



Matrix the essence

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MATRIX[®]



Matrix - the essence

Matrix - the real alternative for universal banking

Modern banks require software that is built around reliable customer data. Neither the product nor the services define the processes. The customer information and profile does. Also from a compliance and risk perspective, a full 360 degrees view on all data, media and processes associated with the customer is required to serve the client optimally and fully compliant at the same time.

Matrix offers a complete and complex data model that is able to distinguish between different types of entities (individuals, corporates or portfolios) and captures all possible relationships between such entities. Matrix' design approach allows a bank to treat any customer, employee or 3rd party advisor as a person, being an authorised user of its system. The system just assigns the roles associated with such person at (secure) login.

In short, the ultimate IT system for modern banks is the 'master' of all client-related data, media and communication while it serves as the 'slave' of all product-related data, since this type of data is stored in one or more product-administrations (i.e. back-end systems).

Built for connectivity, world of services

Matrix is light, flexible, open, using industry standards and focused at the core banking processes and data. It has a service-oriented architecture combined with a componentized structure that allows for easy updates and connectivity with other systems, data and processes. It comes with a set of standard connections to popular applications or services. Processes are not hardcoded in the software but are flexible and easy to change by configuration rather than programming. Connections with external services can even be made available through the cloud.

The holy grail of smooth and cost-efficient operations is 'straight through processing' (STP). By using fully automated processes and workflows, operational costs can be minimized, execution is (near) real-time and errors (almost always caused by human errors) are limited. STP therefor drives customer experience, cost efficiency and control. To achieve high levels of STP, connectivity to the external world is a necessity. Many checks, monitoring activities or alerts are linked to external databases or services, like verifying client data or ID documents on validity, checking AML or terrorist databases, credit checks etc. By moving these checks from manual steps performed by bank employees to automated workflows, easy and smooth connectivity to such external services is paramount. The Matrix service layer is user agnostic, and therefor allows connectivity to all kinds of front-office

The Matrix service layer is user agnostic, and therefor allows connectivity to all kinds of front-office applications (web, app, employee, clients, etc.), external applications with specific functionality (loyalty schemes, financial planning suites, etc.) and any back-end system or service (payment systems, outsourced mortgage-operations, etc.).

Matrix' set-up allows the bank to keep its IT landscape up-to-date, since all services and applications are independently coupled. When obsolete and redundant, the bank can decide to replace such service or system by another, without affecting the remaining architecture.

Vertical expertise embedded in the software

Banks that are re-designing their application landscape to make the paradigm shift expect real and tangible benefits such as cost-reduction, increased employee and customer satisfaction, faster customer on-boarding, increased customer retention, accelerating new business and providing high visibility. Those banks simultaneously want to limit the costs and risks associated with such transformation.

The biggest risk in large IT projects is not the software or the developers. The lack of full business alignment and mediocre project management generally are the reason for failing IT projects. In banks, many different stakeholders need to align their requirements into one (holistic) design of the new organisation. Marketeers, product managers, compliance & risk officers, IT management and many others, they will all have their own requirements and wishes. Generally starting with a blank sheet of paper, with likely no one having experience in actually setting up a bank from scratch. To solve this issue, Matrix is easy to implement and come with the appropriate data model as well as preconfigured commoditized datasets and processes. It is simply easier to comment and approve on a proposed set-up, than to try to 're-invent the wheel'.

This approach significantly decreases project risks, implementation times and project costs. 80% is already available in the system, based on the experience of many previous implementations. Moreover, a better end-result can be expected, since the banking team can focus on the remaining 20% of the specific bank set-up that can differentiate this set-up from the competition.

Horizontal scalability

Matrix allows easy horizontal scalability. It has the ability to connect multiple servers as nodes so that they work jointly as a single logical unit. In the case of servers, for example, you could increase the speed or availability of the logical unit by adding more servers, typically using load balanced nodes or clustering. For banks, being large data-institutions, the ease and costs associated with scaling are important criteria for selecting software.

Horizontal scalability also is an important prerequisite for running a service-delivery model. Next generation software runs on an infrastructure that allows for SAAS, private or public cloud solutions. hat can differentiate this set-up from the competition.

SAAS and cloud

The combined trends towards 'a world of services' and new delivery models such as SAAS and Cloud services have potentially a much bigger impact on banking as we know it today than is currently understood. First of all, a world of services will enable banks with an agile service-oriented core system to adopt any (local) service to their application landscape without substantial investments in hardware, software or development.



Services run independently, and can be coupled or de-coupled without too much effort. Basically, such a set up makes banks truly technology stack agnostic, being able to connect different technologies via services rather than old fashioned interfaces. By adding SAAS or Cloud delivery models, banks can effectively share applications, hardware and maintenance while only paying for the initial set up and actual usage. Smaller banks that traditionally cannot compete with Tier 1 players on online capabilities due to relative large budgets required are suddenly able to offer the same (or better) capabilities and functionality to their end-customers. Finally, a level playing field on quality of delivery to the end-customer that is not dependent on the size of the bank arises. From the perspective of the smaller players, business cases that would fail in the past may very well successfully fly tomorrow. It is expected that lower upfront investments, smaller and less risky projects will attract more new entrants such as retailers to the financial services arena. But also for the established players next generation IT can be truly beneficiary. It allows a phased disintegration of their current complex IT landscapes, moving gradually to an agile, service-oriented operation.

Matrix is ready for SAAS and Cloud setups. A (private) SAAS or cloud model shifts the burden of implementation and maintenance of a software application from the customer to the vendor/service provider. It permits users to leverage the software functionality without the burden of deploying and managing the software themselves. It also eliminates the added costs and complexities of deploying additional hardware and software.

Today's end-customers are savvy and expect information to be delivered quickly. They are demanding anytime, anywhere convenience and more self-service options. In order to meet these growing customer demands, companies require great flexibility in how they implement and deliver new products and services.

Easy updates and maintenance

To drive sustainable growth, modern banks are challenged to implement innovative new solutions and services while actively managing the costs involved. In order to be able to meet aggressive timelines, companies need a way to deploy solutions faster, with reduced risk and capital investment. The use of SAAS based offerings can reduce budget and time-to-market challenges. Software providers still offer the traditional on-premise license solutions; however, a SAAS model offers the benefits of lower initial investment, faster time to market, a constant and predictable expense structure or a flexible pricing subscription model. With more reliable Internet connectivity and increased bandwidth SAAS has become even more attractive whereas only 2-3 years ago this option was only viable for companies that could afford expensive lease lines with MPLS (Multiprotocol Label Switching) technology.

The traditional waterfall-model used for IT projects is not suitable for modern technology solutions in the banking environment that is constantly changing. The process of collecting requirements, writing a functional design, implementation, testing and maintenance is too expensive and simply takes too much time. It is imperative that modern banking software allows for extremely fast implementation, prototyping, launching and analysis of new ideas in a cycle of continuous process-improvement. New banking software therefore also requires a new type of service-provider. This business is not about the biggest projects with the highest number of billable hours. This is about a continuous process of implementing new ideas, workflow improvements, co-creation with consumers, analysis of online activities and connecting with external services in the cloud.



Cost to run

Even more important than a reasonable and flexible license structure are running costs for a bank. Considerations here are: availability of skilled resources in the market place at a low cost base, a clean structure of licenses, an environment that is pure SOA based, i.e. pure and open connections to other third party systems, rather than heavily custom built connections that require constant maintenance when going through more system upgrades. Testing of the functionality throughout the build and deployment process, rather than at the very end also hugely decreases the TCO for banks.

Future Proof

Equipped with all items listed Matrix is future proof. Pure, built from scratch SOA delivers that promise, as much as scalability. Benchmarking the solution with the partners on which the stack is built and deployed (Microsoft) are of vital importance to convince customers of the solutions ability to deal with a very uncertain future: up-scaling, down scaling, vertical and horizontal additions, embracing more regulatory vigour are all part of the true future proofing of the solutions in its deployed environment.