

Misys BankFusion Universal Banking

Technical Overview

Product innovation is key to maintaining competitive advantage in today's market

A New Way of Delivering Solutions

The next generation of core banking systems will not only be defined by their functions and features, but rather the way in which they support transformation of your business – by way of:

- + Greater automation and straight through processing
- + Event driven banking
- + Greater control and administration at the centre
- + Policy driven data management

The legacy systems of today are hampering this type of transformation, so what is required is a **new way of**

delivering solutions to provide real business value.

The BankFusion platform has been designed to help customers reduce costs, increase revenues, satisfy the regulators and, most importantly, maintain their competitive edge through improved business agility.

Misys BankFusion's component-based design and Service Oriented Architecture (SOA) provides enhanced flexibility of configuration, deployment and maintenance. It is based on recognised J2EE open standards, so that it provides Enterprise banking solutions as well as an optimised banking platform upon which to rapidly build and deploy new solutions for your business.

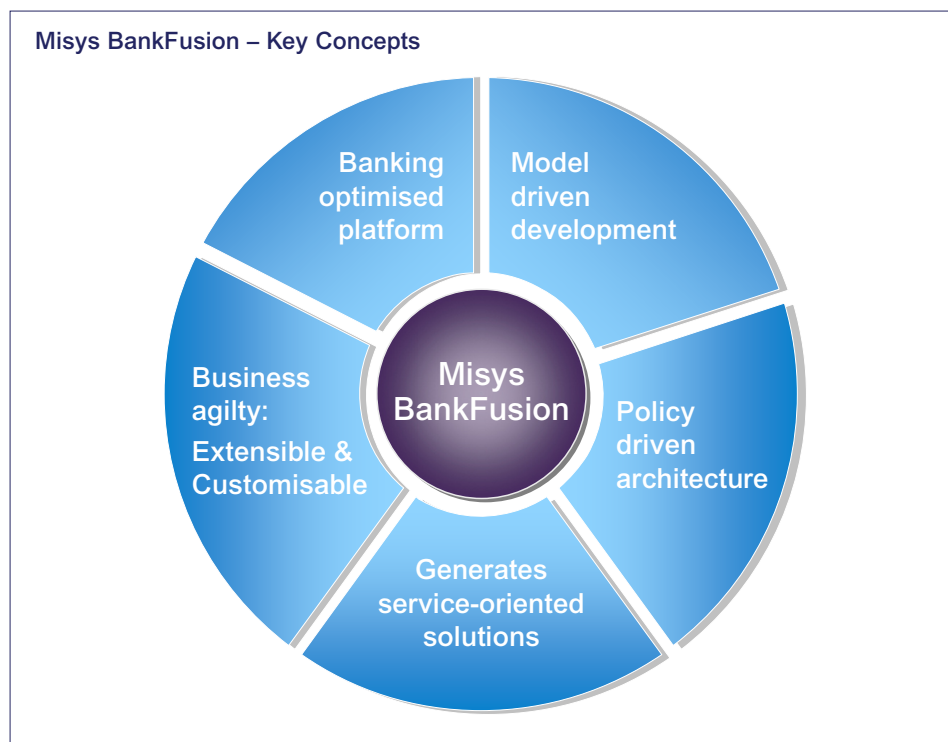
Misys BankFusion technology offers this 'new way' today, because it provides a technology strategy which:

- + **Drives down total cost of ownership (TCO)**
- + **Provides a consistent approach to the enhancement of current investments**
- + **Enables agility through rapid process reconfiguration and deployment**
- + **Provides a Misys platform for the development of new solutions**



“Institutions are no longer constrained by arcane, restrictive, time-consuming and horribly complex practices... far greater degree of business control and ownership.”

Alex Kwiatkowski, Ovum



- + UI services allow different user interfaces to be integrated to reuse the same processes, through clear separation of concerns
- + The BankFusion layered architecture provides for clear separation of concerns, which enables BankFusion solutions to be more readily integrated into legacy applications, i.e. support evergreening as well as replacement strategies

Agility: extensible & customisable

- + Extensibility is built into the framework so that an organisation can provide core applications but also support customisations
- + BankFusion applications can be customised by 3rd parties using the same toolset as the core developers
- + Customisations are compatible with future releases of the core application
- + Regional, country or bank specific extensions to the core application, can be managed centrally

Model driven development

- + Applications are designed and developed using a single graphical toolset and stored as a model, ready to be deployed as BankFusion applications
- + The model is the application: no re-coding means faster time to value and consistent, reliable solutions, which are generated directly to create a high-performance solution
- + The deployment mechanism enables fine grained refinement of the run-time system, e.g. product features, business process rules, data extensions
- + The model is extensible and tooling is available to customers, and partners, to localise, customise and extend, creating clear benefits to customers in terms of turn-around time and reduced development cost

BankFusion – a policy driven architecture

- + BankFusion provides capability to enforce proven application design patterns and templates
- + The design principles are enforced as policies that define the rules and best practice for building the application model
- + Application architecture is flexible, so that BankFusion will adapt as best practices evolve
- + Architectural governance is automatic, so that developers free to concentrate on banking not technology

Service-oriented solutions

- + Industry standard support for the publication and consumption of services.
- + Supports data, process, and UI services

Banking optimised platform

- + The advent of application server platforms (WebSphere, JBOSS, etc.) have delivered benefits through standardised development of enterprise applications – through abstraction and standardisation of the OS, Transaction management, Messaging, Instrumentation, and database management etc.),
- + The advent of the BankFusion platform offers similar benefits to the development of banking systems, through:
 - + Standardised development of banking applications
 - + Abstraction and standardisation of banking components, products, features, Finance and compliance controls, scheduled processing, security and workflows, channel servicing

“Misys has been a trusted partner of ours for many years and we are confident that we have the right mix of solutions and support to ensure our business grows at minimal risk and maintaining a low total cost of IT ownership”

Sergey Mednov, CIO and Member of the Board, Alfa Bank

- + All built upon the same Application Server technology to finally bring the benefits Enterprise architecture to the banking industry
- + New financial products assembled by bank staff from reusable BankFusion business components. Supports business agility
- + Secure, audited deployment of the rules, data and screens that service a financial product
- + Command and control is managed from the centre which reduces both operational risk and IT costs
- + 24*7 Banking server provides core services needed by banking applications

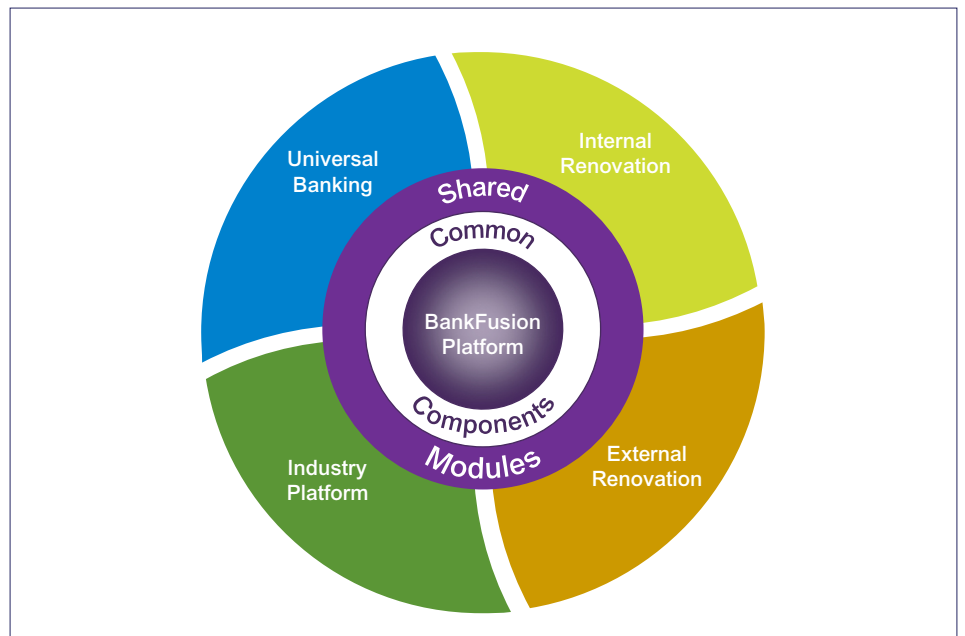
So with BankFusion, Misys has been able to open up new opportunities for their customers:

- + They can replace aged technology
- + They can evergreen and enhance existing solutions, which do not need immediate replacement
- + They can enhance and extend proven solutions where replacement is not required
- + They can offer new solutions which comprise the best of existing Misys assets

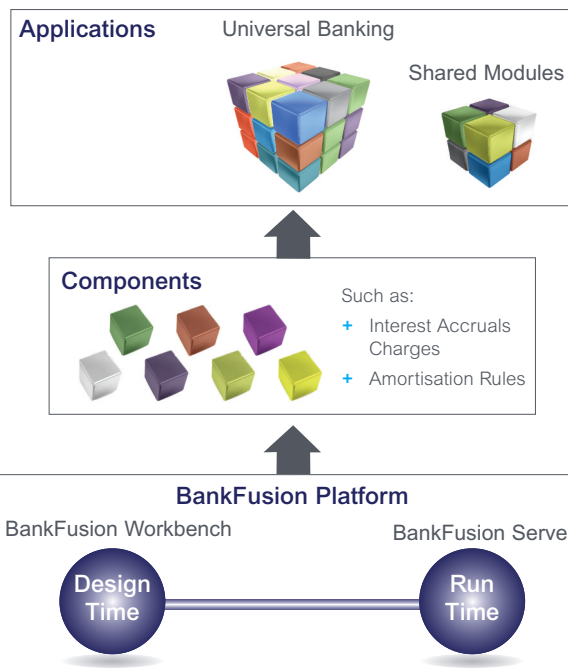
Misys BankFusion Platform

The BankFusion platform has been designed to help customers reduce costs, increase revenues, satisfy the regulators and, most importantly, maintain their competitive edge through improved business agility.

It is the first J2EE, SOA-based banking platform with applications which can be available to the wider banking community.



What makes BankFusion unique?



- + Fully **process-driven** core banking solution gives high flexibility
- + BankFusion Workbench **graphical design time** accelerates development at a lower cost
- + **Use of Components** makes adapting business process to desired workflow simple
- + BankFusion Server **automated code generation** saves time and expensive IT resources



A unique advantage of BankFusion Universal Banking is the ability to implement an individual process and make it available across multiple channels without alteration.

This ensures the same business rules can be deployed and executed for all users, regardless of the channel they are using to interact with the core system.



Meeting Strategic Architectural goals:

The BankFusion technology has been built to industry recognised best practice architectural principles which deliver the following to applications which run on its platform:

- + Scalability
- + High performance
- + Role & object security
- + Flexible design time
- + Ease of integration
- + Resilience
- + Customer centricity
- + 24 * 7 services
- + Enhanced MIS
- + Process based solutions
- + Comprehensive System Monitoring

Misys BankFusion Universal Banking

Misys Universal Banking is an integrated suit of banking modules with broad functional scope, serving the needs of banks looking for a solution from a single vendor.

The system is scalable and flexible for product and business process configuration, deployment and maintenance.

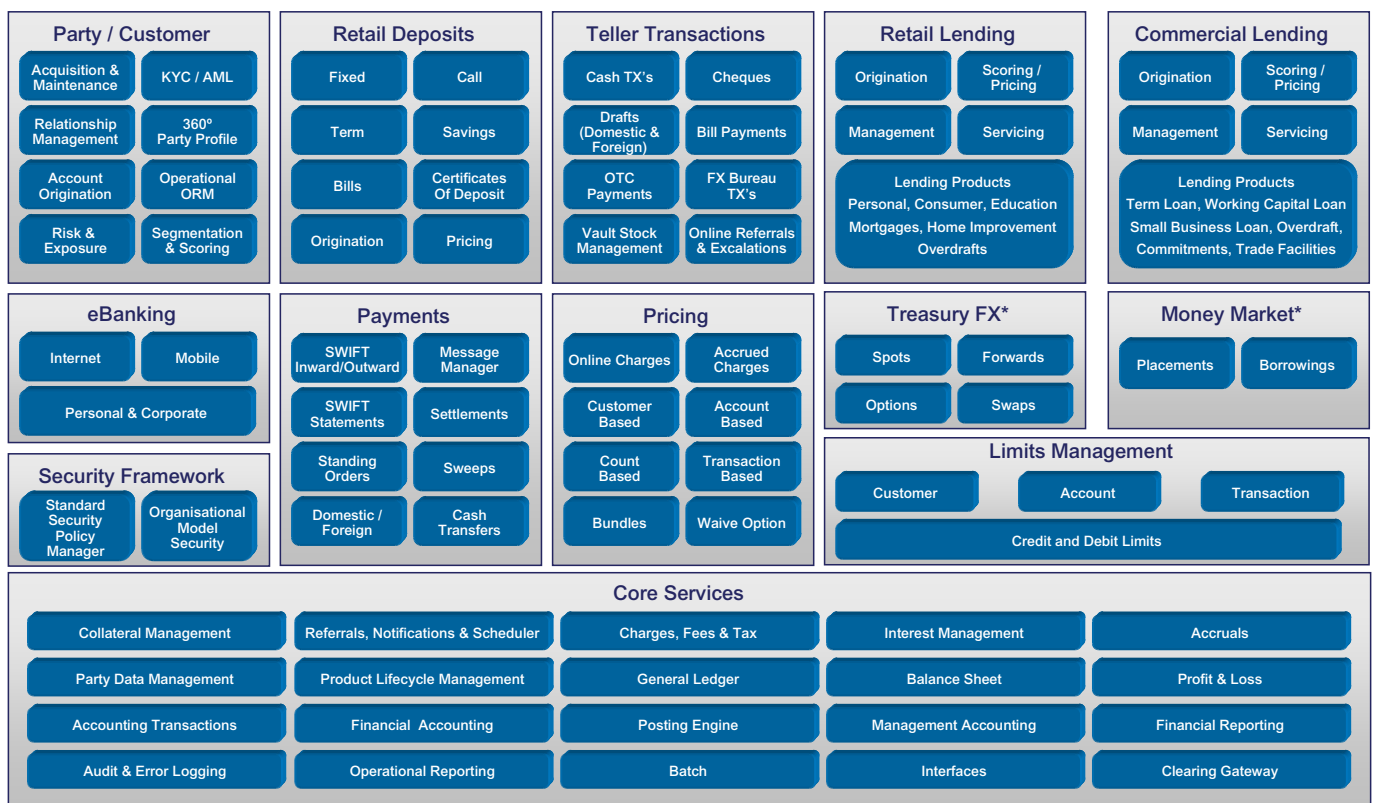
Misys BankFusion Universal Banking provides an integrated design / configuration environment to enable a bank to create / augment financial products and associated fulfilment

processes more efficiently and quicker than conventional systems.

It also provides a flexible integration capability to other systems and channels.

A combination of the architecture and design tooling enables BankFusion Universal Banking to deliver design-time flexibility with scalable run-time performance.

BankFusion Universal Banking



BankFusion Universal Banking Architecture

Multi-Tier Architecture

The Misys BankFusion platform on which Misys BankFusion Universal Banking is built manages the underlying data separately from the business logic which, in turn, is separate from, but easily accessed by, the channel applications.

Data Layer

The data layer maintains and persists the core banking data relating to customers, accounts, products, transactions, and the overall banking environment. Misys BankFusion Universal Banking has a well defined data model that can be easily extended. The data layer is defined at both a logical and physical level, so that changes to the underlying data model will have a minimal impact on the live application.

Channel Layer

The Misys BankFusion platform enables fast design and deployment of new products and services and the Channel Layer ensures that you can reach out and support your customers when and where they want:

- + In the branch
- + At the ATM
- + Via Point of Sale
- + Through call centres and IVR
- + On the Internet

Product & Process Layer

The Product & Process layer is the home of the product portfolio. The Process layer provides a range of business processes to support the channels. The Product layer provides the common product and service functions to support the core banking processes in the bank.

Common Banking Services

To support Misys BankFusion Universal Banking's wide range of products and services, the solution delivers an extensive range of common services. These include a flexible service charging structure and for interest and tax purposes. The solution delivers a wide range of calculation, accrual and application services.

BankFusion Universal Banking Flexibility Product Composer

BankFusion Universal Banking comes with a pre-defined standard product set. New products can be quickly composed and deployed within the system from the existing standard product using a set of "features", which are quickly defined using the Product Composer's drag and drop capabilities. This use of features means that products do not need to be given attributes that they will never use, ensuring improved performance.

Business Process Designer

New business processes such as inquiries, lodgements / withdrawals, loan repayments, standing orders, reporting, creating or amending customer and account data can be defined using the Business Process Designer. The Process Designer gives you the ability to graphically customise an existing business process, or create a new one, adding the visual and system updates you require in the order you want.

Screen Designer

All screens are user-definable using the Business Process Designer, allowing the user to select size, colour, location and imagery to generate their own look and feel. Any field on a screen can have validation functions associated with it, such as date, string and numeric, thus eliminating user errors.

Key Benefits of BankFusion Technology

- + **AIX and IBM DB2 platform** with choice of other operating system and database (including HPUX and Oracle);
- + **Scalability, performance and resilience**, thanks to the underlying enterprise capabilities offered by the J2EE environment;
- + **Speed of implementation and integration** thanks to the use of recognised international standards, such as XML, Web-Services, JMS and JMX;
- + **Built upon a powerful multi-tier architecture** which provides flexibility around service delivery and solution architecture;

Misys BankFusion Universal Banking provides innovation, flexibility and an architecture fit for tomorrow's requirements



Based on open industry standards, on an application sever platform, its 24x7 Java™ 'component based' architecture is highly scalable - from PC to mainframe - and extremely flexible in terms of configuration, deployment and maintenance.

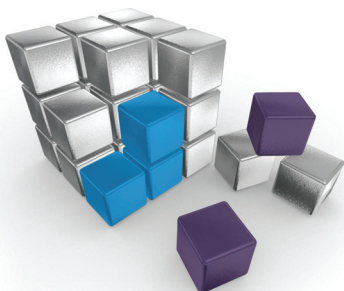


Key Advantages of BankFusion Universal Banking Technology

- + Built-in process management providing greater control and efficiency;
- + Faster development turn-around reducing delivery times and increasing speed to market;
- + Integrated development environment enabling lower cost localisation;
- + Centralised operations supporting centralised management;
- + Scalable and resilient enabling both organic growth and growth through acquisition.

Smooth Migration

- + Backward compatibility with existing applications;
- + Automated tooling is provided to migrate bank data;
- + Customer data is greatly extended and enriched in BankFusion Universal Banking;
- + User-defined data can be mapped to extension tables;
- + No enforced account number change;
- + No size limitation on historic data.



To find out how Misys BankFusion can help you, please contact your Misys representative or visit www.misys.com/banking

'Misys' is a trade mark of Misys Plc, a mark registered in various countries worldwide. BankFusion Universal Banking is a trade mark of Misys International Banking Systems Limited and/or Misys group companies. All other product and company names may be trade marks of their respective owners.

Copyright © 2009 Misys Services Limited. All rights reserved.

Misys Services Limited is a member of the Misys group of companies.

Registered in England, No. 01941076 Registered Office:
One Kingdom Street, Paddington, London W2 6BL.