Building the future of banking services

Bank Case Studies Webinar by Credit Suisse and Scotiabank

October 16, 2013
Hans Tesselaar / Claus Hagen / Janette Wong / Dave Banko
Bank Case Studies Webinar by Credit Suisse and Scotiabank  Webinar

Agenda

- BIAN Introduction
- Case Study Credit Suisse
- Case Study Scotiabank
- BIAN The Organization
- How to Become a Member?
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A Warm Welcome to YOU – Dialing in From:
BIAN’s Mission

Central objectives for IT in the banking industry are the reduction of integration costs and the utilization of the advantages of a service oriented architecture (SOA). BIAN is defining a common yet exceedingly flexible SOA framework for the banking industry with the goal of establishing a common language.

Based on broad consensus within the banking industry, this will enable faster, more efficient strategic and operational changes in banks while helping banks to address the key market imperative to drive cost reductions through greater efficiency and organizational flexibility.

BIAN is a global, open, independent and unique community where banks, software providers and system integrators openly exchange Banking IT requirements with regard to SOA.
BIAN Vision

**Today**

BIAN envisions a SOA-enabled banking industry with both internal and industry-wide agility and flexibility. BIAN supports banks to define their internal services based on industry collaboration and best practices.

**2014**

Banks are enabled to develop their semantic service definitions on a consistent basis through BIAN to enable internal and commercial SOA-based solutions according to a standardized industry model.
BIAN key points

- **Distinct application to application (A2A) focus**, which complements the business-to-business (B2B) focus of IFX and SWIFT.

- **Total focus on semantic definitions** - technical definitions are excluded from official work products (helps to balance other industry efforts that, while not excluding semantics, have historically focused on technical specifications).

- BIAN, IFX, and the OMG Finance Domain Task Force recognize **ISO 20022 standard** and the SWIFT-administered ISO 20022 Repository key to keeping standards bodies in the finance sector aligned with one another.

- **Service-oriented**, whereas IFX, SWIFT, and ISO 20022 are message-oriented.

- **UML is a foundational technology**, heavily used in the financial services industry.
SL 1.6
17 Service Domains defined
Revised / simplified “How to Guide”
Metamodel Aligned

SL 2.0
Total of 63 Service Domains defined
Metamodel Aligned
All deliverables available in HTML and UML

SL 2.5
Total of 100 Service Domains defined
Metamodel Aligned
All deliverables available in HTML and UML

SL 3.0
Total of 203 Service Domains defined (All bank functionality)
Banking Domains Completed
Metamodel Aligned
Results of new Working Groups in the Business Support Area
New Set-up of the “How to Guide”

SL 4.0
All 262 Service Domains fully defined
All Business Domains defined
Metamodel Aligned
If applicable Object Model based on all Focus Object will be available (not an agreed deliverable yet)
BIAN moves from “Development Mode” to “Maintenance Mode”

NEW

All Banking Functionalities Defined
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Leveraging BIAN at Credit Suisse
A Case Study

Claus Hagen
Credit Suisse
An integrated global bank

Founded in 1856 with headquarters in Zurich, Switzerland, Credit Suisse combines its expertise in:

- Private Banking & Wealth Management
- Investment Banking

Integrated bank offering clients advisory services and customized products
Strong senior credit ratings (Credit Suisse AG):

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- Over 530 offices and 22 booking centers located in over 50 countries
- 46,300 employees (approximately 60% outside Switzerland)
- Assets under management: CHF 1,297 billion
SOA is Everywhere in Credit Suisse

- **Credit Suisse Information Bus** -> SOA for the private bank, since 1998, with 1300 services implemented
- **Front-to-back integration** -> Data quality through well-defined interfaces
- **BIAN** -> Market-wide service standardization
- **E-Commerce portal, Global Front Systems** -> Desktop Integration
- **Financial Messaging Hubs** -> Standardized message formats (SWIFT, ISO 20022, FPML, …) link internal and external applications
- **Reference data distribution** -> Consistent reference data across the application landscape
- **Swiss platform renewal** -> Replicated services for resilience and performance
- **Data Warehouse** -> Managed bulk services feed data into warehouses
Governance Interface Management System

- Searchable Service Catalog
- Data type repository with UM/WSDL integration
- Governance workflows
- Lifecycle management
- Extensible code generator (MDA)
- Integration with other tools, like application repository or accounting
Credit Suisse was a founding member of BIAN because of an important strategic vision:

- SOA benefits today materialize primarily in "build" projects, where we can design the services according to our standards.

- In "buy" projects, we still face the problem of proprietary semantics in the service layers of standard applications. The high cost of integration projects is often due to the semantic integration of the packages.

- If the BIAN vision becomes true, we will have semantic standards for banking packages which will allow to reduce the integration costs dramatically.

- The vision in this respect would be a "BIAN approved" status for software packages ensuring that a package conforms to the BIAN standards and promising easier integration than is the case today.
How we benefit from BIAN

- Long-Term, standardized interfaces of software packages will lower integration costs

- The BIAN service landscape serves as a reference which can be used to validate our proprietary IT and business architecture models

- By having our domain architects participate in BIAN working groups, they gain insight on industry best practices which benefit our change projects

- The SOA discovery and design methodology established by BIAN helps to start new SOA initiatives even in areas which are not finance focussed.
BIAN Service Landscape
Reference for validating our architecture models

- Given that we started early, Credit Suisse has its own models for describing its architecture
  - Business Capability Model
  - IT Domain Model

- The BIAN service landscape has reached a degree of completeness and maturity which allows us to use it as a reference

- Example:
  - Our Business Capability Model (BCM) was not designed with SOA in mind. It is difficult to use it as a starting point for service discovery and as a framework for managing the services.

  - We used the BIAN service landscape with its SOA-focussed structure to identify necessary changes allowing to use the BCM for SOA service management
BIAN SOA method
«Cookbook» for defining your SOA

The methodology behind the service landscape which is used by the BIAN service design working groups, has turned out to be an asset in itself.

Example: In a project with our infrastructure department, we helped to define a service oriented architecture for infrastructure ordering and deployment.

We were able to use the BIAN methodology to help the project design their own service landscape and consequently design and implement the necessary services for straight-through infrastructure delivery.
BIAN working groups
Benefit from aggregated expertise

The BIAN working groups consist of subject matter experts from various banks, software houses, and system integrators.

We try to benefit from this expertise in areas where we have architectural challenges to solve. By sending our own architects to the BIAN working groups, they can understand what others are doing in these areas and also discuss their own ideas with a knowledgable community.

Example:
- Multi-year participation of our Customer Data architect in the BIAN «Party» working group since we had a major reengineering initiative of our customer data system
- Participation of a senior architect in the investment banking working group since we have an initiative to streamline the complex data flows from front to back in the trading space.
Experiences with BIAN
5 years of development deliver results

- After more than 5 years of work, BIAN deliverables are on a level of maturity where we can use them in our bank.

- The biggest benefit still comes from direct participation in the working groups...

- ...but we are able to more and more use the BIAN assets internally, even though we have an established and elaborate architecture framework in the bank.

- Maturity of BIAN assets will increase steadily.
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Scotiabank – BIAN Use Cases

Janette Wong, Enterprise Architect
Enterprise Architecture & Consulting, Scotiabank, Canada
Classify SOA Services – 1

- Scotiabank has a SOA Services Repository

- Repository contains development time meta-data of SOA Services
  - Name
  - Description
  - Interface
  - Schemas
  - Classification
  - Compliance-related attributes

- Service Landscape used as the main functional classification scheme for the SOA Services
Classify SOA Services – 2

Name: Credit Adjudication Service
Version: 1.0
Examples: 1.0 or 1.1
Community: SOA Services Community
Type: SOA Service
Short description:
Organization:
Technology Owner:
Primary Technology Contact:
Secondary Technology Contact:
Service Specification:

Add user...
Add user...
Add link...
Classify SOA Services – 3

Expand the tree on the left to select from the available categories. The applied categories appear in the pane on the right.

Available categories:

- BIAN Service Domain
  - Reference Data
  - Sales and Service
  - Operations and Execution
  - Analytics
  - Business Support
- SOA Service Technical Nature

Applied categorizations:

- Fulfillment of the range of secured/collateralized consumer loan products.
Classify SOA Services – 4

- Service Landscape provides an open standard of the SOA building blocks of banking services
  - Carefully analyzed and designed
  - Vendor-independent
  - Comprehensive

- Enables consistent classification (at least in terms of categories available)

- Consistent terminology – looking forward to BIAN business vocabulary

- First step toward identifying gaps and overlaps
Organize Interfaces for Application “Wrapper” - a potential use case

- Use Service Domains to organize interfaces

- Purchased vendor application to provide some banking capabilities

- Developed internal “wrapper” to encapsulate the vendor application

- Service Domains used to organize the interfaces and operations provided by the “wrapper”

- Without the Service Domains, easy to overlook where flexibility (partitioning) is required
Identify Stakeholders & Viewpoints for Roadmap – 1 - a potential use case

- Use Service Domains to identify the different viewpoints and stakeholders of key business information (reference data) when developing a solution roadmap.

- Key reference data dispersed among multiple repositories – need consolidation and a unified approach.

- Traditionally, tried to understand the existing “applications” that own and manage the key reference data and amalgamate the applications (resolve gaps, overlaps, etc.). This approach somewhat maintains the status quo; may miss bigger opportunities for improvements.
Identify Stakeholders & Viewpoints for Roadmap – 2 - a potential use case

- Instead, identified the list of Service Domains which use the key reference data and ...
  - their viewpoints (i.e. historical, contractual, financial, behavioral, analytical…)
  - their data requirements (key attributes and relationships, data quality)

- Cross-check the list of Service Domains with the list of stakeholders:
  - Do they match?
  - Are there viewpoints with no current stakeholders?

- Leverage the list of Service Domains to ensure we have sufficient coverage in terms of stakeholders, scenarios, requirements
Participate in BIAN Working Groups

- BIAN Working Groups comprise SMEs and people with shared interests

- Collaboration and networking provide opportunities to gain insight and fresh viewpoints – think outside of the box

- Part of professional growth and continuous learning
Summary

- 3 years of BIAN membership

- Convinced of the value of the SOA Conceptual/Logical Framework that BIAN is standardizing and delivering

- Becoming an international standard is a journey fraught with challenges

- Direct participation is key to getting benefits in the near term

- Looking forward to more BIAN outputs – both volume and maturity
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The BIAN Organization

- General Assembly
- Board of Directors
- Executive Director
- Architecture Committee
- Advisors
- Strategy Advisory Group
- Communications Group
- Secretariat
- Quality Assurance
- Standardization Group
  - Service Definition WG Analytics
  - Service Definition WG Party
  - Service Definition WG Payments
  - Design Authority
  - Service Landscape
- Architecture Framework & Foundation
- Business Vocabulary
- SD WG Investments & Trading
  - Service Definition WG Lending
  - Service Definition WG Channels
  - SD WG Product & Pricing
- Domain Experts
  - Finance & Accounting
  - Wealth Management
  - Retail Banking & Consumer
  - Corporate Banking Products
  - Card Products
  - Trade Finance Products
  - Back Office
  - Sales & Services
  - Business Operations
  - Business Development

New Working Groups

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BIAN Board of Directors

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BIAN’s Internal Wiki and Official Homepage
Intellectual Property

- BIAN Intellectual property policy
- WG membership triggers IPR Policy
- Members surrender IP on contributions to WG’s
- Members warrant that all WG contributions are their IPR
- BIAN deliverables are royalty free

Fees (annual membership)

**Software / Tech vendors / Integrators**
- (250 employees or more)
- EUR 30.000,- / $ 40,000.=*

**Banks / FI’s that are not vendors**
- EUR 20.000,- / $ 27,000.=*

**Software / Tech vendors / Integrators**
- (less than 250 employees)
- EUR 10.000,- / $ 13,500.=*

**Federal Banks / Central Banks**
- EUR 10.000,- / $ 13,500.=*

**Academic Partners**
- EUR 0,-

* Depending on the exchange rate
### Engagement Level 1: Membership and Limited Engagement

- Member contributing membership fee to support funding of third party resources
- Access to BIAN internal wiki, including work in progress (e.g. documents currently under review)
- Engagement limited to participation in physical BIAN Core Team Meetings
- **Next event: March 26 - 28, 2014 at SWIFT, New York City**

### Engagement Level 2: Participation in (virtual) Reviews

- See above – in addition:
- Participation in Document reviews – Contribution to Quality Assurance
  - Virtual or physical review sessions with other subject matter experts
  - Recently finalized documents prior to final approval and publication

### Engagement Level 3: Active Contribution

- See above – in addition:
- Active engagement in 1 Service Definition Working Group / 1 Architecture Working, for example:
  - Service Definition Group: WG Business Partner or Lending
  - Architecture: Service Landscape (alternatively: Architecture Framework and Foundation)

### Financial and Marketing Support
- In addition approx. 2 PDs*) per expert review: Prep., guidelines, review)

### Membership and Limited Engagement
- 6-9 PDs*) per member representative per year

### Guidance through Participation in Reviews
- Active engagement in area relevant to Member
- In addition approx. 20 PDs*) per working group per year (mainly virtual collaboration)
- *) PDs = Person Days
Opportunity to schedule a meeting with Hans Tesselaar, BIAN Executive Director, and Guy Rackham, Lead Architect at BIAN, and/or meet the BIAN team and community.

- **Singapore**
  - November 19 – 22, 2013

- **BIAN Executive Summit in Bangkok** hosted by BIAN member Bangkok Bank
  - November 26 & 27, 2013

- **BIAN Introduction Day in New York** hosted by BIAN member SWIFT
  - March 25, 2014

If you are interested in schedule a meeting or join one of the events, please drop us a note: info@bian.org
Questions?