

“Fujitsu is a truly collaborative partner, which understands our needs, as well as the needs of our customers and the transport retail industry. It has enabled us to undertake an exciting transformational journey.”

Chad Collins
Head of Retail
Transport for Wales Rail Services



Increased revenue through improved devices

At a glance

Country: United Kingdom

Industry: Transport

Founded: 2016

Website: tfwrail.wales

Challenge

Transport for Wales Rail Services (TFWRS) inherited the innovative FUJITSU STARmobile solution when it was awarded the franchise in 2018. However, the STARmobile fleet needed an update due to outdated and worn-out consumer mobile phones. TFWRS wanted a more reliable, rugged manageable device that would better meet the needs of conductors and passengers.

Solution

Fujitsu migrated TFWRS to an enhanced version of FUJITSU STARmobile on-train ticketing application, running on 279 new Zebra TC56 handsets, which increased availability and sales revenue, improved battery life, better durability in the field, simpler management and greater reliability.

Benefit

- Increased revenue collection and improved passenger experience
- Device utilisation increased from 25% to 80% due to ease of use
- New functionality enabled, including smartcard reading and loading, and Scan to Pair
- Number of devices has reduced by a third, lowering costs and maintenance overheads
- Battery life increased by 50% and can be swapped out when needed

Customer

Transport for Wales was set-up to 'Keep Wales Moving' by delivering expert advice, customer-focused services and targeted investment in modern transport infrastructure. Transport for Wales Rail Services (TfWRS) is a Welsh train operating company operated by Keolis/Amey Wales Cymru Limited, which commenced operating the Wales & Borders franchise in October 2018. The rail network carries over 30 million passengers every year. The 15-year contract is designed to transform transport in Wales and the Borders, and TfWRS has an ambitious vision to be the best UK railway.

Products and Services

- FUJITSU Professional Services
- FUJITSU STARmobile

Upgrading an on-train ticketing platform

When the Welsh rail franchise was awarded to Keolis/Amey in 2018, it inherited FUJITSU STARmobile, an innovative mobile on-train ticketing solution. Its aim was to increase on-train revenues and improve the passenger service by providing a modern, modular capability based on Android mobile phones.

STARmobile supports walk-up fares and ticket printing. It enables access to real-time journey information and the ability to sell and validate tickets, protecting and increasing revenue.

While STARmobile has brought clear benefits to the franchise over the three and a half years since it had been adopted, the hardware required refreshing as it had come to the end of its life. Extensive use across many customers had shown that the devices, designed as consumer mobile phones, lacked the rugged form factor needed in a transport environment. They had other limitations, for example, the battery was locked in and couldn't be swapped out when low, rendering devices out of service whilst they recharged.

TfWRS wanted a new device that could withstand the challenging environment of on-train retail, have a better battery life and improve the day-to-day ticketing activities of a train manager. At the same time, it wanted to retain the STARmobile application because employees were familiar with – and enjoyed – the interface and functionality. It turned to strategic partner Fujitsu for advice.

"We love STARmobile, but the handset let us down, causing hardware failure issues," explains Chad Collins, Head of Retail, Transport for Wales Rail Services. "We were keen to upgrade with Fujitsu to an industrialised Personal Digital Assistant."

Rugged design meets enterprise-class functionality

To refresh the hardware for STARmobile, Fujitsu recommended the Zebra TC56, which combines rugged industrial design with enterprise-class features and functionality. The device's hyper-efficient hex-core processor is up to 15% more energy efficient and performs up to five times faster than competitive devices. It has a five-inch sunlight-readable screen with capacitive touch, which gives rail employees a flexible multi-touch operation that works even when wet or with a gloved finger.

Furthermore, FUJITSU STARmobile and Zebra have the ability to read and fulfil tickets to smartcards, so it helps futureproof the devices for at least five years.

Following a formal procurement process, where a number of mobile solutions were proposed, the senior team unanimously chose FUJITSU STARmobile and Zebra. TfWRS initially deployed the Zebra handsets to one depot to pilot their use – with Fujitsu on hand to provide support.



Finally, out of 279 Zebra devices, 258 were deployed to depots across Wales over the course of one month.

During the deployment TfWRS recognised early on that engagement with, and support from depot staff, train managers and union representatives was key to this delivery. Therefore, a number of sessions were held with TfWRS teams to walk staff through the changes and benefits of the new devices. During early deployments, Fujitsu specialists from the project were present in depots to both assist with deployment and to help develop the operational processes to manage the devices.

Fujitsu has also enhanced STARmobile's functionality for this new iteration, introducing features such as Scan to Pair, which enables automatic pairing between the handset and peripherals, like printers and Portable Electronic Devices (PEDs). At the same time, centralised management enables TfWRS to see battery life and usage patterns – as well as ticket sales – across the whole fleet from one dashboard.

Maximum reliability boosts sales and productivity

TfWRS has lowered costs and maintenance overheads, because the increased reliability and battery life of the new device enable longer use on the trains. Based on a comparison between December 2018 and September 2019, the volume of total hardware calls logged reduced by 63% and the volume of phone and SLED handset related calls has reduced by a dramatic 98% with the new Zebra device.

"The Zebra handsets running FUJITSU STARmobile have enabled us to reduce device numbers by a third and drive down failure rates, making employees more productive and passengers happier," continues Collins. "The feedback from conductors has been 100% positive because they are already comfortable with the interface but now also have additional functionality. Device utilisation has increased from around 25% to 80% as a result."

When TfWRS brought the Zebra handsets to a Wales International Rugby match at the Millennium Stadium in Cardiff to sell train tickets to spectators, it sold over 7,000 tickets worth £9k, without a single glitch. That flexibility and connectivity helps build revenue streams beyond the station and train itself.

"There was a significant amount of pressure on the Zebra devices that day and they all worked like a dream, which is testament to the effort Fujitsu put into getting the build right," concludes Collins. "Fujitsu is a truly collaborative partner which understands our needs, as well as the needs of our customers and the retail industry. It has enabled us to undertake an exciting transformational journey, meaning our staff can now sell, inspect, inform and be digitally engaged."

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