

## The World's Smartest Mobile Payment Solution

The option for mobile payment using QR codes, based on Cellum's technology, has recently been made available in the cars of one of Budapest's largest taxi companies. The technology is simple: the passenger scans the driver's unique code, enters the fare into the app and initiates the transaction, after which the driver receives the confirmation of payment through a POS terminal or in a text message. Budapest's Tele5 Taxi already has 700 cars in which mobile payment has been made possible since summer 2012.

With the CellumPay application, in Hungary introduced as MasterCard Mobile and developed by Cellum, the solution is secure, fast and convenient.

## Good technology requires good communication

Mobile payment as a technology, at least in principle, has benefits for all parties involved – the taxi driver, the taxi company, the passenger. However, there are a number of factors and misconceptions that can practically hinder the proliferation of this service.



„Taxi drivers understand that a significant market share and new customers can be gained with mobile payment method.”

Csaba Horváth  
General Manager, RT5 Taxi



## The passenger definitely benefits

On the one hand, payment is fast and secure. On the other hand, the passenger can enjoy a higher level of safety as no cash is needed so long as his / her phone is at hand. The taxi as a service also becomes easier to track. The system stores all data electronically, thus the driver of the vehicle, the time of travel and especially the amount of money charged can be monitored at all times. The risk of overcharging or some other type of abuse is thus diminished. **Passengers only benefit from mobile payment.**

„One of the biggest questions is how we can get to the point where passengers use their smartphones for paying in a taxi. The key is to get them to know, **understand and trust this method of payment.** People have to be educated to think mobile payment. It is crucial for the customer to know the benefits of using it”, says Cellum's strategic director Balázs Inotay. The key is probably security.

## Taxi company: more professional service

“Mobile payment and the topping up of prepaid taxi cards through mobile apps can open up new horizons for taxi companies as well: cashless payment, more punctual accounting, and last but not least: increased oversight of drivers while a new passenger-friendly, easy-to-communicate feature with considerable advertising value is added to the service portfolio. We still have a long way to go, though, as it is our job to explain and demonstrate all this to taxi company executives”, adds the strategic director.

The CellumPay app developed by Cellum includes the functionality to top up prepaid taxi cards. The user wishing to settle the fare charge using a prepaid card can access this feature through the CellumPay/MasterCard Mobile app by selecting the taxi company’s card, entering the unique card ID and the desired amount of money, and finally initiating the transaction by pressing the “Top-up” button and entering the mPIN number.

## Drivers: the importance of education

The most common business model in Hungary is that drivers work as subcontractors and pay a membership fee to the taxi companies, which collect addresses and forward them to the drivers. Monitoring several hundred drivers who represent the company and assuring service quality is not an easy task. The introduction of the mobile payment system provides a further opportunity in this regard: it makes fare charges easier to monitor and income becomes more transparent.

Of all the end-users, there is a sense of distrust among taxi drivers towards mobile payment. This mainly derives from the fact that for a long time the taxi business was based on the direct cash mechanism: the driver received cash immediately after the fare. “I’ll just sit in my car and by the end of the day

I will surely have money to spend” – this is the main motivation for a lot of drivers. With mobile payment introduced, the direct cash option is eliminated, and the money goes to the driver’s bank account instead. A lot of people do not understand why this is necessary and regard the whole thing as a nuisance. According to RT5’s general manager Csaba Horváth, the greatest challenge is to get drivers to overcome their hostility. “They are a very important target group, who need to understand that a significant market share and new customers can be gained with this additional payment method.”

There has been perceivable change since the introduction of the service last summer. It is often the drivers who are most surprised by the ease of mobile payment. “Sometimes passengers initiate the payment procedure before reaching the destination, so by the time the car stops, the driver has already received the confirmation. There’s no need to obstruct the traffic, which happens quite often in case of normal card payment and causes a lot of inconvenience” – the general manager sums up the experiences.

Cellum’s latest mobile payment application, MasterCard Mobile has been downloaded by 100 thousand customers in Hungary to an iPhone, Android- or Windows-based smartphone.

### Key benefits of the technology

- no cash needed
- banking-grade security
- convenient, fast, reliable
- safer solution for the passenger
- quality assurance:  
better oversight of service

## Mobile payment in taxis using a QR code

**Placement of QR codes in cars** a QR code identifying the company and the car (e.g. radio signal identifier) is displayed in a well visible place in every car (e.g. on the dashboard, the rear of the seats).

**QR scanning before payment and entering fare charge** having reached the destination, the passenger uses his/her smartphone to scan the QR code in the car with the MasterCard Mobile app's pertaining functionality. The data found in the QR code is displayed on the app's interface, this way the passenger can check if the payment is made to the right taxi driver. The fare announced by the driver is entered into the phone using this interface.

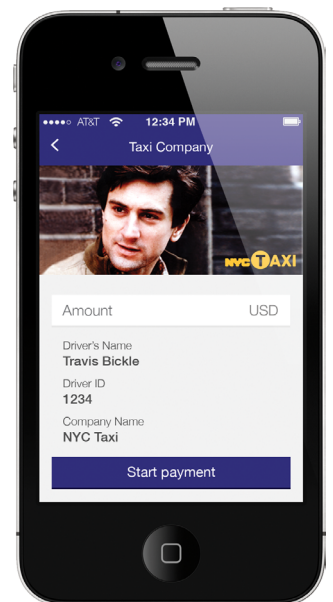
**Checking data and initiating the transaction** after entering the sum payable and pressing the "Send" button the application displays a summary of the input, which needs to be confirmed by the passenger. Following this, the application initiates the payment procedure.

**Paying and entering mPIN** the passenger selects the desired instrument for payment (in case there are multiple credit cards registered in the system) and then enters the mPIN number.

**Confirmation of payment for the passenger** the app confirms whether the transaction was successful, this can later be viewed in the app's "Transactions" menu item.

**Confirmation of payment for the driver** the taxi company and the taxi driver receive a confirmation including the transaction data and status using one of the means provided by the app (e.g. POS terminal, text message).

**Official invoice** the driver issues the invoice for the fare charge according to normal procedure.



### Hungarian taxi company using MasterCard Mobile won Leadership Award 2012

A taxi company to introduce mobile payment for the first time in Hungary has won a prestigious innovation award. The backbone of RT5 Taxi's tender was a series of "e-based" digital developments, such as e-billing and the e-taxi card, and the introduction of the CellumPay / MasterCard Mobile app has played a seminal role among these.



## Cellum Group

Cellum is a leading developer of mobile payment applications. Its innovations make purchases via smartphones easier and more secure. The company's bank-grade security solutions cover all areas of m-commerce, including mobile purchases and payment as well as NFC (contactless) technologies. Cellum is fully PCI DSS compliant, being the first mobile payment service provider in the region to comply with the most important security standard of the top global card companies.

Systems operated by Cellum currently manage more than one million secure mobile transactions per month, and the company counts among its customers and partners MasterCard, Vodafone, Telenor, Magyar Telekom, Vivacom, M-Tel, FHB Bank and SPAR.

Established in 2000, the company began a major international expansion in 2011, establishing subsidiaries in several European markets and opening representative offices in North America and Asia.

More information is available at [www.cellum.com](http://www.cellum.com)

