KAL makes ATMs futureproof with nexo standards protocols

Introduction

KAL is a world-leading ATM software company that specializes in solutions for bank ATMs, self-service kiosks and bank branch networks. Its multivendor Kalignite Software Suite enables ATM hardware, software and services sourced from multiple vendors to work together perfectly so banks regain control of their ATM networks, reducing costs, increasing functionality and improving customer service.

KAL software is the preferred ATM software and ATM management solution for many of the world's leading banks, including Citibank, UniCredit, ING, China Construction Bank and Česká spořitelna (Česká), a member of the Erste Group. It is installed and supported in more than 80 countries around the world and is certified in over 30 languages. KAL ATM Software supports 40 ATM manufacturers and over 250 different ATM model types, including NCR, Diebold, and Wincor Nixdorf. There are over 300,000 ATMs running KAL ATM Software today.

KAL began providing its ATM software to Česká in 2016. Česká is the biggest bank in the Czech Republic, with almost five million customers and assets of over $45 billion. Česká provides its customers with the broadest range of banking services in the Czech Republic via a branch network of over 550 and more than 1,600 ATMs.

This case study explores how KAL software answered Česká's requirement to improve the management of the largest ATM network in the Czech Republic – while continuing to innovate and launch new products and services quickly into the market. The case study also addresses how KAL software and nexo standards helped Česká to fulfil its strategy to create a single environment and support for its clients via ATMs, and an online platform that provides consultancy and other services beyond standard internet banking.

The challenge

In recent years, Česká decided it had to increase the transaction capability of its ATMs to deliver more efficient services to its customers and reduce operating costs. Its ATMs, however, were supported by the bank's outdated host computer system, which offered limited functionality and little flexibility.

Česká chose to decommission the host system gradually, transferring functionality to a new terminal handler system. At the same time, Česká wanted to switch to a new, open payments acceptance standard that was forward-looking and future-proofed. Using an open standard would also significantly increase Česká's options to deliver new innovative services to the ATM, while ensuring interoperability with all other stakeholders within the payments ecosystem.

The solution

The answer for Česká was twofold.

Firstly, it opted for the KAL ATM Software Suite including the Kalignite Terminal Handler (KTH). KTH gives banks a new option within the datacentre when replacing legacy host systems or extending current host capabilities.

KTH is used as a front-end to a bank's host system on the ATM channel. This meant that it could be deployed by Česká to offload a significant amount of work that the old ATM host system was doing. KTH is also highly customizable, allowing Česká to deploy new, innovative features to the market much faster than was previously possible. What's more, KTH can connect the ATMs to many bank back office systems using multiple messaging protocols at the same time.

This is where the second part of the solution came in – nexo standards.

nexo standards is a global association that develops messaging protocols and specifications which adhere to ISO 20022 standards and enable fast, interoperable and borderless payment acceptance by standardizing the exchange of payment acceptance data between merchants, acquirers, payment service providers and other payment stakeholders.

KAL, along with a number of other key ATM nexo standards members, jointly developed the nexo standards ATM Messaging Protocol. The protocol is an extension of the ISO 20022 global standard for host-to-host communication and is the first universal standardization initiative related to the ATM transaction and management domain.

The ATM Messaging Protocol from nexo standards works by ensuring that the ATM message set focuses on the communication between an ATM and host systems. Under the nexo standards protocol, the ATM's messages cover extensive transaction processing, security, ATM inventory, state of health and terminal management. The fact that the nexo standards protocol is derived from ISO 20022 made it even more valuable for Česká because it allows for future developments in the transaction value chain worldwide.

The nexo ATM Messaging Protocol was integrated into the KAL ATM Software to standardize the communication between the ATM and KTH. The role of KTH is to convert the nexo message it receives from the ATM into the messaging format required by the other host / central systems at Česká that support the ATMs.

The benefits
Using the nexo standard ATM Messaging Protocol provides Česká with many benefits, including:

New services
- The nexo standards protocol significantly increases the bank's ability to deliver new and innovative services to its ATMs. For example, nexo standards' ATM Protocol gives Česká the option to support contactless card transactions and pre-staged transactions.

Lower implementation costs
- Česká has reduced its costs by using a single, common standard protocol, rather than one of the hundreds of bank-specific, vendor-specific and country-specific protocols currently in use around the world. Unlike these legacy standards, nexo standards provides open messaging protocols that allow better interoperability between ATMs and Česká's host computers.

Easy implementation
- The nexo standard protocol uses XML over HTTPS which is simpler and quicker to implement than today's non-secure binary protocols. This resulted in shorter implementation timescales for Česká when updating its ATMs.

The ability to offer the implementation of nexo standards to its customers also generates a variety of benefits for KAL:

- In a very competitive marketplace for ATM software, nexo standards enables KAL to add significant value to its customers, beyond what is readily achievable via other messaging protocols such as vendor-specific and proprietary formats used by many banks.
- The reduced implementation timescales realized with nexo standards enables KAL to complete deployments on both local and global scale projects significantly faster and more efficiently than before.
- With nexo standards, KAL now has a universally consistent messaging foundation that can be applied around the world, regardless of the domestic specificities of each future project.

About KAL

KAL is a world leading ATM software company and preferred supplier to the world's mega banks such as Citibank, ING, UniCredit and China Construction Bank.

KAL's standardized ATM software enables banks to regain control of their ATM networks to reduce costs and improve competitiveness. It is installed and supported in more than 80 countries around the world.

Its multivendor Kalignite Software Suite includes:

- **Kalignite Platform** – at the core of all Kalignite solutions, providing everything needed for functionally-rich, robust multivendor applications for ATMs and all types of self-service systems.
- **Kalignite Advanced ATM application or K3A** – delivers all of the ATM functionality required by banks of all sizes. It is multivendor and supports a wide range of host protocols.
- **Kalignite Terminal Controller (KTC)** – an enterprise-wide ATM management system, providing a direct and secure connection from each ATM in the network to the KTC server. This connection provides immediate, real-time access to information needed to effectively manage and monitor the ATMs.
- **KTH** – KAL's Kalignite Terminal Handler for driving bank ATMs. It is designed to be installed on servers within the bank's datacenter and connects ATMs to a wide range of host computer systems enabling banks to deliver the widest possible range of transactions to their customers.

For more information, please visit www.kal.com

About nexo standards

nexo standards enables fast, interoperable and borderless payments acceptance by standardizing the exchange of payment acceptance data between merchants, acquirers, payment service providers and other payment stakeholders. nexo's messaging protocols and specifications adhere to ISO 20022 standards, are universally applicable and are freely available globally.

nexo standards is an open, global association dedicated to removing the barriers present in today's fragmented global card payment acceptance ecosystem. Headquartered in Brussels, its members represent the full spectrum of card payments stakeholders, including acceptors, processors, card schemes, payment service providers and vendors.

For more information, please visit www.nexo-standards.org.