CASESTUDY

translink

Translink securely bringing OV transactions **to the public cloud**

AMBITIONS AND CHALLENGES

- Simple and smooth innovation, such as the replacement of a chipkaart with personal payment methods
- Managing peak loads with a scalable solution
- Maintaining control over a technically complex system that is highly outsourced
- Meeting all major security and reliability requirements for payment transactions

SOLUTIONS

- **2011** – Hosting all mobility solutions and the customer contact centre
- **2016** – Office365 license management
- **2018** – OS renewal process
- **2019** – Gradual transformation of services to public Azure cloud
- **2021** – PCI/DSS certification for EMV-based IDBT

Flexibility and security in a scalable IT environment

Translink emerged in 2001 as Trans Link Systems, a joint venture of the five largest Dutch public transport companies, with the aim of developing a single payment system for the entire Dutch public transport system. The company now processes an average of over 7.75 million OV-chipkaart transactions every day. In order to improve access to public transport further, Translink was looking for more flexibility in a scalable, yet highly secure, IT environment. They subsequently found the solution in a gradual and managed transition of services to the public cloud thanks to the help of Solvinity.

Towards greater flexibility and innovation

The way the Dutch can pay for public transport anywhere in the country with one OV-chipkaart is unique in the world. But no matter how fantastic the solution is, it's not perfect, according to Ted Straathof, Manager Operations at Translink. Translink therefore wants to move towards a more flexible solution that provides travellers and transport operators with more options, both now and in the future.

"Translink wishes to bring the processing of OV transactions to the public cloud in a responsible way," says Straathof. The cloud allows us to handle the inevitable peak loads in public transport in a flexible way, but also makes innovation significantly easier: "We want travellers to be able to pay with their own means of payment, such as their bank card, phone or smartwatch. That's why Translink is joining EMV, the international standardised payment method for Europay, Mastercard and Visa. In addition, underlying systems are being standardised as much as possible, preferably to public cloud.

At the same time, Translink itself has expressed the wish to remain in control of a technically complex system that, despite being largely outsourced, still meets all essential requirements for security and reliability.

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>
> **Ted Straathof**, Manager Operations at Translink

RESULTS OF THE PARTNERSHIP

- 95% of services now go to private/public/hybrid cloud
- IDBT pilot at Keolis and Arriva
- 15% cost savings in 2020
- 60% fewer support calls since 2017
- 85% fewer critical/high incidents since 2017

ABOUT TRANSLINK

Translink originated in 2001 as Trans Link Systems, a joint venture of the five largest Dutch public transport companies. Since 2016, it has been 100% owned by the Coöperatie Openbaar Vervoerbedrijven, an organisation uniting all Dutch transport operators (Arriva, Transdev, EBS, GVB, HTM, Keolis, NS, Qbuzz and RET).

- Issuer of OV-chipkaart
- Processor of all OV transactions
- Headquarters in Amersfoort
- 118 employees
- 15.3 million OV chip cards in circulation
- 2.83 billion OV-chipkaart transactions per year

ABOUT SOLVINITY

Solvinity provides Secure Managed IT Services for organisations with high security requirements. With innovative cloud solutions, outsourcing, managed hosting and Lango Workspace, Solvinity supports the government, municipalities and leading organisations in financial and business services in their digital transformation. In addition, the company provides CI/CD, container technology and "Stretched" DevSecOps solutions for software developers. The organisation has distinguished itself with very high standards for cyber security and certifications according to (inter) national standards such as ISO 27001, ISO 14001, ISO 9001, SOC 1 & SOC 2 (including Azure) and PCI/DSS. In 2020, Solvinity achieved an annual turnover of 50 million euros with 300 employees.

Solvinity®
Secure Managed IT Services

Secure outsourcing

Translink has been working with Solvinity for almost ten years now. In 2011, Solvinity transferred the majority of Translink's IT operations to its own private data centres, with the move to the public cloud commencing in 2019. "At Translink itself, there are actually only about five servers left that control the production of the OV-chipkaart," says Straathof.

One of Solvinity's major responsibilities is security. In order to be able to use the international EMV standard, the systems and infrastructure for the Identity Based Ticketing environment (IDBT) need to comply with the Payment Card Industry Data Security Standard (PCI/DDS) certification, explains Martin Potappel, CISO at Translink, which is fighting payment card fraud.

"Solvinity already complies with strict SOC 2 requirements in terms of information security, and has stringent regulations for the safe handling of data," says Potappel. Continuous hardening, security by design, infrastructure segmentation and a strict update and patch policy are standard at Solvinity, which also provides services for various public services with high security requirements. "This makes it relatively easy for Solvinity to now also meet the PCI/DSS requirements that are so important to us".

> *"When it comes to security, they know what they're doing at Solvinity. This gives us the confidence that we've taken adequate and appropriate security measures, which is perhaps the most important thing."*
>
> **Martin Potappel**, CISO at Translink

Moving to the cloud together

Public cloud is an important consideration in the development of the new IDBT environment. At the same time, Solvinity is gradually moving an increasing amount of Translink services from its own private cloud environment to the public cloud. "In consultation with Solvinity, we have opted for Azure, but we aren't tied to it", says Potappel. "We want to retain the flexibility to make other choices if we need to in the future".

The advice that Solvinity provides carries a lot of weight, Straathof adds. "We were looking for an experienced partner of similar size, with whom we could work together towards further developing our services." Both he and Potappel compare the partnership to a marriage: "As in any relationship, there are ups and downs, but you choose each other because you can achieve something together," says Straathof.

We have worked hard on good communication, from management to implementation. "Our partnership has become closer and closer and Solvinity deserves a lot of credit for that. We regularly consult at all levels and visit each other frequently (mainly digitally in Corona times) - a deliberate choice that keeps us well informed and helps us understand each other better.

Transparency brings results

With the convenient CloudBilling invoicing system, Solvinity provides insight into the services and products that are being purchased and consumed, not only at Solvinity, but also from other suppliers and service providers. Making a conscious choice for the right migration has led to huge gains in efficiency, which in the past year have delivered cost savings of 15%," says Straathof.

Equally important is the significant improvement in the quality of the service, notes Martijn van de Veen, Delivery Manager IT Operations at Translink. "Since 2017, the number of calls to Solvinity has more than halved. Of course, the number of incidents will never be zero, but the fact that we've been able to reduce these by almost 60% is very important for us."

As CISO, Potappel is particularly pleased that, with Solvinity, he has a partner who understands the importance of security. "Compliance, certifications and monitoring are essential, but so too is going into detail with experts. When it comes to security, they know what they're doing at Solvinity." The 'journey to the cloud' is exciting in all respects for a public organisation like Translink. Potappel: "Solvinity gives us the confidence that we've taken adequate and appropriate security measures, which is perhaps the most important thing."