



LLB: Digital agility

During times of digitalisation, banks face major challenges. They need to be able to integrate new functions and innovations quickly, their customers need to be able to access their own personalised range of offers at any time, from anywhere, and 100% security is paramount at all times. The Liechtensteinische Landesbank began its digitalisation project in the autumn of 2015 and now, scarcely two years later, the entire infrastructure is up and running with the new online portal seamlessly in place: it is modern, customer-orientated and secure.

The ultimate goal of the Liechtensteinische Landesbank, which also includes Bank Linth, was to create a modular, cross-channel online banking platform with adaptive security that would provide the best-possible combination of flexible in-house and integrated services as an online presence. Ergon provided support for the LLB Group in this venture as a technology and development partner, working in close cooperation to elaborate the architecture and the multilevel security concept while developing the portal as a central access point for all the services offered, including online banking and mobile apps.

Quick reaction times thanks to "two-speed architecture"

These days, new front-end services supplementing a bank's digital service portfolio have to be quick, flexible and capable of being implemented in short releases; back end applications are subject to considerably longer cycles and have to guarantee stability, performance and operational precision. To ensure that both are possible simultaneously, a clear division between the two layers is required, and this is achieved with "two-speed architecture" that decouples customer applications from the core bank solution. The dividing layer – the central micro-service interface – plays a major role in such circumstances; it is where the back end applications provide their services to every possible consumer in finely detailed form. The front-end applications that make use of these can combine them as they choose and assemble a unique service, but are simultaneously protected from release changes by the interface that stands between them.

"The last 15 years, Ergon has accompanied us every step of the way, providing exceptional IT expertise."

Kurt Mäder

Group Chief Operating Officer, LLB Group

This pattern has been continued through into the portal architecture, allowing both the incorporation of in-house applications and the integration of third-party content. All this takes place hidden away beneath a designer interface, providing customers with a consistent overall appearance. Thanks to its responsive web design, the user-friendly portal can be operated from any desktop or mobile device.

Its dynamic and multivalent upstream configuration ensures that the user is obliged to interact with the security systems as tangentially as possible and only where really necessary.

Mobile banking apps and online banking

Native apps were selected as great emphasis has been placed on the best possible user experience with high standards of security for mobile applications. A finger-print or Face ID option offers handy functionality in the mobile banking app; customers wishing to do no more than briefly check their balance can use these methods to achieve the desired result quickly and easily. Only when additional functions such as making a transaction need to be carried out will customers have to identify themselves with extra authentication methods. The system unlocks different access rights depending on log-in method.

The Java client previously used for online banking has been replaced with a web solution, with two-stage authentication allowing users to access the system. This makes use of photo TAN identification provided by a partner organisation that is a standard feature of the Airlock IAM authentication solution. Customers requiring assistance with online banking can seek help from staff at the Customer Service Center using the co-browsing function. This component is similarly a third-party solution that has been perfectly integrated into the overall solution via Airlock WAF and is available throughout the entire service portfolio.

In the case of corporate clients, payments often have to be signed off by several people and an encrypted push alert has been introduced to the online banking system for secure and simplified administration of such transactions. This secure notification system conveniently alerts customers of payments requiring authorisation. The fraud detection solution developed by Ergon is also part of the new online banking system; this uses machine learning to identify fraudulent payments more reliably than human experts.

The LLB Group's portal and flexible architecture ensures an emotionally satisfying and consistent customer experience at every touchpoint, creating a basis from which the company can further expand and optimise its business processes in the future.

About Ergon

Ergon Informatik AG is a leading developer of bespoke software solutions and software products in Switzerland. We employ highly qualified IT specialists who are committed to creating value for the client, anticipating technological trends and designing solutions that generate competitive advantage. Our 280-strong company was founded in 1984.