

ZAPTHINK ZAPNOTE™

INTERACTIVE FINANCIAL EXCHANGE (IFX) AN XML-BASED FINANCIAL EXCHANGE SPECIFICATION

Briefing Date: October 2001

Analyst: Ronald Schmelzer

Abstract

Financial services and related industries are some of the largest consumers of information and data in the world. Standardization of transactions (message sets) allows financial organizations to more easily acquire customers for online banking and financial services, retain flexibility in their choice of technology vendors and suppliers, more easily manage their portfolio of service, and greatly reduce cost of product development and integration. The IFX Specification allows financial institutions and associated service providers to access account information, download credit card statements, transfer funds, process consumer and business payments, enable bill presentment, and improve customer service. The specification supports a broad range of client devices, including Web browser access, direct support within financial software packages, Voice Response Units (VRUs) that provide Bank by Phone services, Automated Teller Machines (ATMs), handheld devices, and mobile phones with data capabilities.

All Contents Copyright © 2001-2002 ZapThink, LLC. All rights reserved. Reproduction of this publication in any form without prior written permission is forbidden. The information contained herein has been obtained from sources believed to be reliable. ZapThink disclaims all warranties as to the accuracy, completeness or adequacy of such information. ZapThink shall have no liability for errors, omissions or inadequacies in the information contained herein or for interpretations thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice. All trademarks, service marks, and trade names are trademarked by their respective owners and ZapThink makes no claims to these names.



Standardizing Financial Transactions

Financial services and related industries are some of the largest consumers of information and data in the world. One can certainly argue that the only product that these companies have is the data itself. The exchange of banking, securities, and other monetary instruments has largely been an electronic-only process. These processes are enabled through the development and use of standards that help to connect and tie disparate organizations together for the purpose of conducting a financial transaction. Standardization of transactions (message sets) allows financial organizations to more easily acquire customers for online banking and financial services, retain flexibility in their choice of technology vendors and suppliers, more easily manage their portfolio of service, and greatly reduce cost of product development and integration.

However, standardization has been a difficult goal to achieve in the very large and diverse financial services sectors. A variety of different technologies and approaches have been applied to solve this problem to different levels of success. The advent of XML-based standardization efforts has brought a new, fresh approach to financial industry standardization. A typical scenario for an XML-based approach would entail an individual account holder who is banking from home via a secured public Internet connection to their financial institution. This situation is mirrored in scenarios that support communication not only between a Financial Institution and its customers, but also between a Financial Institution and its Service Providers, between Financial Institutions, and even directly between customers. To support these needs, a more complex and flexible specification is needed.

The Interactive Financial Exchange (IFX) Specification

The Interactive Financial Exchange (IFX) Specification was created to address this and other similar challenges in the financial services community. The specification was created by the IFX Forum under the management of the Data Interchange Standards Association (DISA) as a cooperative industry effort among major Financial Institutions, Service Providers, and industry-related software and services vendors. Built upon previous industry experience, notably the Open Financial Exchange (OFX) and the IBM/Integrion Gold specifications, the IFX Specification allows financial institutions and associated service providers to access account information, download credit card statements, transfer funds, process consumer and business payments, enable bill presentment, and improve customer service. The specification supports a broad range of client devices, such as any standard Web browser software, personal computers with personal financial manager (PFM) software, voice response units (VRUs) that provide bank by phone services, automated teller machines (ATMs), consumer handheld devices, or mobile telephones with data capabilities.

TAKE CREDIT FOR READING ZAPTHINK RESEARCH!



Thank you for reading ZapThink research! ZapThink is an IT market intelligence firm that provides trusted advice and critical insight into XML, Web Services, and Service Orientation. We provide our target audience of IT vendors, service providers and end-users a clear roadmap for standards-based, loosely coupled distributed computing – a vision of IT meeting the needs of the agile business.

Earn rewards for reading ZapThink research! Visit www.zapthink.com/credit and enter the code IFXSPEC. We'll reward you with ZapCredits that you can use to obtain free research, ZapGear, and more!

For more information about ZapThink products and services, please call us at +1-781-207-0203, or drop us an email at info@zapthink.com.

The specification consists of a two-part model consisting of a business-level Message Specification and its associated Data Dictionary, and implementation specifications. The Message Specification provides a common set of Business Messages that may be used to provide message-processing services across multiple organizations and networks. The format defines not only the specific elements and fields contained in business messages, but also provides message semantics for request and response pairs sent between communicating parties. The Implementation Specifications are agreements between vendors and the financial services industry on how to implement the specifics of Business Messages and provide for integration among products and services from different vendors.

The current version of the specification, version 1.2, contains functionality covering the following capabilities:

- Retrieval and query of bank account balances, account information, and statement download for deposit and loan accounts
- Download of credit card statements
- Funds transfers, including recurring transfers
- Individual and Recurring Consumer payments
- Individual and Recurring Business payments
- Bill presentment
- Account-related customer service

In order to be maximally flexible, IFX specifies the minimum functionality necessary to provide reliable interactions between systems owned and maintained by different users. As a result, users can add custom elements, aggregates, or entire messages to rapidly deploy new services or add functionality to existing services. Notably missing from the specification, IFX relies on industry standard mechanisms to provide secure channels between client and server. However, the specification does provide application-level authentication of customers and Financial Institution and Service Provider staff. The IFX Specification may be implemented using either batch or interactive session management, and incorporates significant features for international support, including multiple currencies, and languages.

The specification is intended to be used among banks, brokerage houses, financial service providers, small businesses, and consumers and is aimed at supporting a wide range of access methods including Web browser access, direct support within financial software packages, Voice Response Units (VRUs) that provide Bank by Phone services, Automated Teller Machines (ATMs), handheld devices, and mobile phones with data capabilities.

The IFX specification didn't actually start off as an XML-based effort, but rather as a business messaging specification for financial services 'components' that provided a means for financial service industry players to communicate. As a result, the core of the IFX specification allows for a robust and distributed network of service providers providing services to consumers. As XML became a viable solution for actually implementing these specifications, it became the primary means by which IFX could be put into practice. Much of the existing documentation for the standards are XML-centric, but if technology takes a different turn, the specification can be easily reworked.

Plans for version 1.3 of the specification, due to be released in Q2 2002, include an increased focus on consumer loan processing, focusing initially on consumer auto lending and student loans, and later addressing mortgages, lines of credit, and business lending. Other features under consideration are lockbox functionality for business banking. A major planned feature for the 2.0 release is support for Web Services standards.

IFX has specified its own transport, routing, and packaging layers for communication of business messages. The main reason for not leveraging a messaging protocol such as SOAP

or ebXML's TRP layer is due to the lack of maturity in these standards when IFX was first created. Now that these formats are starting to gain adoption, it is highly likely that IFX will support these transport methods.

The IFX Forum is made up of a consortium of industry leading financial institutions, service providers and software vendors. Membership to the IFX Forum is open to anyone interested in contributing to the development of open financial standards. The IFX Forum is currently organized into the following working groups: Architecture, Electronic Bill Presentment & Payment; Business Banking; Credit Application Processing; Insurance; and Aggregation.

Standards Adoption

While IFX has yet to be widely adopted, it is a major influence in the financial services industries. Current IFX members include Microsoft, CheckFree, Bank of America, Wells Fargo, Citigroup, and MasterCard International, among others. A number of these members are implementing IFX in different scenarios. One of the most prominent of these is Spectrum, a corporate entity formed by Chase Manhattan, First Union and Wells Fargo, which uses IFX as a router and switch for electronic bill payment, rather than using the competing CheckFree system. Siebel and IBM are currently selling bank teller applications that are IFX based. China Trust is using IFX corporate payments. In addition, Bank of America and SAP will use the IFX v1.2 specification for cash management and account reconciliation, through the mySAP.com portal.

Competition & Alternatives

IFX is not the only specification available to the financial industry for handling transactional communications. Some of their goals are being met by standards such as ebXML, ACORD, and OFX. The group feels that they are further along than these groups, especially ebXML. While ebXML has framework and methodology for business communication, they do not have the detail or experienced group required to put together the sophisticated financial exchange system proposed by IFX. IFX could, however, be a 'payload' for ebXML and utilize the format as a means to communicate between IFX-compliant parties.

There is also some overlap with the ACORD insurance format in the area of lending and payments. However, the difference is that ACORD is concerned mainly with insurance-specific transactions rather than financial transactions as a whole. In fact, the specification is using IFX for financial-specific transactions. Thus, there is a partnership and close alignment of goals between the two groups. There are also some prominent overlaps with the OFX format. The group hoped to 'retire' the OFX format in favor IFX, but there are still groups, notably including Intuit, who are still developing and using the format. Thus, there is a danger of OFX slowing IFX adoption.

In addition to the financial industry, a number of groups, including the Department of Education and The Open Philanthropy Exchange Forum have expressed clear interest in utilizing the IFX architectural framework and contributing to the Forum's XML message development.

Challenges & Future Trends / Directions

The key challenge for all XML-based formats and specifications is adoption. IFX has a good start in attracting influential users who are capable of deploying large-scale implementations. However, the group has yet to see widespread adoption. It is unclear how ebXML, Web Services, OFX, or other formats may compete with and impact the adoption of IFX. It is also unclear how tools and software vendors will support or continue to support the format as the market matures. Finally, it is important for IFX to continue to attract new members and solicit

implementations within the working groups, membership, as well as external 'non-interested' parties.

Key Conclusions & Recommendations

- IFX is a key specification for individuals, businesses, and organizations seeking an XML-based format for financial transaction and exchange.
- IFX should seek to push for increased adoption, liaison with other standards organizations, and alignment with Web Services technologies to assure future growth and longevity. In particular, the adoption of Web Services technologies will help to lower the bar to develop IFX clients and servers since users can take advantage of off-the-shelf components for routing, security, digital signatures. This also will allow the group to spend more time on core competencies rather than on technical underpinnings.
- Financial industry players should investigate IFX as it is one of the more influential standards to impact their space.

Profile: IFX	(October 2001)
Date Founded: 1997	
Specifications:	
• Interactive Financial Exchange (IFX)	
Chairman: Mark Tiggas (Wells Fargo)	
Members:	
ACORD, ALLTEL Information Services, Avolent, Bank of America, Bankers Assoc. of China, BITS, Business Logic Corporation, CheckFree Corporation, Citibank, N.A., Clarke American, Corillian Corporation, Credit Online, CUNA & Affiliates, Deutsche Bank, e-Bank, EDS, Fifth Third Bank, First Union, FISERV, FleetBoston Financial, Group 1 Software, HNC Software, Huntington National Bank, IBM, iPlanet, LendingTree, MasterCard, Metavante, Microsoft, NCR, NETdelivery, Princeton eCom, SAP, State Farm Insurance, Unisys, Wells Fargo, YourAccounts.com	
URL: www.ifxforum.org	
Contacts:	
Jim Shain jim.shain@alltel.com	
Julia O'Brien jobrien@ifxforum.org	
Mark Tiggas mark.tiggas@wellsfargo.com	

Related Research

- *XML in Financial Services* Report (ZTR-VI100)
- *Clareon* ZapNote (ZTZN-0236)
- *Fidesic* ZapNote (ZTZN-0183)
- *MISMO* ZapNote (ZTZN-0133)

About ZapThink, LLC

ZapThink is an IT market intelligence firm that provides trusted advice and critical insight into XML, Web Services, and Service Orientation. We provide our target audience of IT vendors, service providers and end-users a clear roadmap for standards-based, loosely coupled distributed computing – a vision of IT meeting the needs of the agile business.

ZapThink's role is to help companies understand these IT products and services in the context of SOAs and the vision of Service Orientation. ZapThink provides market intelligence to IT vendors who offer XML and Web Services-based products to help them understand their competitive landscape and how to communicate their value proposition to their customers within the context of Service Orientation, and lay out their product roadmaps for the coming wave of Service Orientation. ZapThink also provides implementation intelligence to IT users who are seeking guidance and clarity into how to assemble the available products and services into a coherent roadmap to Service Orientation. Finally, ZapThink provides demand intelligence to IT vendors and service providers who must understand the needs of IT users as they follow the roadmap to Service Orientation.

ZapThink's senior analysts are widely regarded as the "go to analysts" for XML, Web Services, and SOAs by vendors, end-users, and the press. They are in great demand as speakers, and have presented at conferences and industry events around the world. They are among the most quoted industry analysts in the IT industry.

ZapThink was founded in October 2000 and is headquartered in Waltham, Massachusetts. Its customers include Global 1000 firms, public sector organizations around the world, and many emerging businesses. ZapThink Analysts have years of experience in IT as well as research and analysis. Its analysts have previously been with such firms as IDC and ChannelWave, and have sat on the working group committees for standards bodies such as RosettaNet, UDDI, CPExchange, ebXML, EIDX, and CompTIA.

Call, email, or visit the ZapThink Web site to learn more about how ZapThink can help you to better understand how XML and Web Services impact your business or organization.

ZAPTHINK CONTACT:

ZapThink, LLC
11 Willow Street
Suite 200
Waltham, MA 02453
Phone: +1 (781) 207 0203
Fax: +1 (786) 524 3186
info@zapthink.com