

The Future of Data Management: Are We Ready?



Introducing DB2 10



Low Operational Costs

- Faster Query Response
- Improved Index Mgmt
- Adaptive Compression
- Multi-Temperature Data Management

Ease of Development

- Temporal Capabilities
- Row and Column Access Control
- SQL Compatibility enhancements
- NoSQL Graph Store

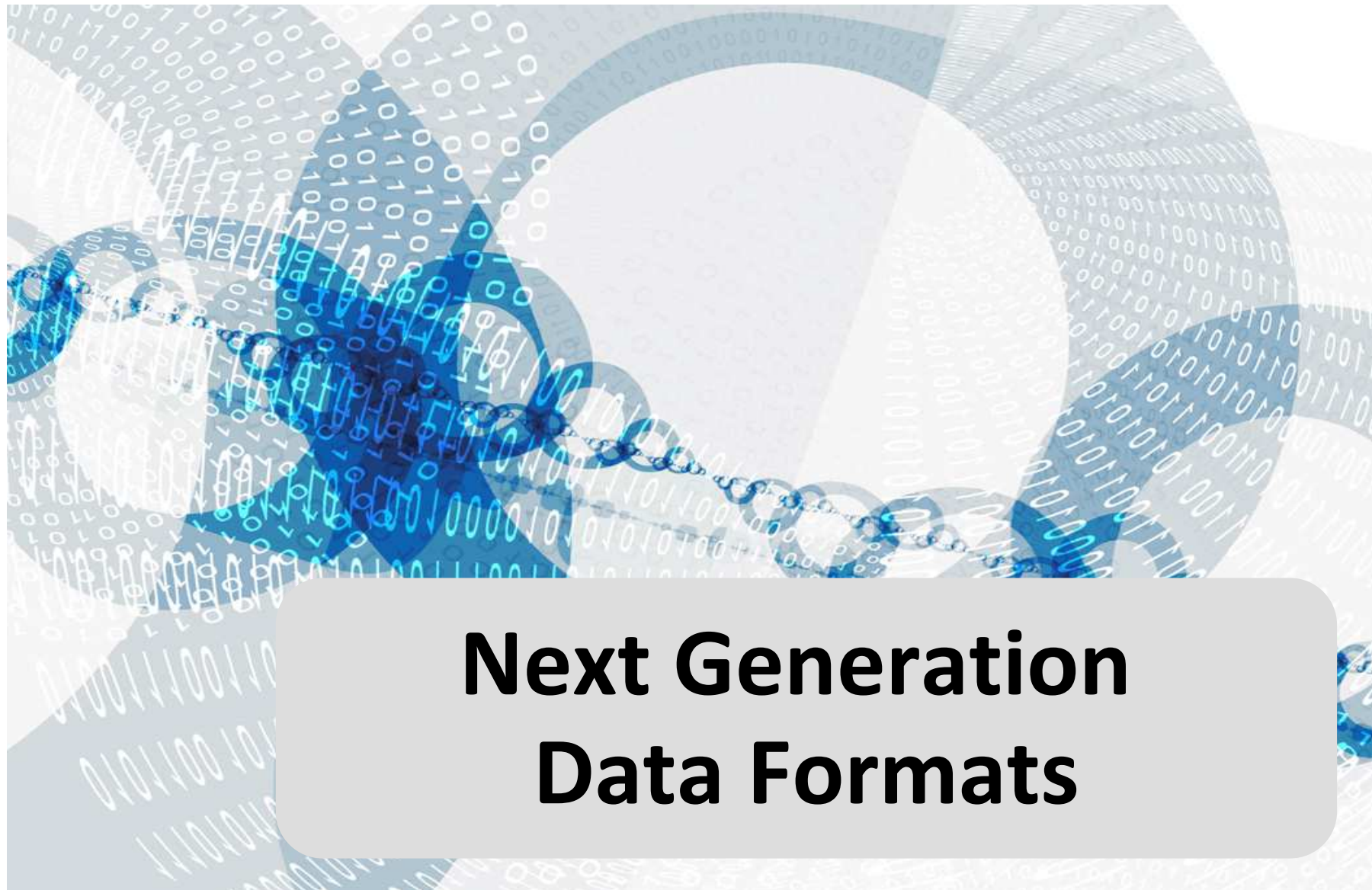
Reliability

- DB2 pureScale enhancements
- Workload Management Enhancements
- HADR Supports Multiple Standby Servers

Is your Data Management Environment Ready for...

- Next Generation Data formats
- Next Generation Administration
- Next Generation Performance
- Next Generation Migration





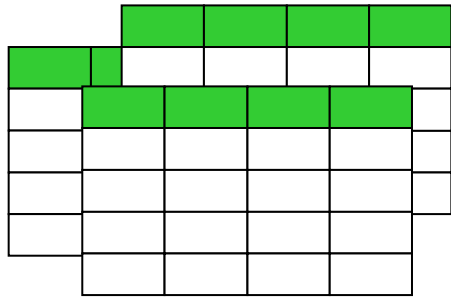
Next Generation Data Formats

DB2 supports multiple data formats...

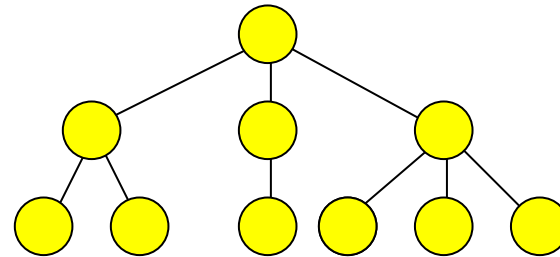


... providing you with the ultimate **flexibility**

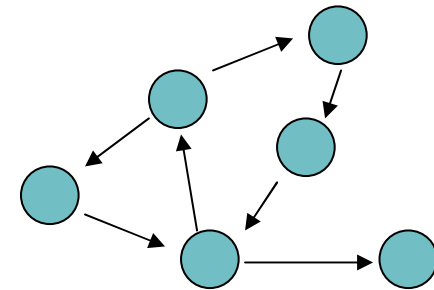
DB2 supports multiple data formats...



Relational Tables



Hierarchical XML

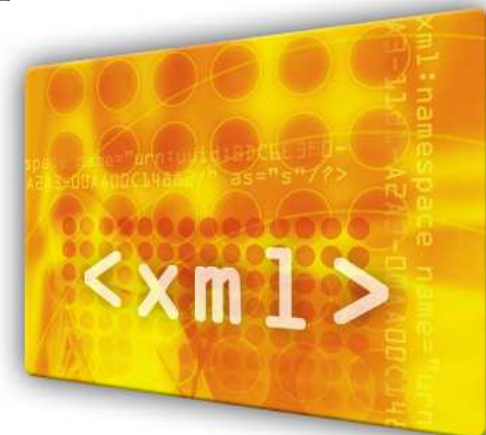
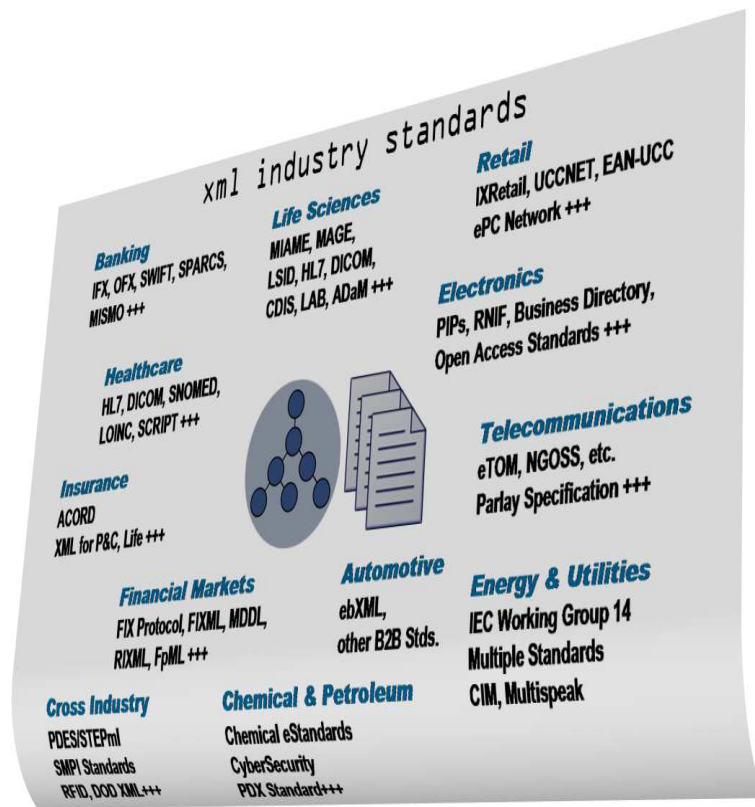


Graph RDF

Storage of **XML**
Data has **doubled** in
past 3 years

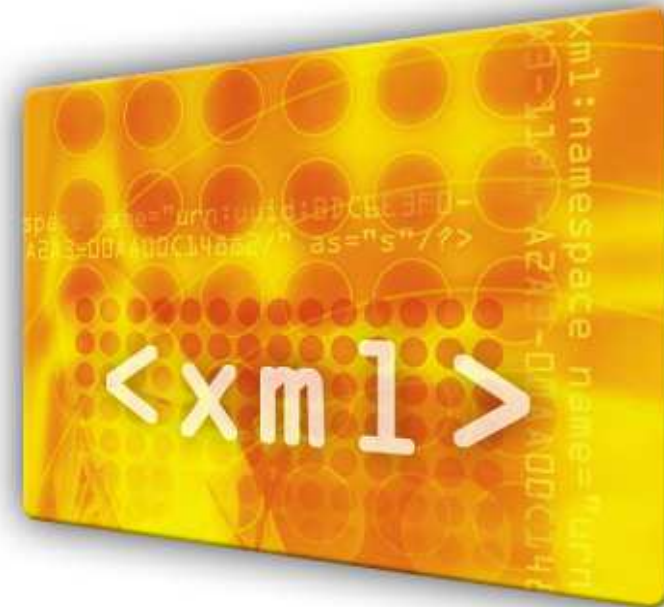
Unlike its RDBMS competitors, **DB2** added true **native** support for XML

“IBM is... taking a more holistic approach than its competitors to combine XML and relational systems.” — Forbes.com



Unlike its RDBMS competitors,
DB2 added
true **native** support for XML

“IBM is... taking a more holistic approach than its competitors to combine XML and relational systems.” —Forbes.com



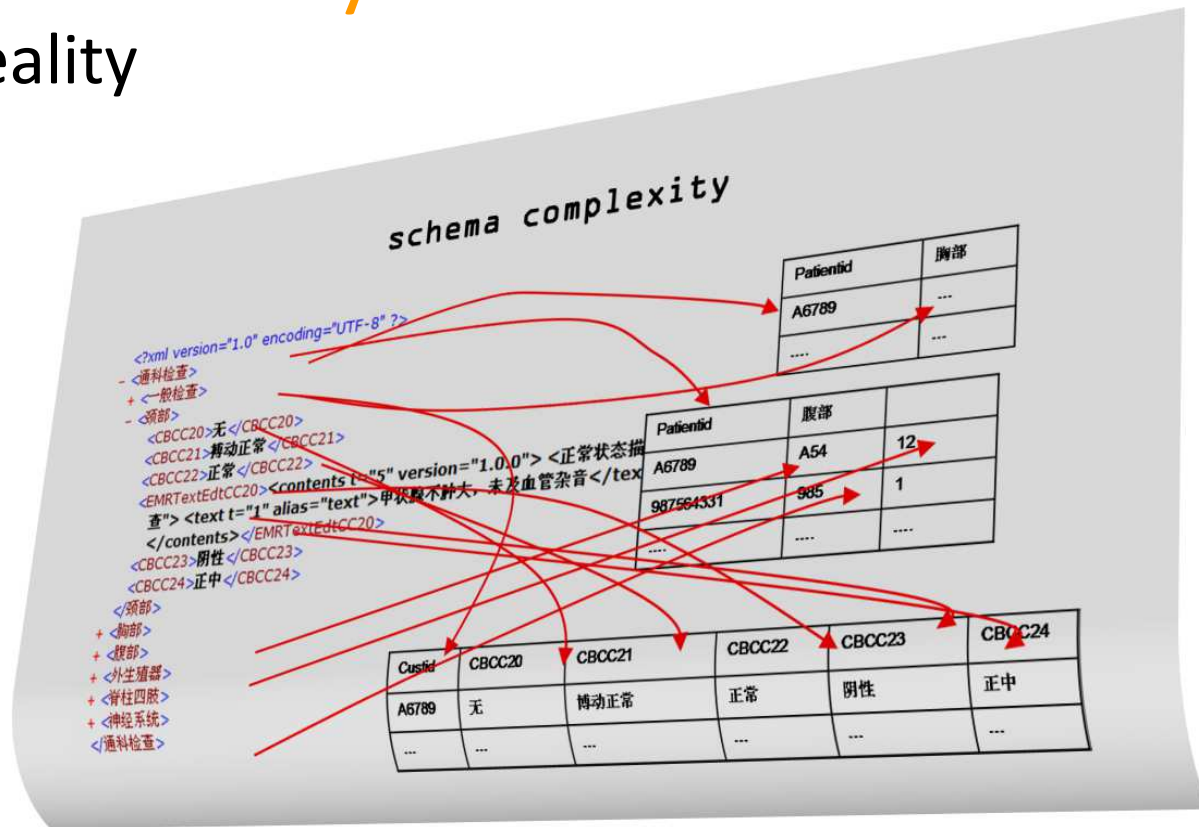
Major North American Bank...

Competitor

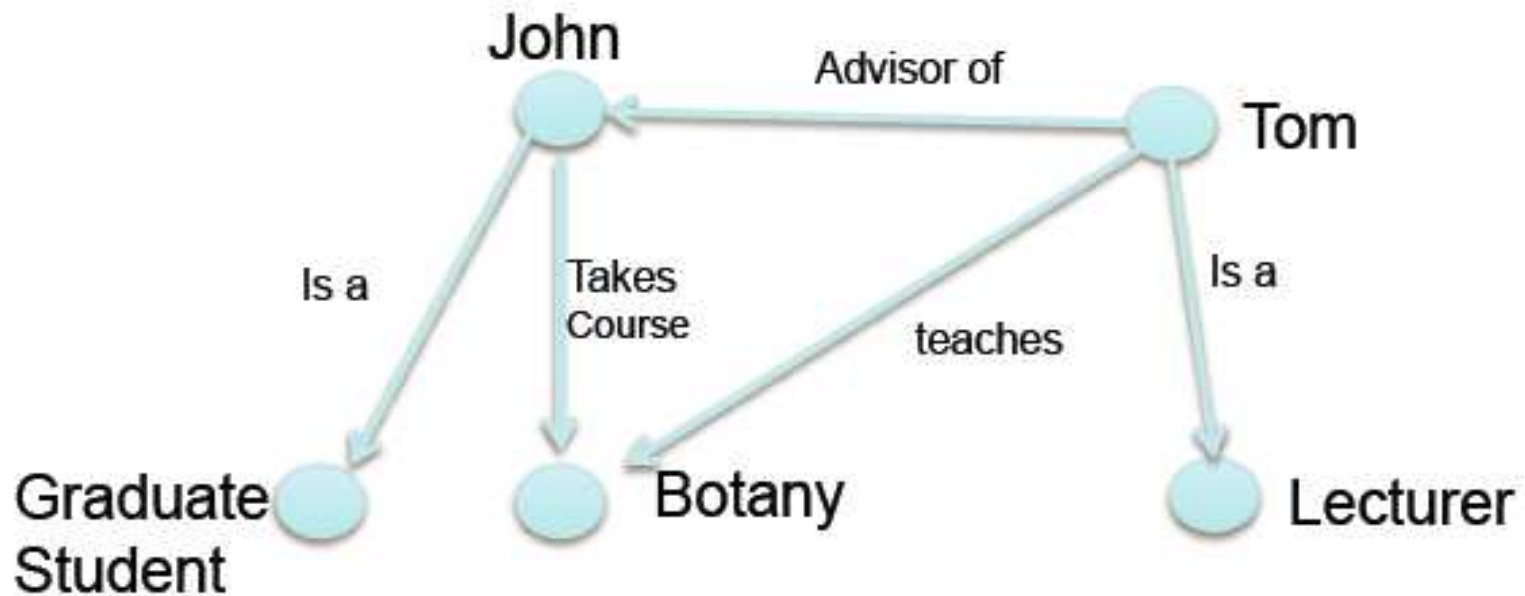


- Move to XML-based standard
 - Use incumbent RDBMS
 - 500,000 XML docs per day
 - FAILED!
- Use DB2 pureXML
 - 500,000 XML docs **per hour**

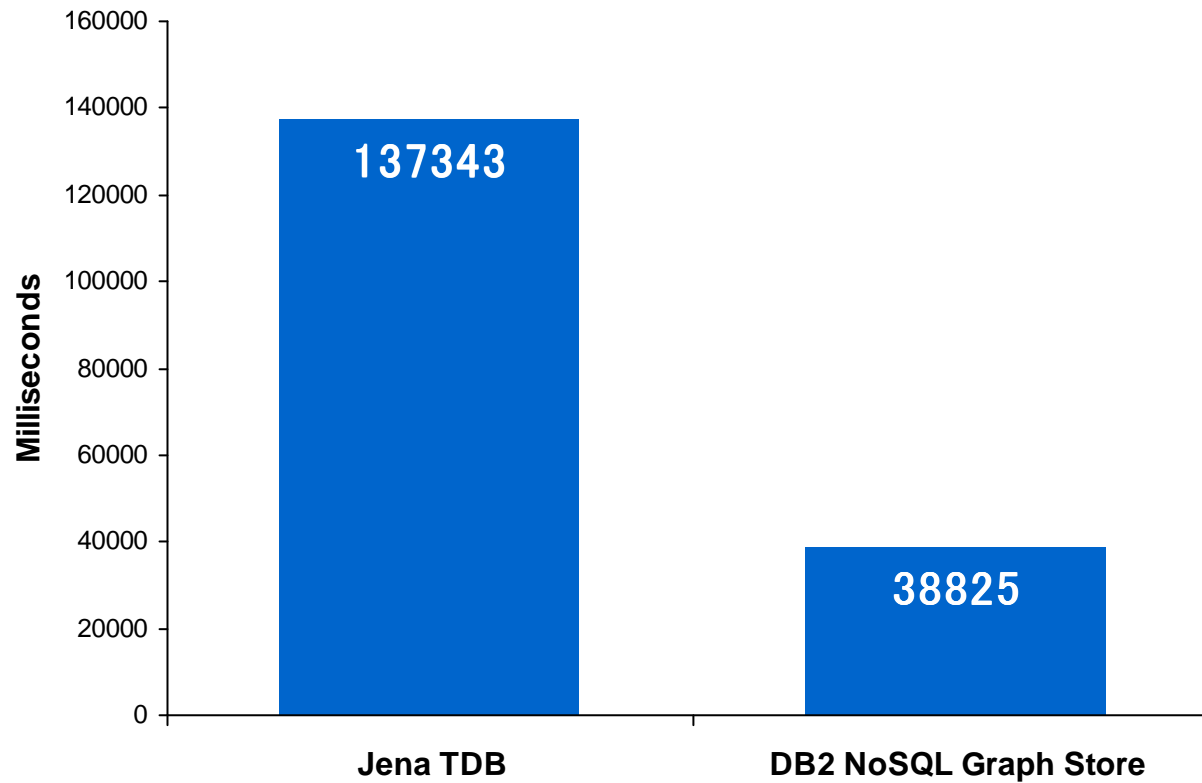
XML makes schema flexibility a reality



DB2 added a NoSQL RDF **Graph Store**



Up to **3.5x** faster for IBM Rational Use Case



* Based on internal benchmark tests of Rational Jazz graph store usage, comparing DB2 10 Graph Store with Jena TDB version 0.8.10.

NoSQL Characteristics People Like

- **Simple approach**
- **Fast performance**
- **Highly scalable**
- **Easy implementation**
- **Easy ongoing management**



NoSQL Characteristics People **Don't** Like

- **Lack of consistency**
- **Operational issues**
 - Compression
 - Backup
 - Recovery
 - Etc.
- **Integration challenges**
- **Lack of standardization**
- **Lack of well-defined semantics**



DB2 Offers the Best of Both Worlds...

The reliability, maturity,
and consistency of
a **Relational** environment



The rapid development,
deployment and agility of
a **NoSQL** environment

IBM plans to continue development of NoSQL features





Next Generation Administration

DB2 Automates Maintenance



DB2 Heals Itself



DB2 Tunes Itself



DB2 Self-Tuning gives Best Performance

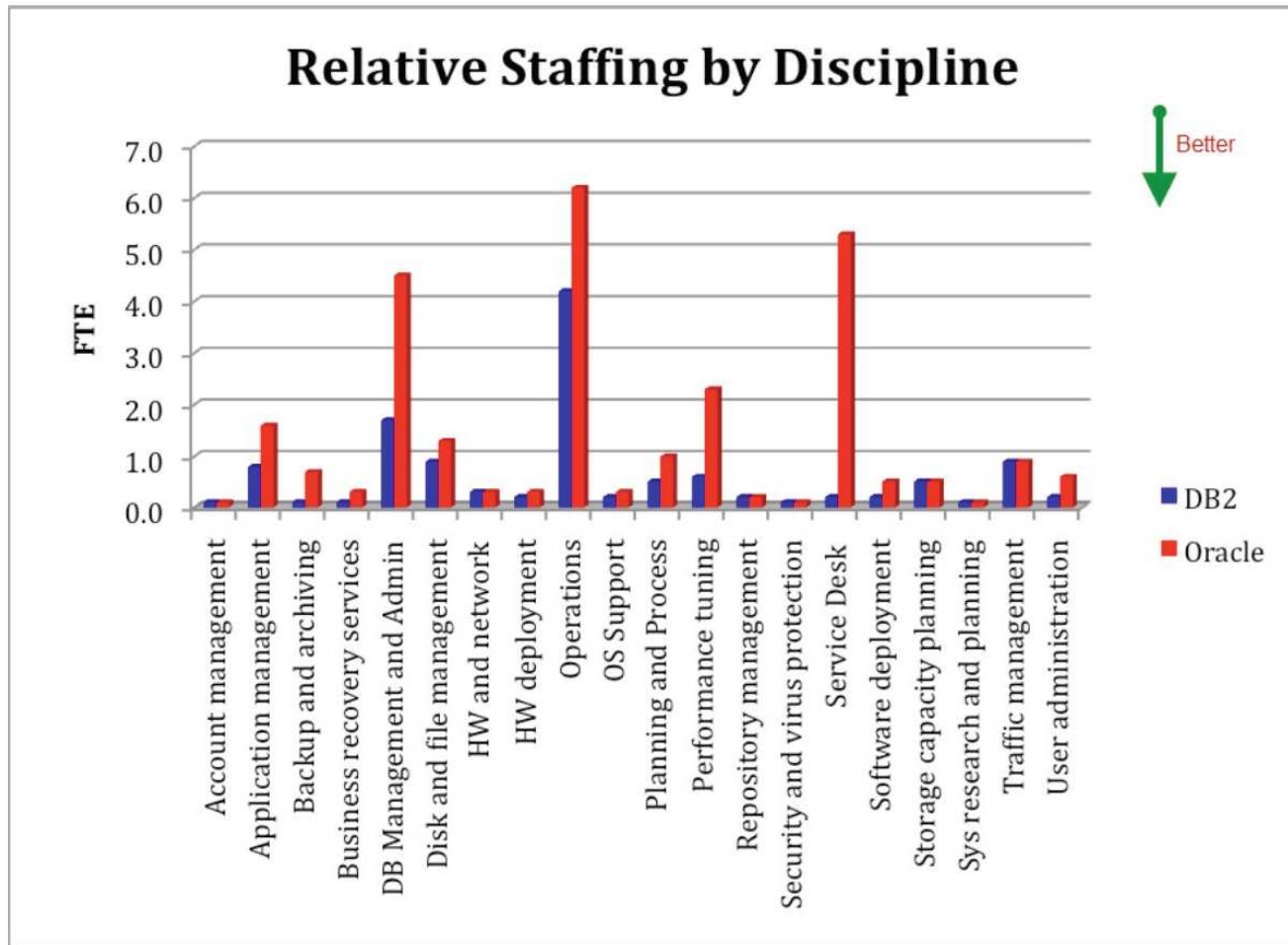


**3 DBAs support
more than 100 instances
of DB2**

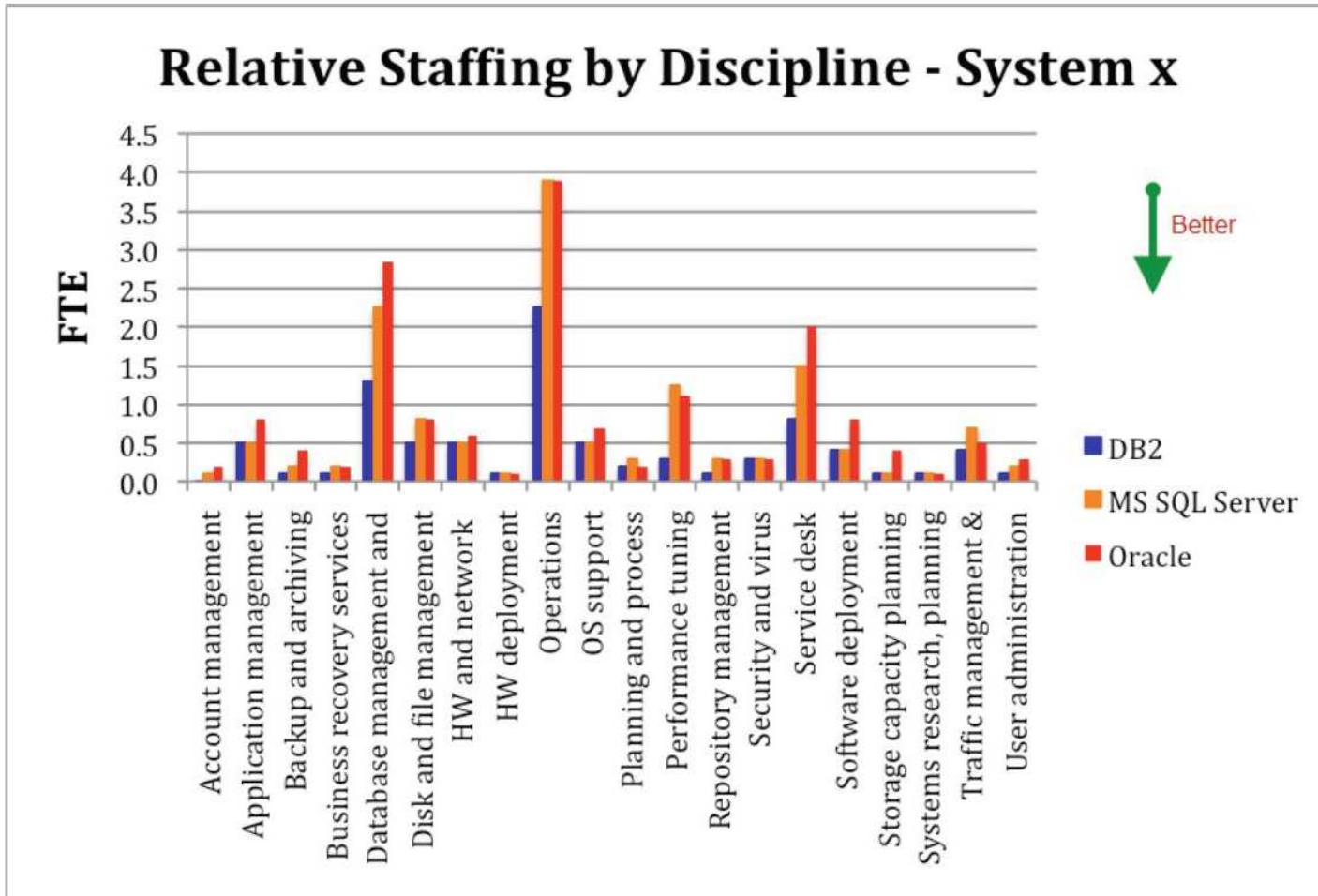
– Phil Kilgore, Lithonia Lighting



Staffing for Database Software on Power Systems



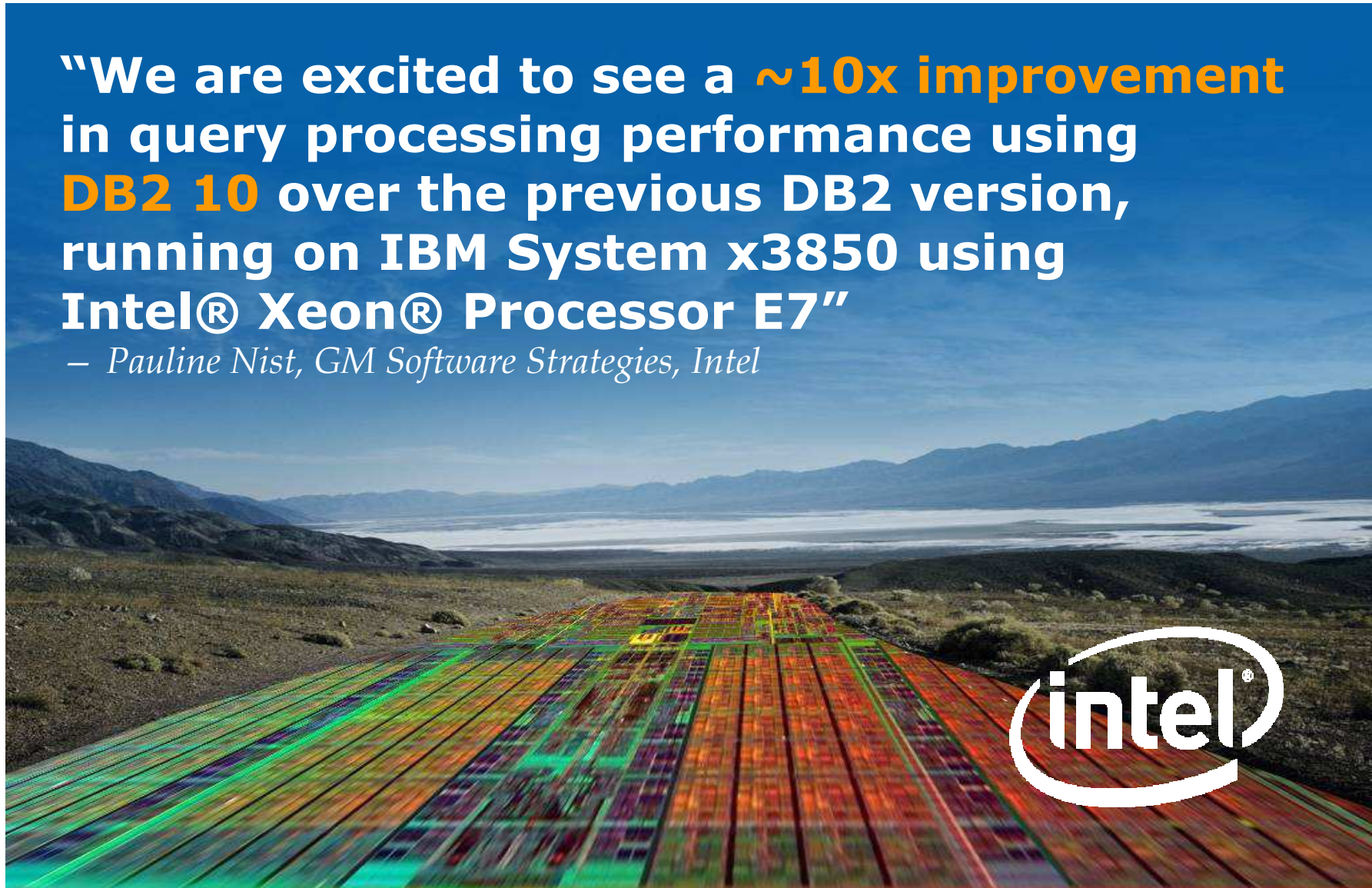
Staffing for Database Software on System x



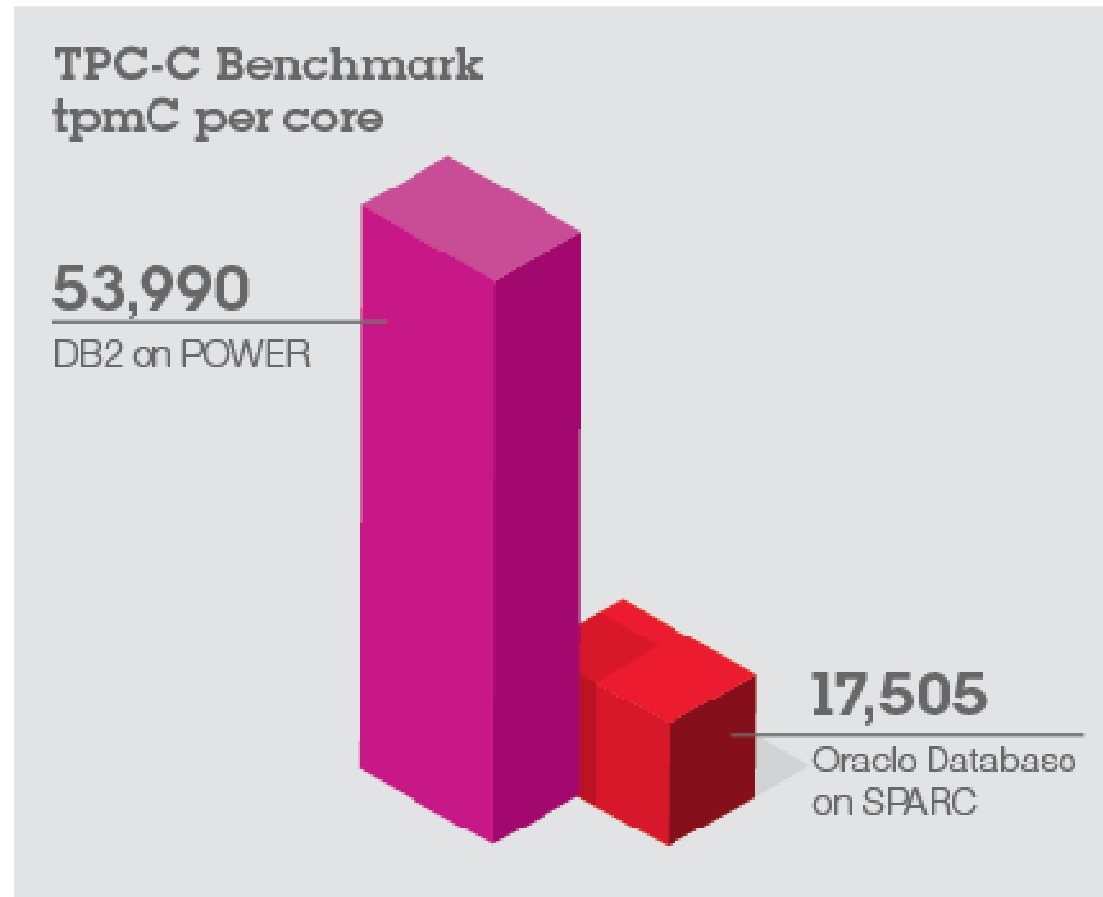


“We are excited to see a \sim 10x improvement in query processing performance using DB2 10 over the previous DB2 version, running on IBM System x3850 using Intel® Xeon® Processor E7”

– Pauline Nist, GM Software Strategies, Intel

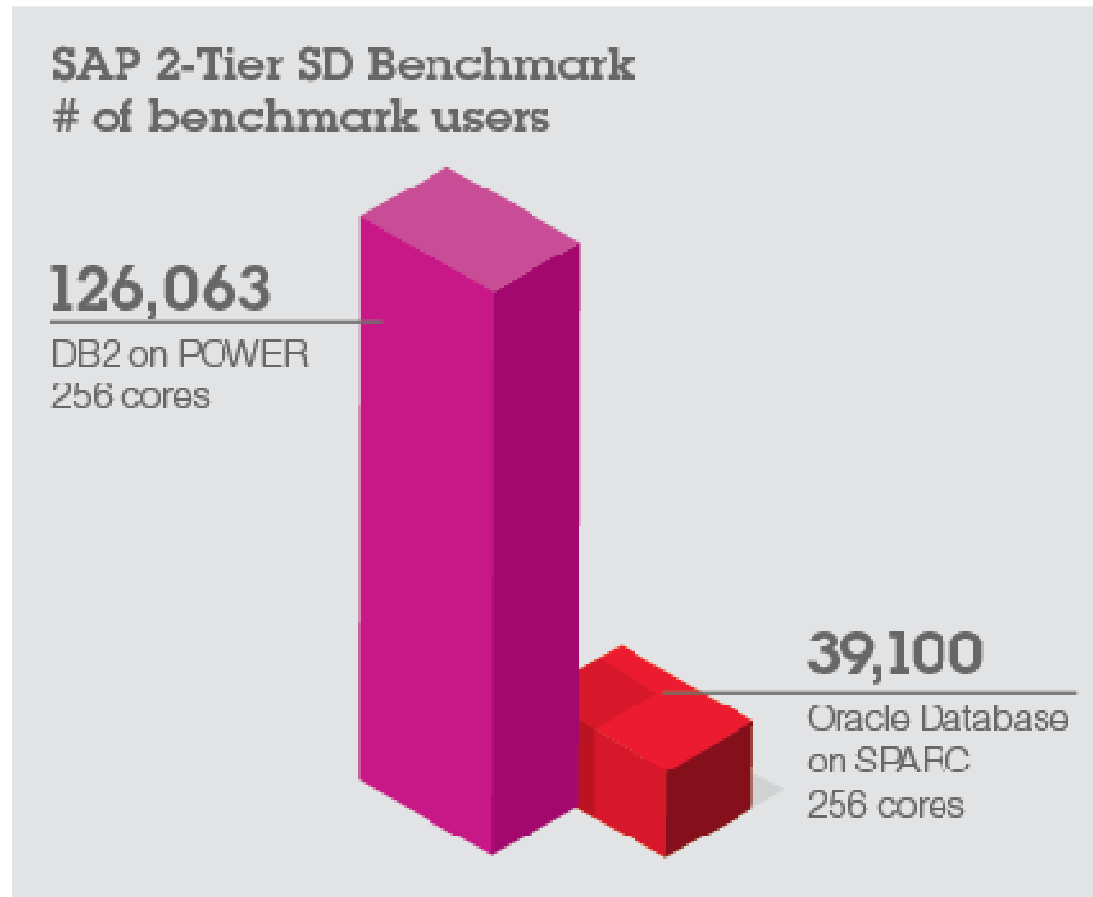


DB2 on Power Systems Delivers up to 3x the Performance per Core of Oracle Database on SPARC: TPC-C



www.tpc.org (<http://www.tpc.org>) as of 4/3/2012 [IBM Power 780 (3 x 64 C)(24 Ch/192 C/768 Th); 10,366,254 tpmC; \$1.38/tpmC; avail 10/13/10 v. Oracle SPARC SuperCluster w/T3-4 Servers (27 x 64 C)(108 Ch/1728 C/13824 Th); 30,249,688 tpmC; \$1.01/tpmC; avail 6/1/11]. TPC-C is a trademark of Transaction Performance Processing Council.

DB2 on Power Systems Delivers up to 3x the Performance per Core of Oracle Database on SPARC: SAP SD



www.sap.com/solutions/benchmark/ (http://www.sap.com/solutions/benchmark/) as of 4/3/2012 [IBM Power 795 (32 P/256 C/1024 Th); 126063 users/2-tier SAP ERP 6.0 pack4/AIX 7.1 + DB2 9.7; cert 2010046 v. Oracle SPARC Enterprise Server M9000 (64 P/256 C/512 Th); 39100 users/2-tier SAP ERP 6.0/Solaris 10, Oracle 10g; cert 2008042]. SAP is registered trademark of SAP AG in Germany and in several other countries.



**“This feature is a
paradigm shift
in the very concept of
database migration!”**

– Godson Retna, Cognizant Technology Solutions





**“To move our application to DB2 9.5
would have taken an estimated 2 year effort...
it took **only few weeks** to move it to DB2 9.7”**


– Paolo Juvara, Openbravo



Take Action Now...

- “No charge” technical assessment
 - MEET Tool
- “No charge” financial assessment
 - BVA Tool
- “No charge” skills training workshops
- Visit www.ibm.com/breakfree
- Follow-up in Twitter: [@ibmanalytics.es](https://twitter.com/ibmanalytics.es)





“We’ve saved **more than a million dollars over the past four years in licensing, maintenance and storage costs by migrating from Oracle Database to DB2.”**

– Tom DeJuneas, IT Infrastructure Manager, Coca Cola Bottling Company.