

Northern Trains Limited, a publicly owned train operating company in England, partnered with Fujitsu to develop an integrated mobile application aimed at improving debt recovery, reducing ticketless and fraudulent travel, and enhancing customer and staff experience.

Challenge

The train operating company sought to extend financial protection activities and offer better customer and staff experience with one device that could perform all the necessary tasks quickly and efficiently.

Solution

Fujitsu's STARmobile ticketing software integrated with:

- Zebra Technologies hardware device
- · Masabi software for barcode scanning
- Raspberry Tips application for penalty fares and travel incident reports.

Outcomes

- Company-wide rollout of 651 industry-grade STARmobile devices designed specifically for rough handling
- Advanced fare and bookings management and support, lowering the fraudulent refund rate from 11% to 2%.

"Having the direct relationship with developers and architects at Fujitsu allowed us to get into the nitty-gritty details and create this perfectly happy path for us."

Nick Laycock, Retail Operations Delivery Manager at Northern Trains Limited





Awarded

'Highly Commended' at the Transport Ticketing Global Awards in 2023 in the Ticketing Enabler of the Year category

Innovation on board

Discover how Northern Trains Limited, working in partnership with Fujitsu, has successfully delivered an innovative service to improve debt recovery, reduce ticketless and fraudulent travel and enhance customer and staff experience through a single integrated mobile application. A great example of how Fujitsu is helping its customers to improve their business efficiencies in multiple ways.

Owned by the Department for Transport, Northern Trains connects major cities, regions and towns in Northern England. This train operating company (TOC) aims to deliver efficient and reliable services connecting thousands of people to work, leisure, education and more every day.

Northern needs to improve reliability, customer experience and value for money. As part of this, there is a desire for efficiency that addresses all these challenges, resulting in a need for one device that would combine ticket issuing, validation and other digital capabilities that were previously only available to staff on separate machines. This was hindering them, leading to revenue loss and slower customer service.

In short, Northern wanted to extend financial protection activities and offer better customer and staff experience with one device that could perform all the necessary tasks quickly and efficiently. Fujitsu was the perfect programme lead on this project, working with partners and Northern to provide an integrated service on a single enterprise-grade Fujitsu STARmobile device - the only digital device capable of selling and validating tickets, issuing penalty fares and unpaid fare notices as well as writing travel incident reports.

A smooth ride

Northern relied on Fujitsu to provide a complete service that included close collaboration with Raspberry Tips, Masabi and Zebra Technologies for smooth third-party integrations.

"We had regular input sessions about how we wanted it to look and behave but we trusted Fujitsu to manage these relationships directly," says Nick Laycock, Retail Operations Delivery Manager at Northern Trains Limited.

Fujitsu used the Zebra hardware device to first integrate Masabi software for barcode scanning, followed by The Raspberry Tips application for penalty fares and travel incident reports. Northern employees offered their input throughout the process and contributed to the final look and feel. A successful pilot was followed by a company-wide rollout of 651 STARmobile devices designed specifically for rough handling. "They get knocked around a lot on trains, so they're perfect for industrial use," says Laycock. "But most importantly, people don't have to juggle several devices anymore. It's an all-in-one tool, making it seamless and much faster."

2,500 staff can now pass through the trains quickly, issuing and scanning more tickets. "Our fraudulent refund rate used to be 11%," says Laycock. "Now, it's down to 2%. We can attribute lots of this success, particularly scanning, thanks to having the right tools on the right device."

Digital penalty fare reports can now also be issued instantly. Prior to this, a paper-based report had to be printed and sent to the debt recovery and prosecutions unit for manual processing. Additionally, an integrated camera allows staff to provide immediate photographic evidence of fraud. The same is true with other travel incident reports for accidents or antisocial behaviour.

Industry: **Transport**

Location:

UK

Website:

northernrailway.co.uk

About the customer

Northern Trains Limited, owned by the Department for Transport's public sector owning group (DOHL), plays a vital role in the north of England by helping thousands of people travel for work, education and leisure every day. The company continuously introduces new trains and trials new technology aimed at addressing overcrowding and improving customer experience.

The STARmobile device also supports Northern's 'promise to pay' scheme, whereby if a passenger wants to pay with cash, but the ticket vending machine (TVM) at the station only accepts cards, they can pay the Conductor. By scanning the barcode printed by the TVM, the new device automatically fills in what the customer pre-selected at the station, speeding up the sales process.

Just the ticket

November 2023

The new solution doesn't only affect customer care and employee efficiency. The data availability helps with advanced fare and bookings management as well as supporting the digital fraud team. "All these scans leave digital breadcrumbs of those who choose to defraud the system and provide the data for revenue protection activities," says Laycock. "This feeds directly into organisational decisions such as where we put our revenue officers and what activities we need to focus on that week."

Overall, the STARmobile device allows Northern to be proactive instead of reactive and make better business decisions based on real data. The new devices also give Northern the ability to further its sustainability agenda as everything is digitised, making paper-based reporting obsolete.

New improvements and functionalities will be added in the future, including a passenger assistance app that would give a conductor advanced warning of passenger assistance requests. They could get the ramps for a wheelchair or prepare for a lot of luggage, reducing station dwell time and providing better customer service. "This solution will be trialled and implemented soon," says Laycock. "But we have other ideas for the device. We're always looking for things to improve."

The complete service provided by Fujitsu in bringing this project to life relied on the relationships and integrations that enabled Masabi, Raspberry Tips and Zebra to be brought together into one solution. "It's all part of a journey," comments Laycock.

"Having the direct relationship with developers and architects at Fujitsu allowed us to get into the nitty-gritty details and create this perfectly happy path for us. It was proven by the quality of the software that Fujitsu delivered."

The unique collaboration resulted in the 'Highly Commended' award at Transport Ticketing Global Awards in 2023 in the Ticketing Enabler of the Year category for the Integration of Ticketing Inspection Activity. "That was a great day," comments Laycock. "And we get lots of TOCs asking what our winning formula is because some really struggle to get their scanning figures as high as ours. We also get a lot of queries about the revenue protection piece and 'promise to pay' conversion."

But despite this notoriety, the main award for Northern is the fact that the solution does exactly what was needed. "It was designed to be simple and easy to use," says Laycock. "A lot of the positive comments we get from people are about the speed of it. Every single train you get on, you hear the quick beeping as the staff make their way down the train."

Customer:

