

**Transit cards:
Not “just another card”
in your mobile wallet**

Thales Banking and Payment Services

Mobile wallets are much more than containers for digital cards

Carrying cards in digital form, rather than tucked away in a purse or wallet, is now commonplace. When issued with a new card, the first thing that many of us will do is upload it to our digital wallet. The physical version goes straight into a drawer. In fact we can now skip the plastic completely, and order direct an instantly useable digital card. Digitising plastic cards is fast going out of fashion.

Transit cards in a mobile wallet must deliver more than a plastic version

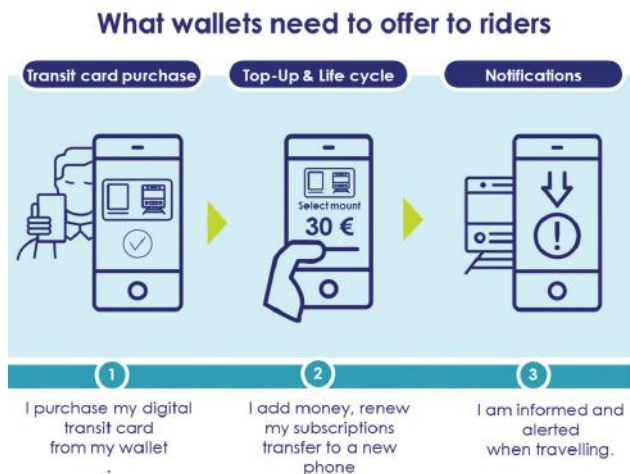
Reflecting this trend, a growing number of city authorities offer urban travellers the opportunity to digitise their contactless transit

cards in popular mobile wallets. These pioneering cities include Hong Kong, Paris, Los Angeles and San Francisco. However, looking closely at how people actually use digital cards, it is clear that they are treated very differently to a traditional payment or loyalty card.

A card in a mobile wallet is much more than a digital copy of the physical version. For example, when using a payment card in a digital wallet, we expect our latest transactions to be displayed instantly. Similarly, we expect a digital transit card to provide user-friendly services via our smartphone. Indeed, the mobile wallet is destined to become the main point of interaction between the card issuer and end user. The operator's mobile application is a platform for additional services associated with the transit card, and the wallet provides a direct channel of communication between transit operators and urban travellers.

Transit cards are special for users, transit operators and wider society

Mobile wallet must provide a user experience that is tailored to the specific usage of transit cards:



Anyone who has tried to purchase a metro ticket on the first day of the month, during peak hours, will have experienced a compelling need to open an app store and download a faster, smarter solution. The queues at ticket vending machines are undoubtedly the best advert for mobile ticketing, and using smartphone-based in-app payments to save on time and hassle. What's more, Covid has had a lasting impact on behaviour. Many travellers remain keen to avoid physical contact with either vending machines or cash.

The most used of all cards, require special care

Going digital offers further advantages. Of all the cards we carry, those issued by transit operators are probably the most frequently used. Regular commuters are likely to tap them up to eight times a day. But is there anything more annoying than frantically searching your pockets for an elusive card, or waiting behind someone stuck at a turnstile for the same reason? How about being obliged to buy a new travel card, knowing full well that you have four or five at home, sitting uselessly in various bags and jackets?

The alternative is obvious. When you reach the turnstile, just wave the phone that you invariably carry at all times. The desperate search for a card or ticket becomes a thing of the past.

Of course, transit cards of all types (prepaid, preloaded, passes and pay as you go) demand additional care and attention from users. "Did I really check out when I stepped off the bus?" "Do I still have tickets left, or am I going to be stuck at the turnstile ...again?" Card users therefore need to be clearly and fully informed of the actions they have taken, as well as any actions they need to perform. Messaging needs to be crystal clear and adapted to the type(s) of fare product that the traveller is holding.

What's more, that information needs to be delivered within seconds of check out, when it is still fresh in the customer's mind.

Wallets loaded with transit cards are the best means for agencies to interact with customers

In the wake of the pandemic, transit operators have had a tough time encouraging travellers back onto buses, metros, trams and trains. A significant number of people have elected to work remotely. Many have changed their commuting habits and means of transportation. The competition between providers of new mobility offers is therefore fierce. To keep existing travellers loyal, win back lost customers and attract new business, transit operators must guarantee that access to fare products is quick and easy. In this respect, there is simply no better media than the mobile phone to sell travel and fare products. The mobile wallet has become the instrument of choice.

Transit operators must respond to the needs of their customers to access information on past and future journeys and fares. They must also take advantage of the ubiquity of the mobile wallet, using it to promote their services and incentivise customers to travel off-peak, for example. Around the world, transit operators typically complement their core mass transit offers with additional and more personalised solutions such as micro-mobility and ride hailing. Again, these need to be promoted via mobile wallets.

THALES introduces the ultimate user experience for transit cards Powered by Mastercard's M/chip technology

Over the past decade, the number of open payment card implementations has skyrocketed. Mastercard is a strong advocate of the benefits open payments bring to cities and riders and has led numerous implementations across the globe.



Mastercard - leader in cEMV ticketing

The benefits of open payment systems have been demonstrated widely. For transit operators, the investment and operating costs involved in implementing and managing a transit card scheme are reduced dramatically. Overwhelmingly, travellers with bank cards are equally convinced by the ease of use offered by Account Based Ticketing.

Leading the creation of a frictionless urban mobility ecosystem is a top priority for Mastercard as the company continues to address 100% of the riders needs and use cases, including the unbanked population. It is imperative to build the necessary bridges between both the ticketing and the banking ecosystems through Powered by Mastercard's M/chip technology to drive inclusive growth. As a result, many transit operators are considering replacing their

Operators need to be in control of customers' mobility and payment accounts

The fight for a position at the heart of multi-mobility MaaS (Mobility as a Service) ecosystems is intense. Transit operators are seeking to maximise their chances of success by owning the mobility accounts of users, and consequently managing the transit payment scheme that will be accepted across all the legs of a journey. Strategically, they cannot rely on third parties to fulfil these roles; transit operators must control the issuance of the cards linked to mobility accounts.

Transit cards must be inclusive

Beyond commercial considerations, transit cards also help to address wider societal objectives. Mass transit must be inclusive. Workers must be able to get to work, and students to schools and colleges. Everyone must have access to a social life. This means that transit cards must be available universally. Fares must be equitable, and adapted to local populations. Political authorities often control these fares. Some also use mass transit payment schemes as a first step towards financial inclusion for the unbanked.

legacy closed loop cards with EMV cards. Initiatives are taking place all over the world, with noteworthy projects underway in California, Stockholm, Sydney and New York. Others in the pipeline include schemes in London, Dubai and New Zealand.

Now, THALES Banking and Payment Solutions introduces its new white label EMV transit card offer Powered by Mastercard's M/chip technology and Thales' Gemalto D1 platform, a suite of digital and physical issuing solutions tailored to the transit ticketing market.

Transit operators can leverage Mastercard's open payment acceptance solutions to replace their closed loop cards. They can choose between co-branded and white label cards, both Powered by Mastercard's M/chip technology. With the white label option, transit operators enjoy full control of transit accounts and the ticketing scheme.

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Combines leaderships in both mobile ticketing and EMV issuance

It provides an opportunity to run a single system, a single acceptance for both open and closed loop ticketing. This rationalization leads to both lower system costs and lower running and maintenance costs.

For its part, Thales combines extensive experience in the issuance of physical and digital cards in all major wallets with in-depth understanding of the user experience in ticketing use cases. The result is a best-in-class solution for EMV based ticketing, Powered by Mastercard's M/chip technology. Globally, Thales has participated in hundreds of payment projects, and successfully implemented the digitisation of Octopus transit cards in Hong Kong and Navigo cards in Paris.



Thales acts as a BIN sponsor, and the Gemalto D1 platform enables transit operators to issue transit cards themselves, Powered by Mastercard's M/chip technology. This encompasses physical and digital cards and, in both cases, optimising the digital

experience is a priority.

Gemalto D1 is compatible with any existing ticketing back office that is account based and supports EMV. The solution, offered as a service, reuses all the existing connections that have been forged between Thales and the main wallet providers. It has been further strengthened by years of successful operation in the field of digital payments.

As summarised in the table below, the digital experience has been tailored to match the demands of travellers, transit operators and wider society:

Requirement	Thales Gemalto D1
Transit operators want to be in control of user accounts.	Thales issues transit cards on behalf of operators, via a new EMV white label offer from Mastercard. Transit operators are in full control of their ticketing schemes.
Ticketing must be inclusive .	The white label implementation makes it possible to offer any type of fare, including concessions, to users with or without bank accounts.
Users do not want to go to a station and wait at a ticket vending machine to purchase a transit card or ticket.	Users order digital transit cards from their wallet. Thales downloads them into the wallet in a few seconds.
Transit operators want to ease access to infrastructure, increase passenger numbers, and reduce the use of ticket vending machines, kiosks and cash.	Users order digital or plastic cards from the transport operator's application. Thales delivers plastic cards to the customer's home.
Users (including regular and occasional travellers, locals and tourists) do not want to download an app to get a card or purchase a ticket. One-click access is a priority.	Transit operators can list their most popular cards in the user's wallet. The purchasing process is swift and intuitive. Thales provisions the purchased cards and tickets into the wallets.
Users do not want to go to a station and then queue to top-up their transit card.	Users top-up their accounts via the wallet or the operator's app. Alternatively, they can pay with payment cards in their wallets. Thales manages the purchasing and payment flows. The service is available even if the customer only uses the wallet, and does not download the operator app.
Transit operators want to cut fraud, increase passenger numbers, and reduce use of ticket vending machines thanks to a hassle-free card top-up process.	
Users want to receive warnings when actions are required - long before they reach the gate and risk being denied access.	Users receive personalised messages (such as requests for a top-up or renewal), depending on their type of card. Thales connects each individual wallet to the ticketing back end information system. Messages are transmitted in real time.
Transit operators want to ensure a streamlined experience for travellers, with smooth passenger flows at gates and short waiting times at bus stops.	Thales can also convey messages from the Intelligent Transport System, adding value to information shared with travellers and helping them to plan and adapt their itinerary in real time.

For more information: contact **THALES BANKING AND PAYMENT SERVICES** at: [Solutions for Banking and Payments \(thalesgroup.com\)](https://www.thalesgroup.com/solutions/banking-and-payments)

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