their place of work or home. According to the International Association of Public Transport (UITP), many city dwellers use at least two different modes of transport to reach their destination. The O-CITY solution is designed to help commuters move freely by delivering a seamless payment experience. Connecting all stakeholders under the umbrella of AFC, we offer an ecosystem of payments that helps commuters make their journeys while allowing transport service providers to link the various transport modes in their fleets and offer unified payment methods across all routes.



# **PARTNERS PERSPECTIVE**



The city ecosystem is a complex environment involving multiple stakeholders including transport agencies, financial institutions, telecom operators and merchants. O-CITY provides an interconnected environment for all these parties to play their part transparently.

#### **DRIVING THE CASHLESS AGENDA**

By joining forces to drive digital payments to replace cash, ecosystem players promote national cashless agendas while positively impacting their bottom lines. Less cash means lower handling and operations costs, which benefits all participants.

#### THIRD PARTY PAYMENT ACCEPTANCE

O-CITY uses open technology and APIs which enables third parties to plug into the ecosystem, facilitating the introduction of new payment instruments. As an example, student cards, national ID cards, travel cards, prepaid cards or QR-codes by independent vendors can all be used to pay for public transport and city attractions. The ecosystem of players can scale up and benefit all parties involved while providing more choice for customers.

#### VALUE-ADDED SERVICES FROM LOCAL PARTNERS

Local merchants can join the ecosystem to offer value-added services which gravitate around city and transport needs, helping create a single app for the entire city that can be easily expanded.

# **BEYOND MASS TRANSIT**

We view micro-payments and transactions across the city to be the most important driver of a cashless, contactless economy and a main pillar of the smart city environment. O-CITY is designed to support not only public transport activities but also a variety of other services. Automated fare collection can enhance and automate payment for services such as parking, bike rental, vending machines, tourist attractions, museums and indeed any other public service, creating a stepping stone to building a complete smart city.





# ONE CITY ONE PLATFORM





Scan the QR code and visit our website for further information on **www.o-city.com**