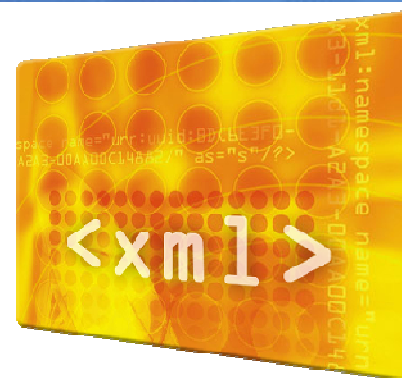




DB2 pureXML Briefing

29 Aug 2008



XML is the language of business data

Flexible, Simple, Efficient, Powerful

■ Flexibility

- Standard interchange format for many documents & messages

■ Simplicity

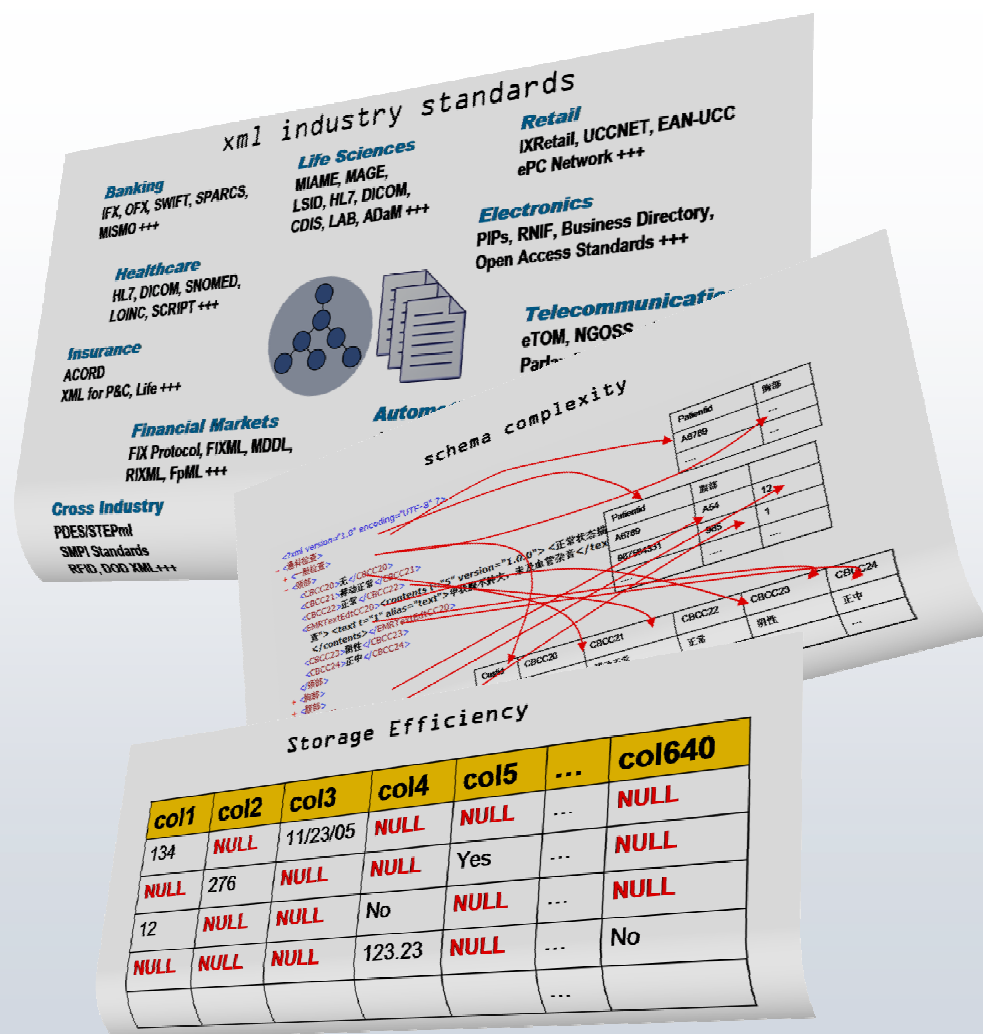
- Internals (the stored data) match externals (XML data that people already understand)
- One column and a few tables, instead of:
 - FpML Standard: 435 tables
 - Electronic medical record: 1,000 tables
 - Tax form: 400,000 table mappings

■ Efficiency

- Tax forms: 75% wasted space in relational
- Document integrity

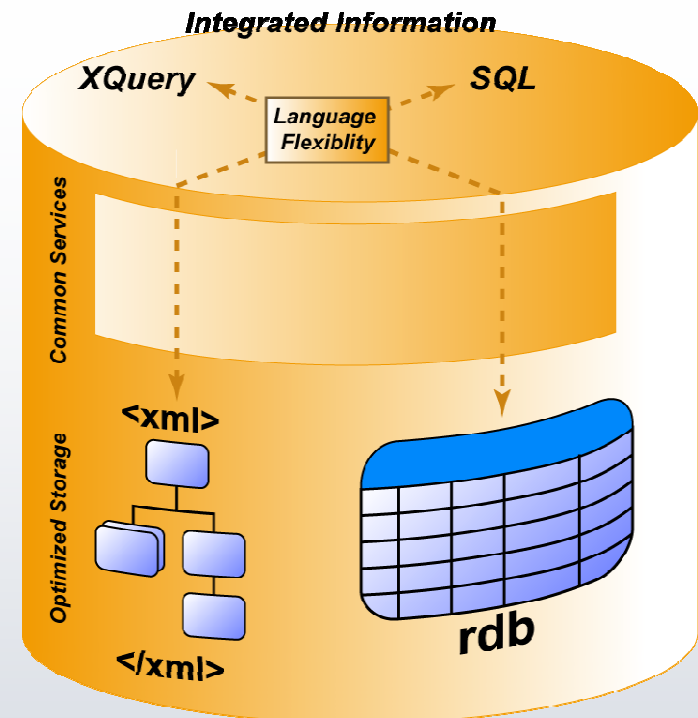
■ Power

- Structured Fields, Rich Content
- Hierarchical Relationships



DB2 pureXML™ preserves the value of XML

- ❑ XML stored in a parsed hierarchical format
- ❑ No fixed XML schema required
- ❑ Schema validation optional
- ❑ Indexing for specific elements/attributes
- ❑ Text search via NSE or OmniFind
- ❑ XQuery, XPath, SQL interfaces
- ❑ Same interface for relational and XML data
- ❑ Proven data integrity, reliability, scalability, etc.



100x query performance improvements over "force fit" approaches
Up to 65% reduction in coding effort
True transactional performance

Trends

<trx
xml>

Transactional XML

<xml
form>

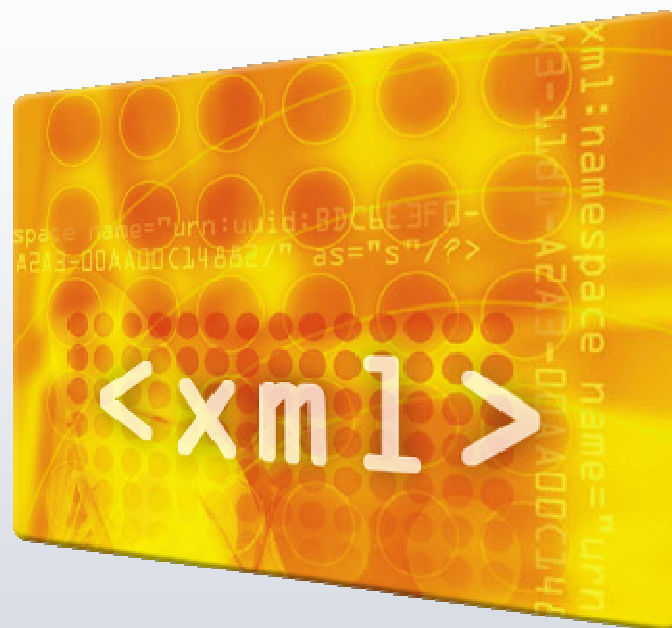
Forms Oriented Information

<xml
cache>

Service Bus Acceleration

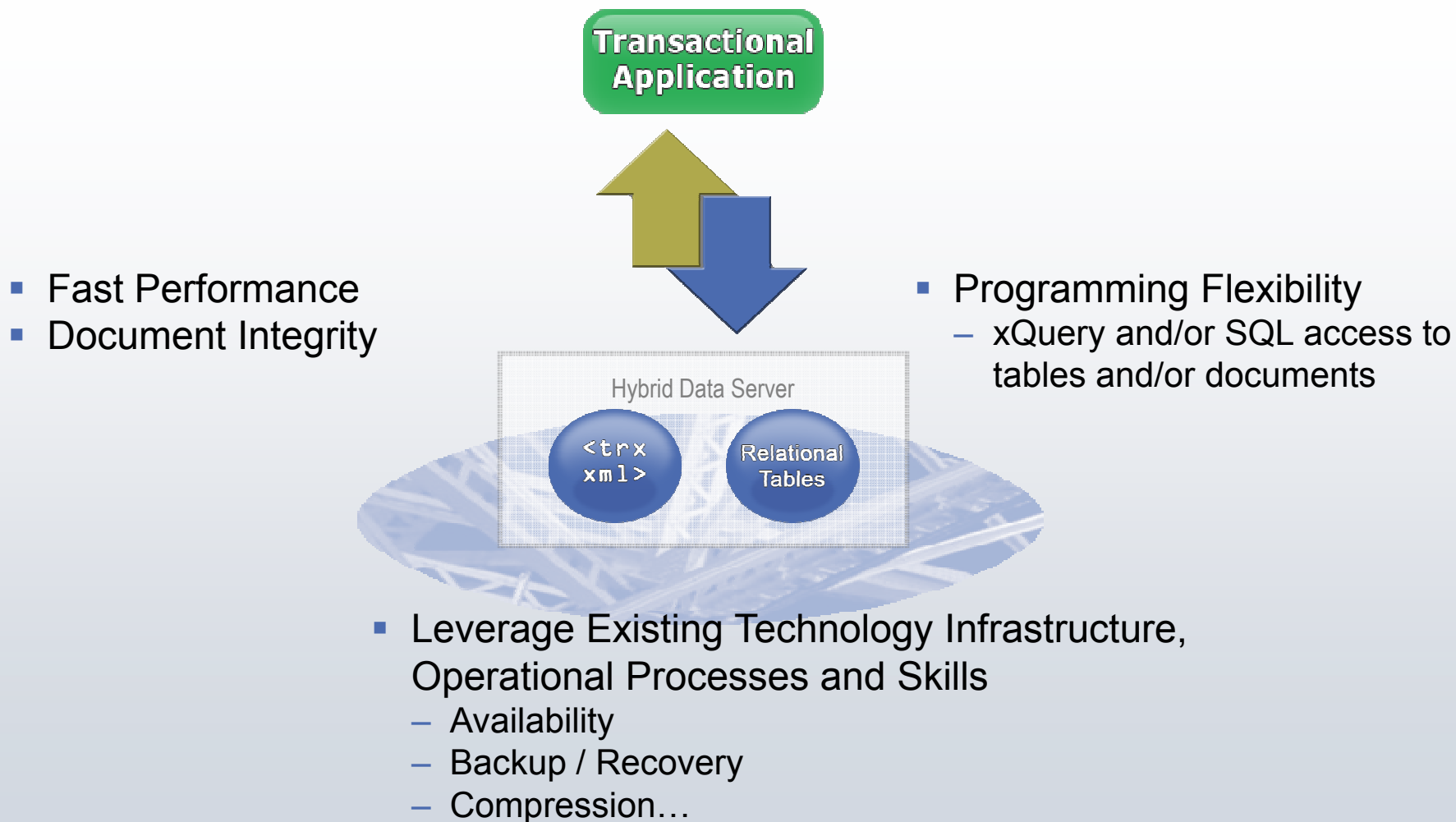
<xml
staging>

Event-driven Data Warehouses



More than half of all pureXML users are first time DB2 customers

Transactional XML





Business Benefits

- Simplified data access
- Increased system flexibility
- Lowered cost
- Improved patient data accessibility
- Minimized storage requirements



Business Challenge

Catholic Medical Center wanted to improve quality and timeliness of care by integrating its data on a centralized, flexible, highly-available platform.

Solution

- IBM DB2 9 with pureXML technology

Customer Quote

"Now that we can store XML data directly on our IBM DB2 9 data server, we have been able to streamline access to medical records and improve care to our patients. All while reducing storage costs with the deep compression feature."

*- Lee Hungu
Manager, Development Service Team
Catholic Medical Center*

Forms Oriented Business Information

Forms Application

- Tax Forms
- Applications
- Claims...

- Easy Modification
- Rich Semantic Expression
 - Hierarchies
 - Series...



<xml
form>

- Simple Schema Structure
- Document Integrity
- Efficient Storage Model



New York State Dept of Taxation and Finance

Business Benefits

- Reduced time and labor for updating tax policies and forms
- Decreased data management costs
- Simplified access to tax records
- Streamlined online tax filing



Business Challenge

New York State Tax needed to modernize its paper-based filing system within a flexible data model that would also accommodate regulation and form changes.

Solution

- IBM DB2 9 with pureXML technology

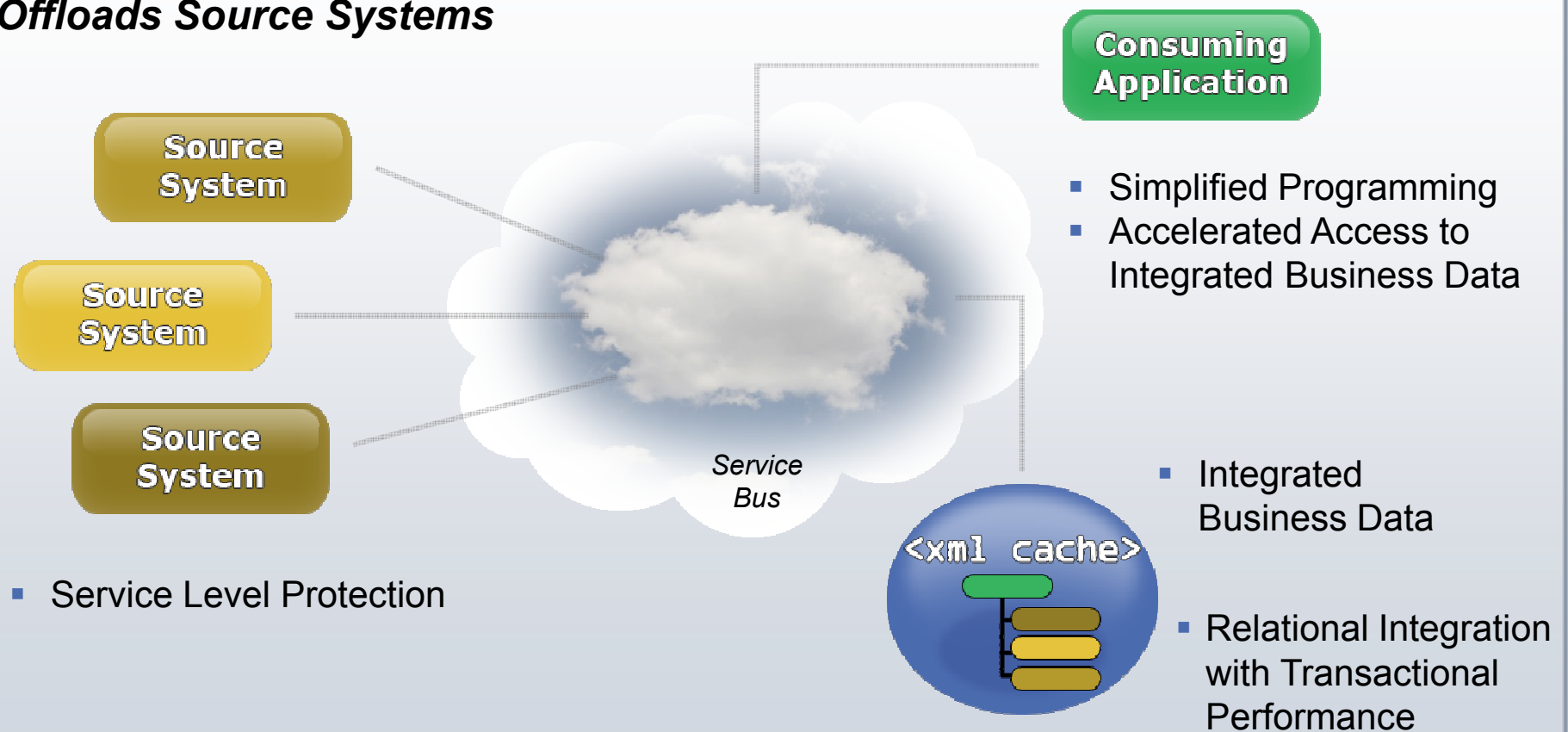
Customer Quote

“Through the use of XML data, we have more flexibility in defining new services and can more easily keep up with changing tax policies.”

— Jim Lieb
Director of Common Services
NYSDTF

Service Bus Acceleration

***Caching Eases Programming,
Accelerates Access and
Offloads Source Systems***



storebrand

Business Benefits

- Expanded capacity to serve five times more customers
- Accelerated time to market
- Reduced order-processing time
- Improved customer service, 24x7
- Increased productivity



Business Challenge

Storebrand, one of Norway's largest and oldest financial services companies, needed to make better decisions, improve business agility and improve customer service.

Solution

- IBM DB2 9 with pureXML technology
- IBM WebSphere

Customer Quote

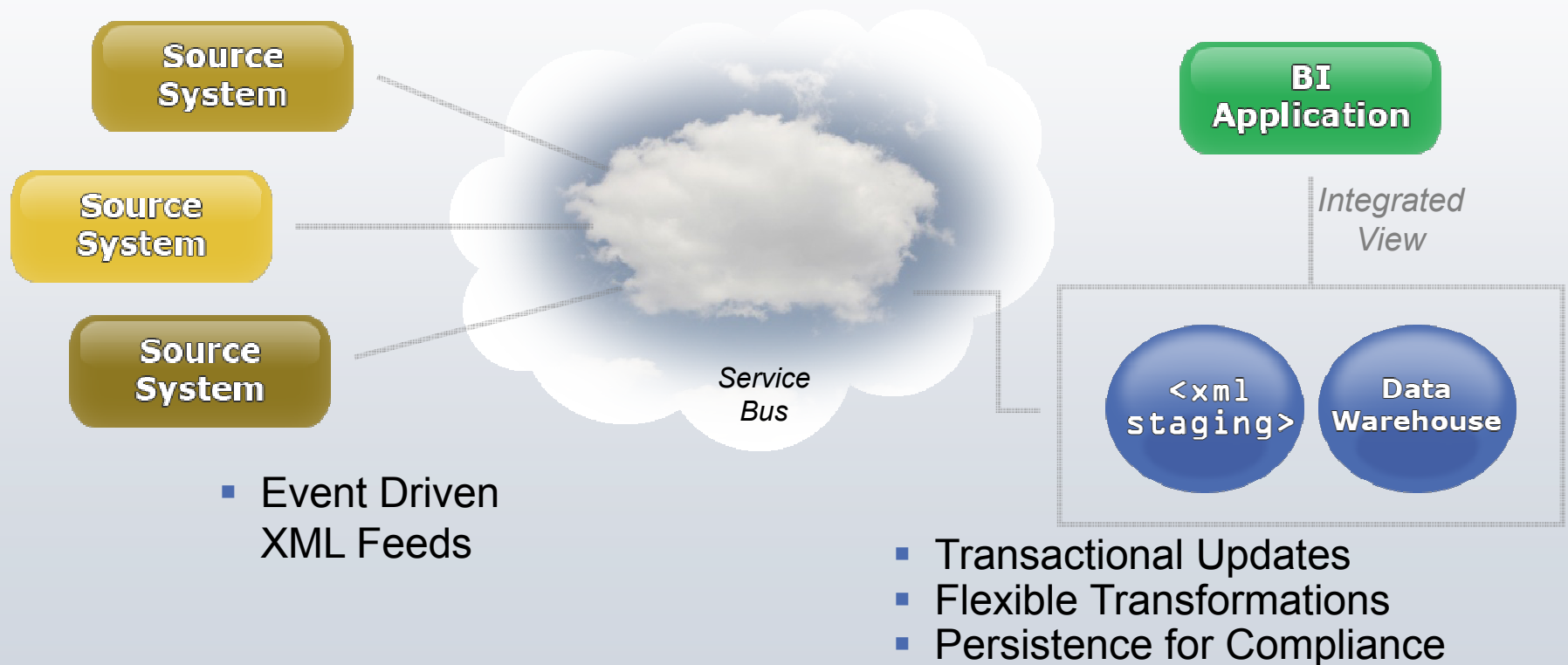
"Our development time using DB2 9 data server as our pureXML store is a radical improvement over existing XML shred technology. We are now able to make schema changes in minutes rather than days and will be able to dramatically improve our customer response time. In combination with our Service Oriented Architecture, DB2 9 can help us achieve, with far greater ease, our goal of using Information on Demand to readily respond to market changes and customer demand."

— Thore Thomassen
Senior Enterprise Architect
Storebrand Group

Event-driven Data Warehouse Feeds

Event-driven XML Feeds Accelerate Information Currency

- Immediate Information Access
- Improved Decisions



DOUGLAS HOLDING

Business Benefits

- Accelerated XML storage by eight times
- Improved accuracy of information
- Delivered time and cost savings
- Automated manual processes



Business Challenge

Douglas Holding, a retailer of perfumes, cosmetics and fashion accessories, wanted to cut down on data storage steps, making storage faster and more efficient.

Solution

- IBM DB2 9 with pureXML technology

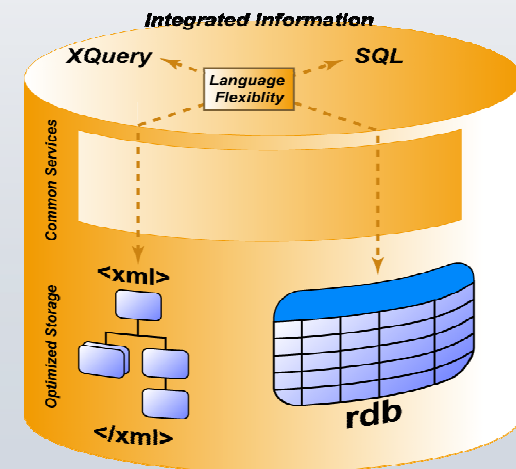
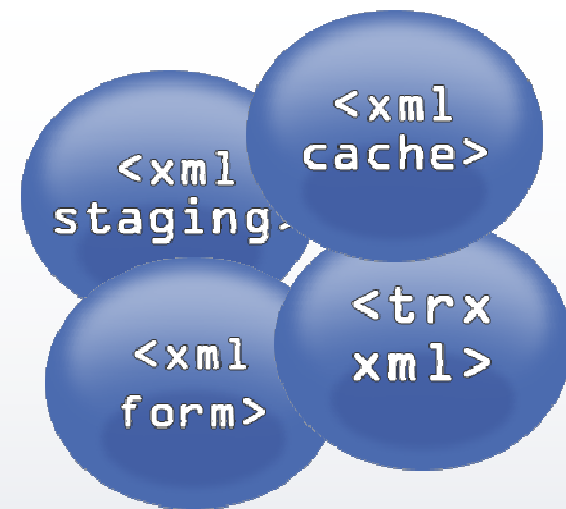
Customer Quote

"Using the XML support of the DB2 9 data server, we can maintain mass data and make it available to our business-critical applications very flexibly, right on time and with extremely high quality."

- Dr. Andreas Birkendorf
Team Leader, Data Logistics
DOUGLAS HOLDING AG

Summary

- ***XML is Pervasive***
 - Message & Metadata Interchange Standard
 - Technology Infrastructure
 - Skills
- ***Innovators define a new generation of business apps***
 - Service Bus Acceleration
 - Event-driven Data Warehouses
 - Forms Oriented Business Information
 - Transactional XML
- ***DB2 pureXML: Hybrid Data Services***
 - Integrated XML storage maximizes performance, ensures integrity, and minimizes cost
 - Query language flexibility provides programming ease for both XML & Relational
 - Common services minimize infrastructure costs and skill requirements
 - Industry-specific schemas speed implementation and reduce skill requirements



Resources

Download DB2 Express-C

<http://www.ibm.com/software/data/db2/express/download.html>

Download Working Demos for XML Industry Standards

<http://www.alphaworks.ibm.com/tech/purexml>

Redbook: DB2 9 pureXML Guide

<http://www.redbooks.ibm.com/abstracts/sg247315.html?Open>

Redbook: DB2 9: pureXML Overview and Fast Start

<http://www.redbooks.ibm.com/abstracts/sg247298.html?Open>

Video: Storebrand Group

<ftp://ftp.software.ibm.com/software/data/videos/storebrand/loader.html>

Flash Demo: pureXML Benefits

<http://www.ibm.com/software/data/db2/videos/purexml-benefits/>

Customers Page

<http://www-01.ibm.com/software/data/db2/customers/>

Wiki: Technical Articles

<http://www.ibm.com/developerworks/wikis/display/db2xml/Technical+Papers+and+Articles#TechnicalPapersandArticles-GettingStarted>

Wiki: News and Success Stories

<http://www.ibm.com/developerworks/wikis/display/db2xml/News>