



Ticketing Solution for Koblenzer Verkehrsbetriebe

A Ximedes Case Study



Koblenzer Verkehrsbetriebe (koveb) partnered with Ximedes to modernise their ticketing infrastructure with a new mobile app and chip card solution. Developed over three months from May to August 2025, the app launched, selling its first digital ticket within 10 minutes. Just days later, the integrated fraud prevention system demonstrated its effectiveness by blocking a fraudster attempting to purchase 600 Deutschland-Tickets worth over €30,000.

Koblenzer Verkehrsbetriebe GmbH (koveb) provides public transportation services in Koblenz and the surrounding region of Rheinland-Pfalz, Germany. As a municipal enterprise running around 100 buses with 300 employees, koveb serves approximately 15,000 customers, including 3,000 students.

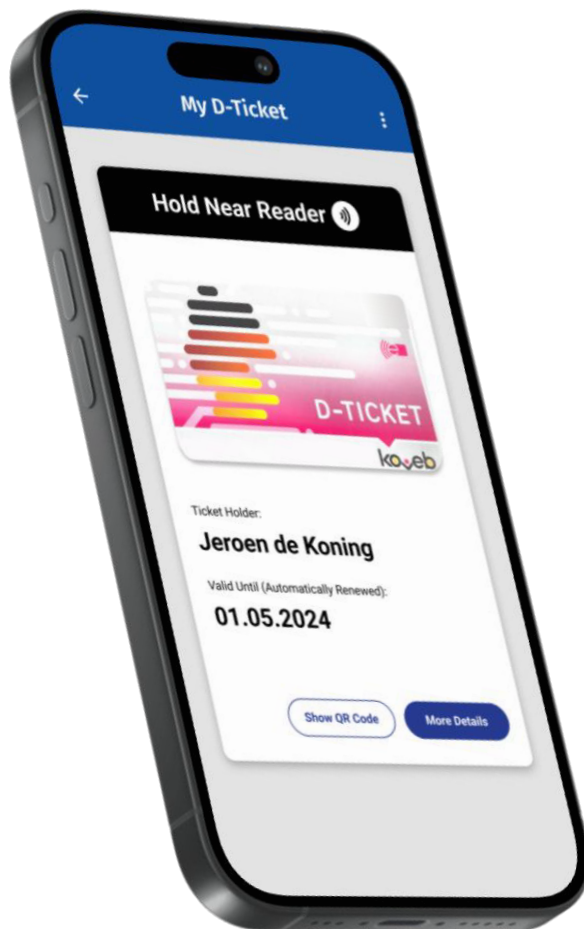
The Challenge

Like many regional German public transport operators, the organisation was struggling with an outdated ticketing infrastructure and a previous provider that offered little support and long processing cycles.

However, the most pressing issue was **fraud**, particularly in relation to the Deutschland-Ticket. Fraudulent transactions were occurring on a monthly basis at a scale that threatened both revenue and operational efficiency.

"A major problem we had was fraud cases with the Deutschland-Ticket." Christian Mund, Head of Finance, IT, and HR at koveb.

Beyond fraud prevention, koveb aimed to reduce administrative overhead, as customer data management and subscription changes, primarily related to the D-ticket, required intensive manual administrative work.



The Objectives

The partnership aimed to deliver the solution in two phases:

Phase 1 (March-August 2025):

- A new koveb ticketing app to sell and manage Deutschland-Tickets, JobTickets, and Schülertickets
- Chipcard-based ticketing for all 3,000 students (Schülertickets)
- Multi-level fraud protection for SEPA direct debit payments, including bank account verification
- Customer self-service capabilities to manage tickets and subscriptions independently within the app
- GDPR-compliant data handling to meet German regulatory requirements

Phase 2:

- Integrated journey planning functionality within the app
- Expansion to include all ticket types, such as single tickets

"In the past, we would spend weeks discussing protocols first. Here, we were productive working on the solution from essentially the first day," - Christian Mund.

The Solution

Ticketing Solution - Mobile App & Chipcard

Ximedes developed a new **kovebApp** with an integrated ticketing API infrastructure, enabling koveb to sell D-tickets and subscriptions through their own branded app while maintaining full control over product definitions and pricing through the backoffice system.



The solution takes a hybrid approach to meet different passenger needs and ensure accessibility for all passengers. Passengers can purchase their ticket or subscription directly within the mobile app, which will be issued as a digital barcode (VDV-KA and UIC). For the 3,000 pupils across the Koblenz region or passengers who need a physical card, traditional chip cards are provided.

Through Ximedes' partnership with Identa, koveb can efficiently order all necessary student tickets at the beginning of each semester. For lost cards, koveb can print temporary tickets directly from their office.

Additionally, customer self-service capabilities enable passengers to independently manage their data and modify subscriptions, thereby reducing administrative burden while enhancing the user experience.

"We are much more flexible because customers will be able to maintain their own data in the future," explains Mund.

Fraud Prevention with Multi-Step Payment Verification

To address the ongoing fraud issues with the Deutschland-Ticket, Ximedes introduced a flexible, multi-level security system that allows koveb to scale protection based on its needs.

koveb chose to begin with the first security level, which centres on automated SEPA direct debit verification. When a customer requests a purchase, the system performs several checks on their bank account before processing the transaction - verifying its existence, activity status, and sufficient balance. This creates multiple verification checkpoints that effectively eliminate fraudulent attempts before they occur.

For this solution, Ximedes incorporated Twikey for payment processing, enabling real-time financial validation that can instantly identify suspicious patterns.

The Results So Far

The collaboration is still in its early stages; the app launched just 1.5 months ago in August, yet the solution has already delivered impact. The first Deutschland-Ticket was sold within 10 minutes of the iOS app release, and on the fraud prevention front, the results have been equally impressive.

Both koveb and Twikey confirm that the system is stopping significant amounts of fraud. One case stood out particularly: the platform blocked a fraudster attempting to purchase 600 Deutschland-Tickets worth over €30,000 in a single transaction.

Additional analysis from Ximedes and Twikey revealed that 90% of failed payment mandates utilised disposable email addresses, demonstrating the system's ability to identify fraud patterns automatically.

Why koveb Chose Ximedes

In an interview, Mund explained that one of the reasons why koveb chose to work with Ximedes was the company's experience in the Dutch transport market.

The Netherlands has well-established chipcard and mobile ticketing solutions, and this expertise was vital for bridging knowledge gaps in Rheinland-Pfalz, where digital ticketing adoption has been slower.

Equally important was Ximedes's proven track record with neighbouring German transport associations. Positive references from VRM and VRN, combined with competitive pricing, built confidence in the partnership. Now, after a few months of collaboration, what truly stands out to koveb is Ximedes's solution-focused, agile approach.

"Goal-oriented, customer-oriented and efficient," says Mund, summarising how he would describe the collaboration.





koveb's partnership with Ximedes demonstrates how modern mobile ticketing platforms can simultaneously address fraud prevention, operational efficiency, and passenger experience.

The project also proves that ambitious goals don't require endless timelines. Through a focused, collaborative approach, koveb achieved meaningful results within just three months, from development to launch. This success validates the value of prioritising practical implementation over prolonged integration cycles.

PTOs considering similar digital transformation initiatives can benefit from Ximedes's proven ticketing API platform and fraud prevention expertise. Contact Ximedes to explore how this approach can address your organisation's specific ticketing challenges.



Ready to achieve similar results? Let's talk.

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