

Office of Paid Parking, Bydgoszcz, Poland

Government

Case study



Zebra® RW 420™ mobile printers meet tough demands of Bydgoszcz parking wardens.

The Office of Paid Parking Zone (PPZ) in Bydgoszcz, a city in central Poland, is an administrative unit of the Municipal Road and Public Transport Authority. The office's main task is controlling how cars are parked in PPZ and whether parking fees have been collected. Each working day ten wardens patrol the streets checking if drivers have bought relevant parking tickets that entitle them to park in this restricted area. Anyone failing to meet this requirement can be issued additional fines by PPZ wardens for unlawful parking.

The Challenge

Until the new technology solution was implemented, parking attendants previously had to hand-write the parking fees directly on the forms. Copies of these were then collected by controllers at the end of each working day and sent to the PPZ Office. There, two dedicated workers would read the forms and manually enter the data into a database. Data recorded in this way ran the risk of errors being made due to illegible handwriting or misinterpretation. More importantly, this data entry process was time consuming – taking up to 6 to 8 hours daily.

In order to speed up and improve process efficiencies, the PPZ office decided to equip their parking controllers with modern data processing and ticket printing equipment. The challenge lay in the choice of devices that would meet both quality and budget targets set by the PPZ office.

The Solution

“We had a choice of several mobile printers, but only a few were user friendly and robust enough to meet our needs,” said Dariusz Wiszniewski, PPZ's manager who initiated this project deployment in Bydgoszcz. The main challenge was the lack of wireless communication options. The PPZ office expected equipment to be not only top quality and rugged, but also light and lacking the tangle of cables that normally constrains users. “The best possible solution available consisted of a Zebra RW 420 series mobile printer and a smartphone functioning as a PDA (Personal Digital Assistant).”

As part of the project's decision-making process Zebra Technologies emerged as the only printer manufacturer that satisfied the basic requirements of durability, the ability to withstand challenging working conditions and support of wireless communication. Additionally the choice of the MDA Compact as a portable computer was made according to the devices' cost effectiveness and cross functionality - it was used not only for data storage but also for taking photographic evidence and making phone calls,” added Dariusz Wiszniewski.

Nowadays, PPZ controllers are equipped with MDA Compact smartphones, where they enter all parking offence related data that is subsequently transferred via Bluetooth into a Zebra RW 420 mobile printer that prints penalty notices on the spot. All data is recorded as text files on the smartphones and later transferred to PPZ headquarters via USB connection or a memory card



Solution Technology

Zebra RW 420™ mobile printers

Smartphone



“Data from an attendant’s daily work is normally recorded on the hard disc of a computer within 90 seconds – this solution has brought vast improvement, greater effectiveness and also avoids errors,” commented Dariusz Wiszniewski.

The Bydgoszcz implementation is innovative, taking into account the range of devices attendants were supplied with. The fact that mobile computers are also smart phones and not only typical PDA’s is significant from both a financial and functional perspective. These devices communicate with Zebra RW 420 printers, whilst at the same time supporting a Windows™ mobile based computer, a mobile phone and a photo camera.

Thanks to this solution, attendants can take and archive photos which can be later used as evidence in legal proceedings. In addition phone calls can be made informing other municipal services of other situations requiring attention such as acts of vandalism, robberies or accidents that happen in the city as well as contacting technical support staff about mal-functioning parking meters.

Equally PPZ attendants who are supplied with this equipment do not have to carry heavy appliances anymore, but instead compact and easy-to-use registering and printing equipment. The whole solution weights less than 1kg and more importantly, due to the lack of cables connecting the devices, guarantees users full flexibility of movement.

“Today PPZ employees cannot imagine going back to the old way of form-filling. Working with Zebra RW 420 mobile printers has been very easy and no problems have been experienced since their deployment, even though they have been used very intensively. Faced with the decision of which printing device to choose from, we initially had many misgivings. However looking back now, I think we could not have made a better choice.” added Dariusz Wiszniewski.

Currently, the next phase of the project is being implemented. It is aimed at enabling text files to be sent, saved on the smart phones, directly to headquarters’ server via GPRS technology.

“Deployment in Bydgoszcz is the first one of this kind in Poland. Zebra Technologies has involved in similar projects in other European cities such as Madrid and Zagreb. We believe that other Polish cities will follow in the footsteps of Municipal Road and Public Transport Authority in Bydgoszcz and use the potential of mobile technology applications.” – says Grzegorz Zbrozek, Product Development Manager, Zebra Technologies, Central and Eastern Europe region.

“Data from an attendant’s daily work is normally recorded on the hard disc of a computer within 90 seconds – this solution has brought vast improvement, greater effectiveness and also avoids errors...”

Dariusz Wiszniewski
Project Manager,
Office of Paid Parking Zone
(PPZ), Bydgoszcz,
Poland

