COMBOIOS DE PORTUGAL

"With one transaction, it is possible to find a single ticket for the national network. In the urban areas, with one single card it is possible to use multiple operators."

Luis Vale
Product System Developer
Comboios De Portugal

Fujitsu developed a bespoke software platform that acts as the hub for a new smart card system, minimizing the potential for passengers to travel without paying for the correct ticket.

At a glance

Country: Portugal
Industry: Transport
Founded: 1951
Employees: 2,700+
Website: www.cp.pt

Challenge

Comboios De Portugal relied on a manual, paper-based process to manage its vital ticketing function, however, this was prone to fraud and human error. The company wanted to introduce a new automated ticketing platform that would be faster, more flexible and more accurate.

Solution

The company selected Fujitsu to provide a centralized software platform that acts as the hub for a new smart card system and connects to new in-station EPOS, PDAs and self-service kiosks.

Benefit

- Minimized potential for passenger fraud, maximizing revenue
- By automating much of the ticketing process, it is able to reduce the need for on-site personnel, lowering costs
- New ticketing platform offers much more flexibility to its customers
- View all transactions in real-time
- Allows more flexible response to changing market demands
- Potential for human error in manual entry has been strongly reduced

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Customer

Comboios De Portugal (CP) is the state-owned national railways operator. It has a firm commitment to contributing towards Portugal's economic development and the safe, effective transportation of its citizens. Over 100 million passengers travel with CP yearly. Every business day more than 1,450 train connections fulfil the mobility needs of Portuguese citizens.

Products and services

- 200+ FUJITSU Server PRIMERGY back office servers
- 143 Office servers
- Storage Solution with Tape Library
- 91 POS devices
- 165 Automated Kiosks
- 480 portable PDAs
- Hardware maintenance services
- Application maintenance

Challenge

In an increasingly competitive transport environment, providing flexibility and convenience to passengers is critical to success. Before the setup of this solution, the ticketing processes had been handled mostly manually, generating difficulty to centralize and manage data. This was not only time-consuming and prone to fraud but also made it difficult for train travel purchases to interoperate with other modes of transport.

"Over the past ten years, I have followed major transformations in ticketing technology. It's a revolution in every business and railway is no exception because it is becoming more and more competitive," explains Luis Vale, Product System Developer, Comboios De Portugal. "So that means we need to provide the best products with the best flexibility to our clients. The system has to evolve constantly because of technology requirements and transport legislation."

CP decided that introducing a contactless system would enable it to introduce a nationwide electronic ticketing platform that would better serve customers, reduce fraud and streamline costs. At the same time, such a solution would strongly facilitate interoperability with other carriers.

"Smart tickets and cards help us to understand clients," adds Vale. "In addition, there is a permanent need for integration – having compatibility with other services and transport companies."

The organization identified five areas that needed to be addressed and updated: a centralized database and analysis facility; ticketing offices; on-board ticketing; self-service vending machines; and in-station gates. Following a public selection procedure, CP selected Fujitsu to manage all but the physical gates.

Solution

Fujitsu developed a bespoke software platform from the ground up that acts as the hub for the new smart card system. This collects data from 21 applications to enable total visibility of transactions and minimize fraudulent activity.

"This central system is capable of communicating with other company areas, such as accounting, data analysis, access channels and, most importantly, our 110 million clients," says Vale.

Fujitsu equipped 325 ticket offices in 154 stations with new POS devices while also installing 165 automated kiosks, all of which connect securely to the network for real-time authentication.

Passengers are now issued with CALYPSO RFID-enabled contactless cards that can be recharged at any of these locations as well as at ATMs. In addition, on-board conductors have PDAs which can validate and sell tickets for added convenience.

Benefit

For CP, the most significant benefit is the ability to minimize the potential for passengers to travel without paying for the correct ticket. At the same time, by automating much of the ticketing process, it is able to reduce the need for on-site personnel, lowering costs. It also offers much more flexibility to its customers, particularly when it comes to interoperability with other transport providers.

"The information that we receive in real-time with this system, we can equate to the special needs of our clients. For example, now we can sell tickets through ATMs or the internet," continues Vale. "With one transaction, it is possible to find a single ticket for the national network. In the urban areas, with one single card it is possible to use multiple operators."

The company also has one single pane of glass through which it can view all transactions in real-time, allowing it to respond more flexibly to changing market demands. This information is much more accurate than previously because the potential for human error in manual entry has been eliminated.

From a passenger perspective, the interoperability with other modes of transport is the ultimate in convenience. Anyone with a smart card can take boats, buses, metro and the train using the same ticket, saving time and hassle.

CP now has a robust, flexible ticketing infrastructure that can scale as the company grows. It is reducing fraud, minimizing the need for human intervention and allowing the company to work more closely with other transport agencies.

As a result, CP has already deployed 22 FUJITSU Server PRIMERGY across the business to support various business functions.

"It has been a good journey. Fujitsu better understands our business and we also understand the technology and what are the new opportunities together," concludes Vale.