

Focus

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The Avalooq Semantic Architecture, a quantum leap into the future

New trends are changing the ways in which banks operate, grow and compete. Industrialisation, increasing regulatory pressure, the rising importance of analytics, the widespread use of mobile devices and social media are just a few of a long list of factors that are transforming the banking industry. Avalooq's banking platform is built on a robust architecture that sustains the required evolution and gives our customers the flexibility to address changing business models. During our 24 years in business, we have been following a strict governance to ensure a consistent evolution of our architecture. Today, we architect our software using the principles of modularity, information consistency across channels, extensibility with third-party components and the ability to customise the platform to meet unique business needs.

Drivers for IT architecture

The backbone of every bank is its IT architecture. It is what guarantees that business requirements can be adequately met.

Requirements for an IT architecture:

- Support functional needs, operating models and process interoperability
- Enable growth and business reorganisations
- Ensure the right mix between standardisation and individualisation
- Allow business flexibility and improve time to market
- Sustain evolutions in a running system

Avalooq empowers banks in a sustainable manner because, when building our solution, we are able to subtly balance five sometimes conflicting key architectural principles:

Consistency, **C**ompleteness, **C**omponentisation, **C**ommoditisation/**C**ustomisation, **C**ollaboration.

Consistency

We offer consistency in various dimensions. We make use of a unique glossary and apply the same business logic and semantics front-to-back. Our Enterprise-Wide Object Model provides a unifying data picture and shared information model for the whole system. Data needs to be entered only once and is propagated in a consistent way, guaranteeing reliability and quality. Transactions are booked in real time and the same information is available on all devices. Our software development also relies on a small number of core concepts, reusable across all business areas. Throughout the system, we follow the same workflow and accounting concepts, have the same engines and one single way of defining rules and validations. We uniquely follow this coherent approach, which guarantees system robustness in an industry of increasing product consolidations.



Completeness

We provide our customers with a full-fledged front-to-back solution with integrated role-based workplaces available on multiple channels. This results in an undeniable cost advantage as the need to integrate with external systems is minimal. With our offering, customers have the flexibility to choose their operating models, jurisdictions and accounting standards and to select their language and currency. In addition, we manage the full spectrum of data a bank needs and can process various sources of quantifiable data within our system to yield information the bank can act upon. This ability to combine static, transactional and behavioural data with analytics within a single system allows us to considerably improve efficiency and responsiveness.

Componentisation

Today, we offer some 40 product variants, which can be licensed separately and which customers can flexibly combine to create the solution adapted to their individual business model. At the same time, all our offerings are designed to dovetail with one another and therefore built along the same architectural principles, processes and user interface paradigms so that they confer the same look and feel. Commercial componentisation aligned with banking reality allows banks to buy only the products they require, thus limiting maintenance effort. When it comes to implementation, either a big-bang or a phased approach can be adopted, the latter allowing for a better control of risks. Componentisation of course begins at the very heart of software development and is reflected at all architectural levels.

Collaboration

To meet the needs of the new digital era, we have opened up the Avaloq Front Platform to certified third parties, who can develop and customise their own applications while leveraging the Avaloq core functionality. This way, banks are able to bring their own products to the market faster. We also offer our customers the possibility to use the Avaloq Front Platform to create their own portals. Our portal capability draws on a variety of sources such as Avaloq functionality, third-party applications and data and services from external providers to create persona-centric views specifically targeted to a client profile, for a richer and more personalised banking experience. Future medium-term projects include a marketplace for the commercialisation of banking

applications, which will promote the sharing of innovations within the community.

Commoditisation/Customisation

Based on our longstanding history of successful implementations and our unique experience in the industry of operating our own software, we have learned what can be standardised. We deliver products with a set of market-proven industry standard practices that constitute a commoditised starting kit for any Avaloq implementation. Configuration costs can be kept low as individualisation is only needed where it brings an added value. The efficiency of our BPO centres stems from the fact that we can easily switch on or off market and segment-specific capabilities in our software. We provide our customers with mass customisation tools that allow them to carry out their own development faster and more reliably. And because the whole community follows the same parameterisation standards, software adjustments can be made without jeopardising maintenance.

The right IT architecture makes the difference

To remain efficient and competitive, banks need a solid foundation that enables the next generation of banking. Avaloq is the right solution for your future because our architecture is based on a consistent and holistic banking model and is developed to sustain the needed evolution. As a result of our 24 years of experience in banking, we have built a proven track record of achievements we are happy to share with you. Do not hesitate to reach out to us.

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