



Revolutionising public transportation in Gaziantep, Turkey

For many years, passengers with concession rights have had to issue separate transportation cards and have been limited to old-fashioned closed-loop technology. *Osman Koç*, General Manager of the Gaziantep Transportation and Information Services Company, discusses the technology that the company has developed in order to solve this issue and allow passengers to pay concession fares even with debit and credit cards.

THE GAZIANTEP Transportation and Information Services Company, established on 1 January 1992 by the Gaziantep Metropolitan Municipality, provides public transportation services with a fleet of 313 buses, 46 trams and 108 bicycles in the Gaziantep province of Turkey. With a population of over two million, Gaziantep is one of the most populous and densely populated cities in the country. The city has comprehensive public transportation infrastructure, overseen and managed by the Gaziantep Municipality, which utilises intelligent transportation system (ITS) infrastructure that has been developed by Kentkart. This system facilitates the operation

of over 1000 vehicles, including those operated by private operators.

Although open-loop EMV cards have become an industry standard for collecting fares in public transport, ticketing with contactless debit and credit cards was limited only to the standard fare. In other words, bank cards and concession fares did not exist in the same universe. Passengers with special statuses, like students, seniors, or people with disabilities, had to issue separate transportation cards. This meant those travellers had to use old-fashioned, closed-loop technology. Gaziantep Metropolitan Municipality expressed the need to enable payment with credit and debit cards for citizens who have concession

rights. Therefore, together with our technology partner, Kentkart, we decided to address this issue by undertaking an unprecedented project, which we believe remains unique even to this day. We called this particular project 'Every Card Is Gaziantep Card'.

Our priority has always been to provide the latest technology and to ensure that our passengers have easy access to all the data that they might need in regard to public transportation. Our mobile application, which currently has over two million downloads, provides them with this data. Our ITS infrastructure, which provides its service under the Gaziantep Card brand, also includes many intelligent transportation features. The Gaziantep Card Mobile Application allows

passengers to easily reach all of the information on public transport and to top-up their balance online. In addition, our fare collection system accepts credit and debit card payments, as well as NFC virtual cards obtained through the mobile application. One can also find out about all of the different transport options and check fares between distances with the mobile app trip planner.

Credit cards to soon become preferred payment method in public transport

Ticketing with contactless credit cards is still relatively new to the public transport industry. Despite this, we have seen more than 11% of our passengers currently use their contactless debit or credit cards for their everyday rides. We expect this rate to exceed 20% by the end of 2023, and sooner than later to become the dominant payment method in public transport. To accomplish this, we have enabled the transfer fare for debit and credit cards, so that our citizens can now benefit from free or discounted transfer fees, even when traveling with their bank cards. In addition, we have recently launched our 'Every Card is Gaziantep Card' project, which allows passengers with concession rights to enjoy their concessionary fares when boarding with a credit card. The project, which had started less than a year ago, now has more than 10,000 credit cards registered in the system. These credit cards combined make about 180,000 rides each month.

All passengers deserve the latest and greatest technology

Speaking of passengers with concession rights who can use their debit or credit cards, our municipality currently offers free or discounted travel concessions to students, the disabled, seniors over 65, as well as the victims of the February 2023 earthquake in the southern region of Turkey. Prior to our project, the citizens of Gaziantep had to apply for their cards by physically visiting our card processing centres and paying the card issuance fee. Not to mention that even after receiving their cards, they still had to track the card balance and deal with top-ups when needed. Thus, transferring these privileges to contactless credit and debit cards means that we eliminate the need to visit card processing centres and card top-up points, which saves both time and money.

Now, all that passengers need to do is visit our online registration portal and enter their national ID details and credit card number, after which our system checks the provided information with the related ministry database (e.g., Ministry of Health or Education) and automatically evaluates each passenger's eligibility. We make sure that no sensitive data is accessible to anyone unnecessarily during each step of the registration process. The processing and verification of personal information is completed with the PCI DSS Level 1-certified software without being shared with any third parties. While implementing this



Osman Koç

Osman serves as the General Manager of the Gaziantep Transportation Company - the company that operates trams, trains and buses in Gaziantep city. Born in Germany, he holds a bachelor's and master's degrees in Computer Engineering, as well as a second bachelor's degree in Business Administration. With an extensive career spanning several years, Osman has held various managerial positions in the urban mobility industry. He specialises in open-loop payments and account-based ticketing and focuses his efforts on the development of cutting-edge solutions for the City of Gaziantep.

project, no changes were made to the devices. It only required developing new software that took just two months to implement.

Today, our citizens who want to use their contactless debit or credit cards in public transport can finally benefit from concessionary fares too. »

*Credit card
is all you need*



kentkart

Transportation as a lifeline: How transport technologies helped during the earthquake recovery

Another crucial part of our job as a transport service provider is to be able to quickly adjust to emergency situations, such as, in our case, the aftermath of the earthquake in February 2023. Providing free public transportation to those affected by the earthquake was a crucial step towards helping the community recover and get back to normal life. By offering free transportation in situations like that, individuals who had lost their homes or who had limited access to resources could still have access to critical services such as medical care, food and water, as well as job opportunities. This could have a significant impact on their ability to recover and re-build their lives.

In addition to the humanitarian benefits, the ability to rapidly adjust the fare collection system to such situations is also important from an operational perspective. While in traditional systems it can sometimes be hard to adjust the fare structure and card processing infrastructure, thanks to account-based ticketing and our newly developed credit card registration platform provided by Kentkart, we can now easily update



our fare structure to better serve the needs of the community and respond to their needs in a timely and effective manner.

Going green and inviting other cities to join

As the Gaziantep Transportation and Information Services Company, we aim to eliminate the printing of new cards and

convert existing ones into open-loop EMV cards, which we think will replace plastic transportation cards soon. We believe that the 'Every Card is Gaziantep Card' project will revolutionise the passenger experience and reduce our carbon footprint by promoting the use of existing cards and taking a leading role in public transport transformation for other cities around the globe. 🌱

EXPERT VIEW

ENABLING CONCESSIONARY FARES FOR OPEN-LOOP EMV CARDS



DR. VOLKAN ŞEN

Marketing Manager of Kentkart



Internet coverage and cloud-based technologies are improving at an unprecedented rate with each passing day. At Kentkart, we continuously strive to develop inventive solutions that benefit not only our company, but also the entire public transport industry.

The technology that we are implementing in Gaziantep city – where we have taken account-based ticketing (ABT) technology one step further and called it ABT 2.0 – is a perfect example of innovation. There is no doubt that the driving force behind such developments is the existence of visionary municipal managers who want to provide better services to citizens and who require more technology to this end. This is why, at Kentkart, we are also developing creative solutions to meet the demands of the municipalities.

The 'Every Card Is Gaziantepkart' project, done in collaboration with the Gaziantep

Municipality, now allows all citizens with concession rights to use their contactless credit and debit cards to make payments in public transportation. While existing smart card holders can pair their cards with debit cards, citizens who have not yet received their smart cards can use their bank cards freely in this system instead of issuing new transport cards.

Our goal at Kentkart has always been to develop the technology that makes our lives easier. And we are thrilled to see real-life examples of this. On the other hand, considering the limited resources of our planet, we also try to reduce our carbon footprint with solutions that eliminate the need for card production. Finally, by making the card registration process entirely online, we drastically reduce energy and time consumption, thus, getting closer to our sustainability goals. 🌱



Enabling Concessionary Fares For Credit and Debit Cards

For many years, ticketing with contactless credit cards was limited to standard fares. Students, seniors, and disabled citizens had to get separate transportation cards and use old-fashioned closed-loop technology. To solve this issue, Kentkart developed technology that allows passengers to pay concession fares even with debit and credit cards. Now, thanks to Account-based Ticketing, all kinds of concessionary fares can be deducted from contactless open-loop EMV cards!