Integration technology

Make your business more agile and competitive with near-real-time event-based integration.
“Temenos’ Integration Framework enabled us to go live in 5 months when otherwise it would have taken 3 times longer. And, because we were able to launch so quickly without any issues, we have massively exceeded our business case.”

- Eric Muriuki Njagi - General Manager - New Business Ventures, Commercial Bank of Africa
What do our customers want and need?

- Fast and efficient integration between systems
- Near-real-time multi-channel banking 24/7
- Business agility
Market background

It is not uncommon for a mid-sized bank to solicit dozens of different systems in order to run its business operations. Even simple transactions require the involvement of more than one business system and, often, of more than one channel. For example, an investment order initiated on a customer’s mobile interface will be checked against constraints in the core banking system before proceeding. When a bank’s systems are integrated in the traditional rigid batch-based manner, the bank can face significant business challenges.

Typically, banks have relied on vendor-specialized experts to develop complex coded interfaces between all of their systems. This approach, called point-to-point integration, is complex, lengthy and very costly to undertake and to maintain over time. Most worryingly, it prevents the bank from integrating new business systems fast and cost-effectively to support evolving customer requirements. In other words, the bank lacks tactical and strategic agility.

The second issue with traditional point-to-point integration is that it is more difficult to support real-time business across multiple channels. Instead, integration is usually done via cumbersome end-of-day batches. In addition to bearing costs and risks, batch-based integration causes some channels to show out-of-date information - a daunting competitive disadvantage in the era of digital banking.

Thirdly, point-to-point integration is not suited for the era of cloud computing because it makes the bank’s internal systems dependent on the performance and availability of cloud-based applications. This exposes the bank to problems beyond its control – a risk no bank should be willing to take.

Finally, traditional integration limits the scalability of the bank. When too many interfaces solicit one system at the same time (for a particular business transaction to be performed), it can no longer perform its duties at the speed expected by the business and by its customers. The problem gets worse as the volume of business transactions increases.
Value proposition

The Integration Framework and products make banks more agile by enabling them to integrate systems much faster and more cost-efficiently, as well as more competitive and profitable by enabling near-real-time, highly scalable, self-assisted and multi-channel banking 24/7.
Business benefits

Temenos’ Integration offering makes the bank much more agile, competitive and profitable. Ultimately, it enables the bank to offer a superior customer experience, one that is much timelier as well as more attuned to evolving customer needs, even when business volumes are growing fast.

The bank can easily stay apace with evolving customer requirements as it is able to integrate any system, whether in-house or third-party, with its Core Banking system much faster and more cost-efficiently than before. Design Studio for Integration Events’ intuitive graphical environment lets the bank determine through simple configuration what data should leave the Core Banking system (and when) and make it available in a standard format. The principal business benefit here is agility.

The bank is also able to provide its customers with a truly near-real-time multi-channel banking experience. When deployed as part of the Integration Framework, Design Studio for Integration Events lets the bank exploit event-based messaging to transmit changes to other systems in near-real-time. The bank no longer faces the time lags, risks and costs of end-of-day batch processing, notably multinational banks where central end-of-day processing affects business performance in other time zones. This approach also enables the bank to exploit innovative cloud-based applications in a risk-free manner. The principal business benefit here is competitiveness.

Thirdly, the Integration products significantly reduce the cost of integration over time. Because the bank can exploit commodity skills (instead of vendor-specialized experts) to perform integration through configuration, it eliminates the cost and risk of lengthy development, testing and maintenance cycles. Also, because the bank's systems are no longer solicited by multiple interfaces at once, the banking platform is much more scalable. The principal business benefit here is profitability.

The bank can achieve these benefits in very little time and very cost-efficiently. The products are easy to deploy and to run, causing no disruption to day-to-day business and generating near-immediate business returns.
Why customers use it

Agility: integrate any system rapidly and cost-efficiently

Competitiveness: provide near-real-time multi-channel banking 24/7

Profitability: reduce the cost of performing and maintaining integration

Scalability: performance of integrated services preserved as business grows
**Products and key features**

- Design Studio for Integration Events
- ESB adapters
- The Integration Framework
Integration Framework
Enable event-based, near-real-time, asynchronous integration

The Integration Framework is not a product, but an architecture in which the bank exploits Design Studio for Integration Events in combination with standard third-party middleware (e.g. ESB that the bank may have), industry-standard messages and formats, as well as commodity skills (that the bank already employs). Implementing the Integration Framework enables the bank to have event-based, near-real-time, asynchronous integration between its systems.

Features:
- Exploits standard event message formats and descriptions to support easy integration between the Core Banking system and other systems
- Leaves the bank the choice between:
  - leveraging an ESB for message routing and transformation
  - exploiting a service in the Core Banking system that pushes messages out to messaging middleware such as Java Message Service or IBM WebSphere MQ
- ESB adapters
  - Leverage your ESB’s design-time tools to perform transformation and routing
  - The adapters are of interest to banks which choose to exploit an Enterprise Service Bus (ESB) in their implementation of the Integration Framework. Note that banks can deploy the Integration Framework without an ESB. The adapter enables the bank’s commodity specialists to use the ESB’s design-time environment to perform routing and transformation work on messages coming from Temenos’ Core Banking system.
  - Temenos provides ESB adapters for:
    - IBM Integration Bus
    - Oracle Service Bus
    - TIBCO BusinessWorks
    - Microsoft BizTalk
    - Fiorano ESB
    - Others upon demand

Integration technology

Design Studio for Integration Events
Easily configure near-real-time event-based integration messages

This product provides an intuitive graphical environment that helps the bank easily configure what data should leave the bank’s Core Banking system and when (when a given business event/transaction occurs). Because this is achieved through intuitive, form-based configuration (i.e. no coding), it can be undertaken by business analysts and integrators who do not have vendor-specialized skills.

Features:
- Eclipse-based Integrated Development Environment (IDE), readily usable by commodity specialists
- Enables the bank to create events, create flows, and deploy events and flows to Core Banking
- Facilitates updates by separating binary and data update processes
- Message files and descriptions (schemas) automatically created by Design Studio
- Leverages standard version-control (SCM) software

ESB adapters

Leverage your ESB’s design-time tools to perform transformation and routing

Address these business challenges:
Lack of tactical and strategic agility
Time and cost of integrating new systems
Cost of maintaining point-to-point interfaces
Out-of-date data across channels
Inability to safely leverage cloud-based resources
Limited scalability
The Integration Framework - how it works

**Integration Framework: design-time**

1. **Browse** the Core Banking system for things that can trigger events
2. **Define** integration events and message formats
3. **Deploy** the events and messages to the Core Banking system
4. **Fetch** schemas (XSDs) generated by the Core Banking system
5. **Store** integration project in a SCM (optional)

**Integration Framework: run-time**

1. Message is triggered when Core Banking transaction is committed
   2a. ESB adapter collects messages emitted from Core Banking
   2b. If bank has no ESB, Core Banking "push service" pushes out messages to middleware
3a. Events routed and transformed by ESB to match format expected by the other systems
3b. Events routed and transformed (using other means)
Benefits summary and proof points

Agility

Competitiveness

Profitability

3x times faster integration of systems powering CBA’s M-Shwari mobile bank

“Most Innovative Use of Technology”
Banking Technology 2014 award

“Model Bank of the Year”
Celent 2014 award

Summary

By enabling fast and easy integration with any system as well as near-real-time multi-channel banking 24/7, Temenos’ Integration offering will make your bank much more agile, competitive and profitable.

Next steps

To hear more about our Integration offering, contact us at sales@temenos.com

Temenos Group AG (SIX: TEMN), headquartered in Geneva, is a market leading software provider, partnering with banks and other financial institutions to transform their businesses and stay ahead of a changing marketplace. Over 2,000 firms across the globe, including 38 of the top 50 banks, rely on Temenos to process the daily transactions of more than 500 million banking customers. Temenos customers are proven to be more profitable than their peers: in the period 2008-2014, they enjoyed on average a 31% higher return on assets, a 36% higher return on equity and an 8.6 percentage point lower cost/income ratio than banks running legacy applications.

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