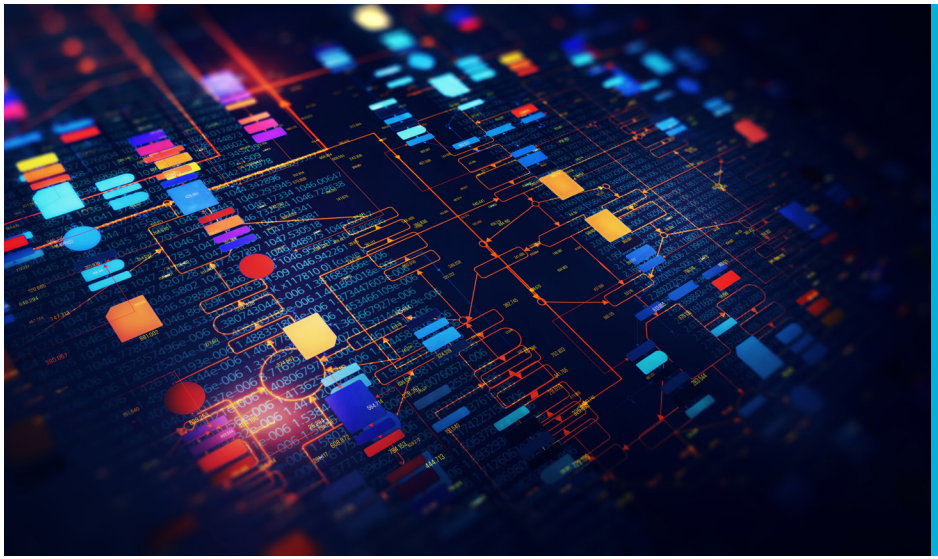

Business challenge

KORE Technologies, sister company to Phoenix Systems, recognized that companies were hesitating over adoption of blockchain solutions because existing infrastructure options were not mature enough.

Transformation

By taking advantage of the security, scalability and manageability of IBM® LinuxONE solutions, the company enables users to create, verify, store and trade digital assets with the utmost liquidity.

Business benefits:

8-fold boost
in processing power offered by IBM LinuxONE solutions

Safeguards
client data against cyber threats and enables exceptional end-to-end security

Simplifies
compliance for users and facilitates seamless scaling

KORE Technologies and Phoenix Systems

Empowering companies to create, verify, store and trade digital assets with trust and security

"IBM LinuxONE provides a level of security we would struggle to achieve with any other platform. With the introduction of IBM Hyper Protect Virtual Servers, we get the benefit of containerization alongside end-to-end encryption of data."

Isabella Brom
COO
KORE Technologies

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About KORE Technologies and Phoenix Systems

Based in Zug and Zurich, Switzerland, KORE Technologies AG enables issuers to issue, manage and store digital assets with high security and demonstrable compliance while providing quality consulting on integration of digital assets in existing or new business models.

Phoenix Systems is a pioneering IT hardware and software consulting and development firm. It aims to develop intelligent IT architectures that are modular, efficient and innovative, incorporating leading-edge technologies including blockchain, big data and Internet of Things (IoT).

Identifying an opportunity

As the new kid on the block when it comes to technology, blockchain has brought players rushing into the space keen to make fast and significant returns. The breakneck speed of development let factors such as security drop down the priority list, leaving participants exposed to risk.

With blockchain-based assets entering their second decade, even the most traditional financial institutions are weighing up an entry into this potentially lucrative marketplace. But for new and existing players to increase their investments in tokens and cryptocurrencies, better, more secure foundations for blockchain-based projects are a must.

Enter KORE Technologies: dedicated to helping clients embrace innovation without compromising on security or convenience. It evaluated existing digital asset management offerings and found them lacking.

Isabella Brom, COO at KORE Technologies, explains: “Today’s online wallets are always at risk of being hacked. Options for keeping digital assets offline, on a USB stick or printed within QR codes, for example, are easy to lose. You hear about people forgetting passwords and losing access to valuable digital assets forever. To make widespread adoption feasible, we aimed to provide bank-grade security, usability and compliance with data regulations.”

Finding the secret to differentiation

KORE Technologies and Phoenix Systems chose to work with IBM to bring its vision to life. The sister companies created a service portfolio that takes advantage of the security, scalability and manageability of IBM LinuxONE solutions to enable users to create, verify, store and trade digital assets with the utmost liquidity. Customers can use the offering to issue new assets, safely store private keys and transfer digital value, or launch dedicated or shared blockchain nodes via Platform-as-a-Service solutions from KORE Technologies. All of these services are consumable via API.

Brom comments: “IBM is the best vendor we could ask for. With them, we quickly defined a joint value proposition that meant we were all equally invested in the success of the project. The IBM technology delivers on all our selection criteria: providing security that is second to none, the scalability to handle huge numbers of transactions and the ease-of-use that enables us to build a client-first solution.”

Phoenix Systems collaborated with IBM to build the infrastructure, based on IBM LinuxONE servers equipped with IBM Hyper Protect Virtual Servers. Thomas Taroni, CEO and Senior Architect at Phoenix Systems and CTO of KORE Technologies says: “We needed a partner with a clear approach to global scaling, who also had the machine with the most power that fit best with our architecture. And that was IBM and its IBM LinuxONE system.”

To bolster the security of the platform further, KORE Technologies and Phoenix Systems engaged Securosys. By combining IBM technology with the Securosys Primus Hardware Security Module (HSM), the companies enabled secure implementation of all cryptographic operations in a highly available HSM cluster.

Maximizing the benefits of innovation

Using the digital asset solution portfolio from KORE Technologies, enabled by IBM technology, customers of KORE Technologies and Phoenix Systems can manage and integrate digital assets into their existing or new business models with minimal risk. Companies of all sizes can choose between customizable Software-as-a-Service, Platform-as-a-Service or hosting infrastructure deployment options, all available from data centers in Switzerland.

Brom comments: “Data regulations are evolving all the time, and it’s important that our solutions help users to create, trade and store digital assets while remaining within the law. Using the IBM technology, we can provide the reports that enable our customers to demonstrate compliance.”

KORE Technologies is targeting its solutions at financial institutions in and around Switzerland, Germany and Austria first, but the companies foresee applications across industries including the public sector, capital markets, media and telecommunications, logistics, insurance and commodity trading.

“We’re only just starting to see the impact of blockchain on the world,” says Brom. “Working with IBM, we can take advantage of cross-industry experience to play a role in revolutionizing value transfer on a wider scale.”

Bringing a bold vision to life

In selecting IBM LinuxONE servers as the foundation for its new offering, KORE Technologies and Phoenix Systems gained eight times the processing power they previously had at their disposal. As a result, the companies can cope with huge numbers of transactions without increasing response times for users. The high-density footprint of the solution enables the companies to maximize utilization of data center resources.

Using IBM Hyper Protect Virtual Servers, KORE Technologies and Phoenix Systems can prevent tampering and unauthorized access to data by isolating memory and restricting command-line access for administrators.

"It's crucial that we can push code out to our customer environments quickly and efficiently," says Brom. "With IBM Hyper Virtual Servers we can do that, while protecting our clients' digital assets from compromise either from the outside or from within. For our custody solution, it's vital that we can prove that accessibility is only possible for asset holders—IBM technology allows us to do that with a high degree of credibility."

As the burgeoning crypto industry gathers steam, KORE Technologies is ideally positioned to capture share in a market expected to grow to billions of dollars. Brom concludes: "With IBM at our side, we have access to global resources to go to market across the world as soon as we're ready. At the same time, IBM is flexible enough to work with us while we're still a relatively small, agile company."

"We needed a partner with a clear approach to global scaling, who also had the machine with the most power that fit best with our architecture. And that was IBM and its IBM LinuxONE system."

Thomas Taroni, CEO and Senior Architect, Phoenix Systems, and CTO, KORE Technologies

Solution components

- IBM® LinuxONE Rockhopper II
- IBM Hyper Protect Virtual Server
- IBM Blockchain
- Red Hat Enterprise Linux

Take the next step

To learn more about IBM LinuxONE solutions, please contact your IBM representative or IBM Business Partner, or visit ibm.com/linuxone

Securosys SA, based in Zurich, Switzerland, is a market leader in cyber security, encryption and securing digital identities. Founded in 2014, Securosys secures the Swiss financial markets on behalf of the Swiss National Bank and protects transactions worth over EUR 100 billion every day. The company supplies more than half of the Tier 1 banks worldwide with hardware security modules developed and built in Switzerland.

Securosys offers a wide range of security network appliances focused on commercial applications. These include communication encryption and key generation and management.

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