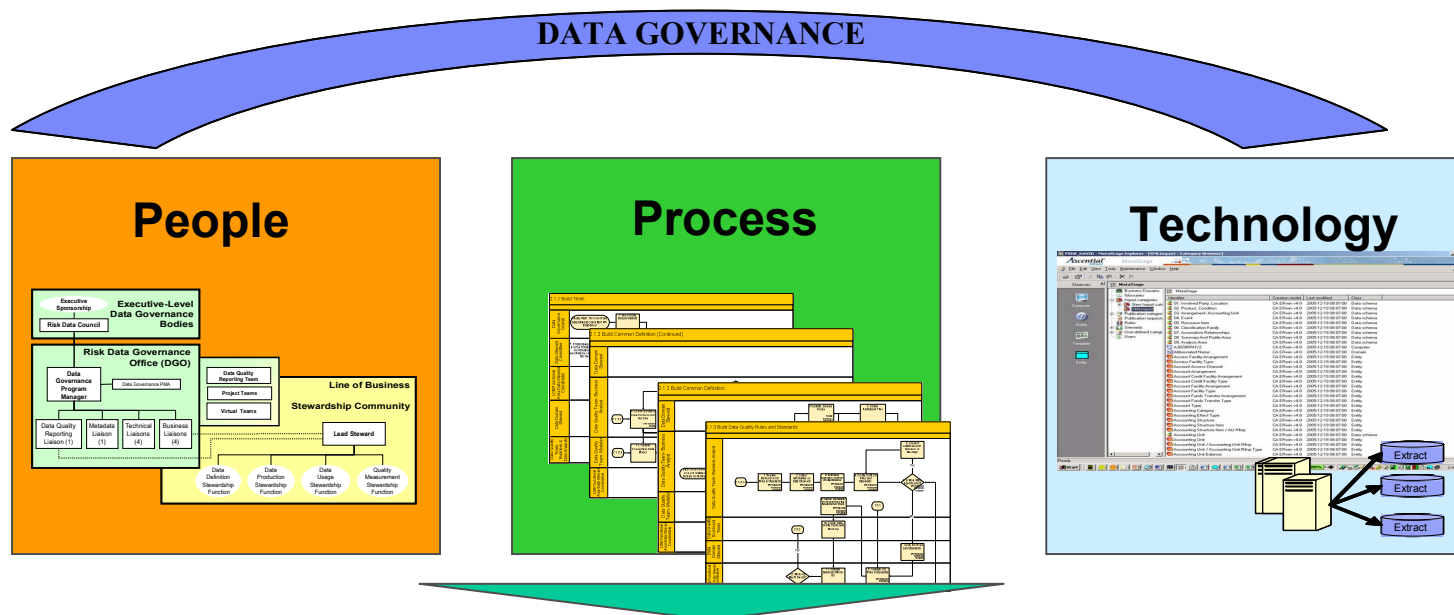


What is Data Governance

Data Governance is the orchestration of people, process and technology to enable an organization to leverage data as an enterprise asset



The core objectives of a governance program are:

- Guide information management decision-making
- Ensure information is consistently defined and well understood
- Increase the use and trust of data as an enterprise asset

Without Data Governance

- People make mistakes...
- Those mistakes more commonly result in losses than hackers...
- Those losses effect every aspect of IT and business
- But data is still an abstract concept and governance needs technology to be improved...

Corporate Sloppiness Is the Real Culprit for Data Loss, Not Vilified Hackers

By Lisa Vaas
3/28/2007 1:25:00 PM

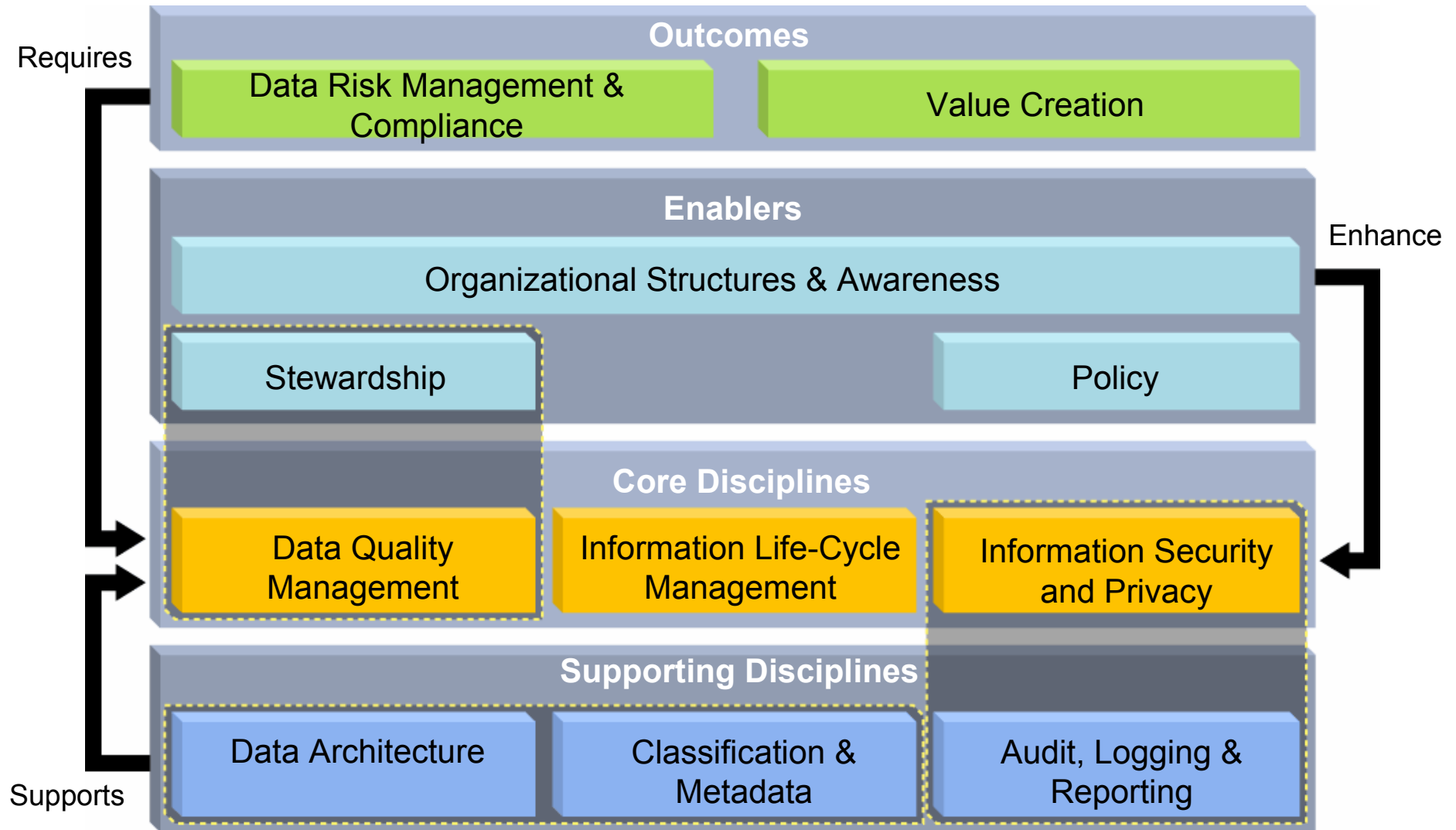
Expect to see the 2 billionth personal record compromised by year's end, according to recent research from the University of Washington. But don't blame it on rogue hackers; sorry to say, it's your own fault, Corporate America.

Researchers at the university in Seattle estimate that electronic records—those containing Social Security or credit card numbers, academic grades or medical history—are bleeding out of North American organizations at the rate of 6 million a month so far in 2007—up some 200,000 a month from last year.

Excluding the exceptional 2003 incident that involved 1.6 billion records stolen from information aggregator Acxiom, hackers have been responsible for only about 550—31 percent—of confirmed breaches between 1980 and 2006.

The majority, 60 percent, of incidents of compromised records were attributed to organizational mismanagement. That includes missing or stolen hardware, administrative errors, insider abuse or theft or accidental posting of sensitive information online. The balance of 9 percent of breaches were due to unspecified circumstances. Even with Acxiom removed from the picture, the commercial sector still accounts for about 252 million individual compromised records, four times that of the next-highest contributor, the government.

The 11 Disciplines of Data Governance

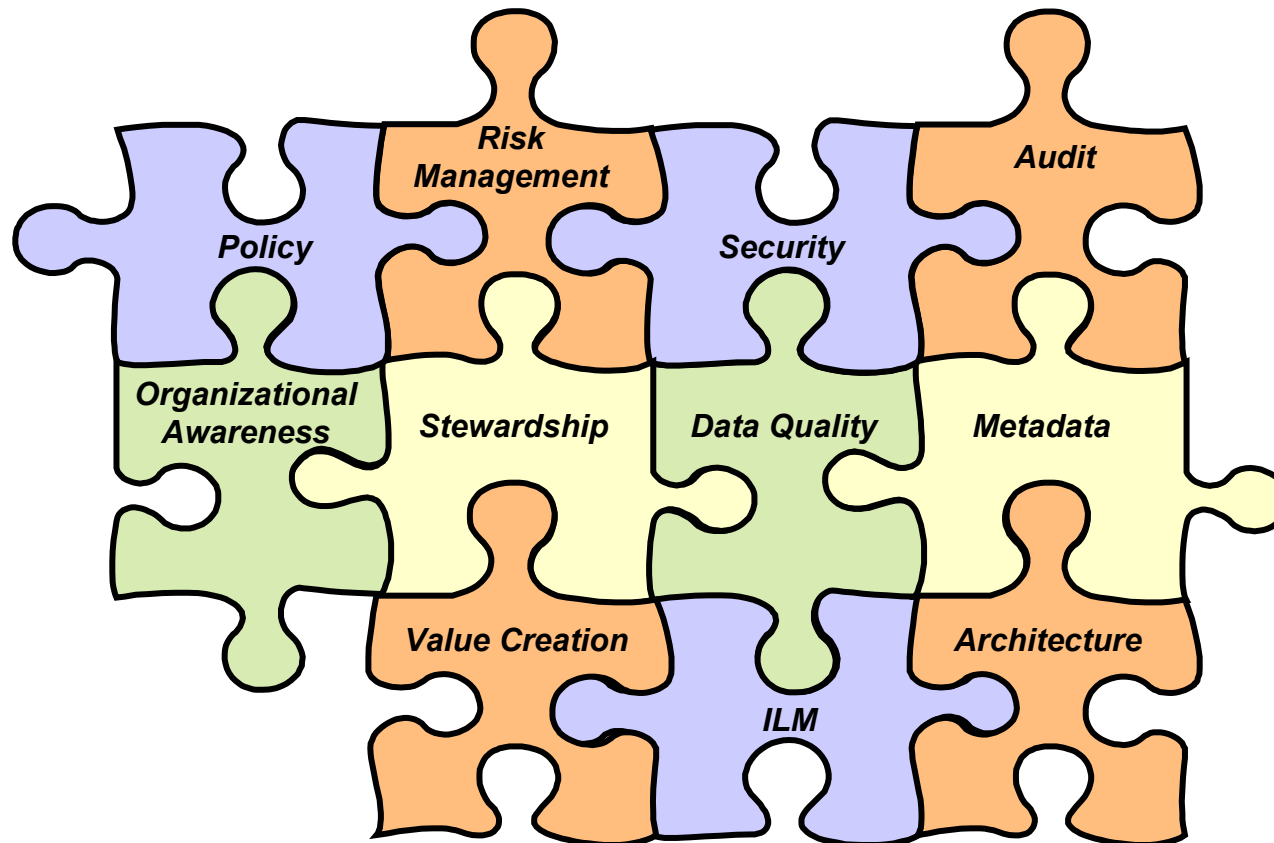


Data Governance Program Activities

The key activities of a governance program to achieve the objectives are:

- **Building governance infrastructure, technology and supporting organization**
- **Defining data governance policies and standards**
- **Defining processes and business rules for ongoing governance**
- **Developing common and standard data domain definitions**
- **Developing architecture practices and standards**
- **Developing the capability to monitor and improve the quality and usefulness of data**

11 Themes of Data Governance



Summary of Requirements to Offerings

Requirement	Feature	Applicable Regulation	Description	Available Solutions
Prevent Data Intrusion	Access Control	All	Assigns unique userid and passwords, privileges assigned based on userid	Built-in Access Control Label Based Access Control
Auditing	Audit Database Privileges	Sarbanes HIPAA PCI	Audit privilege granting	IBM Audit Expert (DB) Consul (Enterprise)
Auditing	Audit Database Access	All	Provides audit trail to data access	IBM Audit Expert (DB) Consul (Enterprise)
Protect Privacy	Encryption	SB1386 GLBA HIPAA PCI	Encrypts data to ensure privacy when unauthorized access occurs	IBM Encryption Expert IBM DB2 and IMS Encryption
Protect Privacy	Test Data Generation with Data Privacy	SB1386 GLBA HIPAA PCI	Ensure test data masks sensitive data	IBM Optim Data Privacy Solution
Data Retention and Retirement	Data Archiving	Sarbanes HIPAA	Archive data not being accessed	IBM Optim Archive Solution

Positioning Optim within Enterprise Data Governance

- **Optim is a critical cornerstone in IBM's Enterprise Data Governance Strategy**
 - Enterprise Data Governance is an integrated discipline for securing and protecting data as an enterprise asset. This involves implementing, monitoring and sustaining data protection policies and standards in order to improve ensure data is secure while promoting operational efficiency, transparency, and enabling regulatory compliance and business insight.

The top challenge for 43% of CFOs is improving governance, controls, and risk management

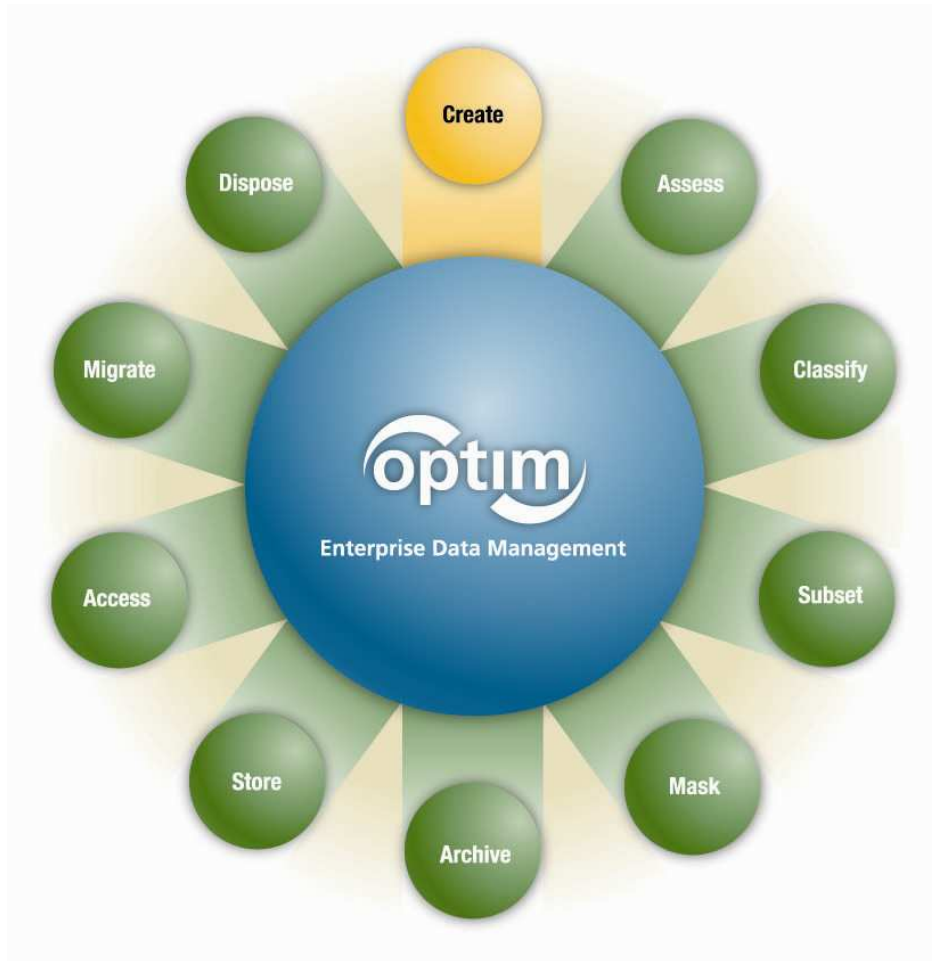
*CFO Survey:
Current state & future direction,
IBM Business Consulting Services*



IBM Optim™

- **Market leading Enterprise Data Management (EDM) Solution and Platform:**
 - Data Growth
 - Retention & Discovery
 - Data Privacy
 - Test Data Management
 - Application Upgrades, Migrations & Retirements
- **2400 clients worldwide; c. 50% of Fortune 500**
- **Princeton Softech acquired by IBM, September 2007**





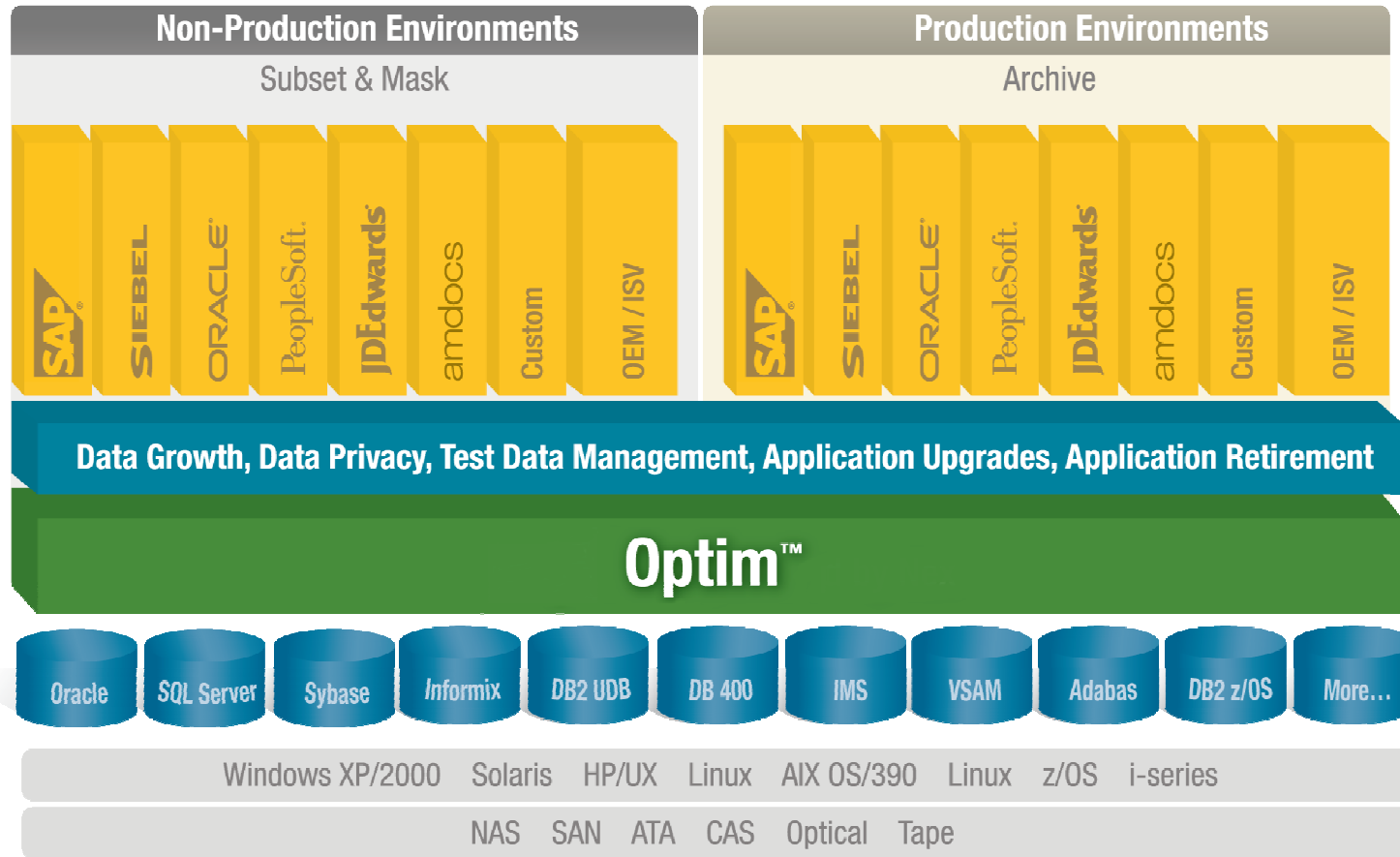
- **Optim Data Growth Solution (Archiving)**
 - Improve performance
 - Control data growth, save storage
 - Support retention compliance
 - Enable application retirement
 - Streamline upgrades

- **Optim Test Data Management Solution**
 - Create targeted, right sized test environments
 - Improve application quality
 - Speed iterative testing processes

- **Optim Data Privacy Solution**
 - Mask confidential data
 - Comply with privacy policies



Enterprise Architecture



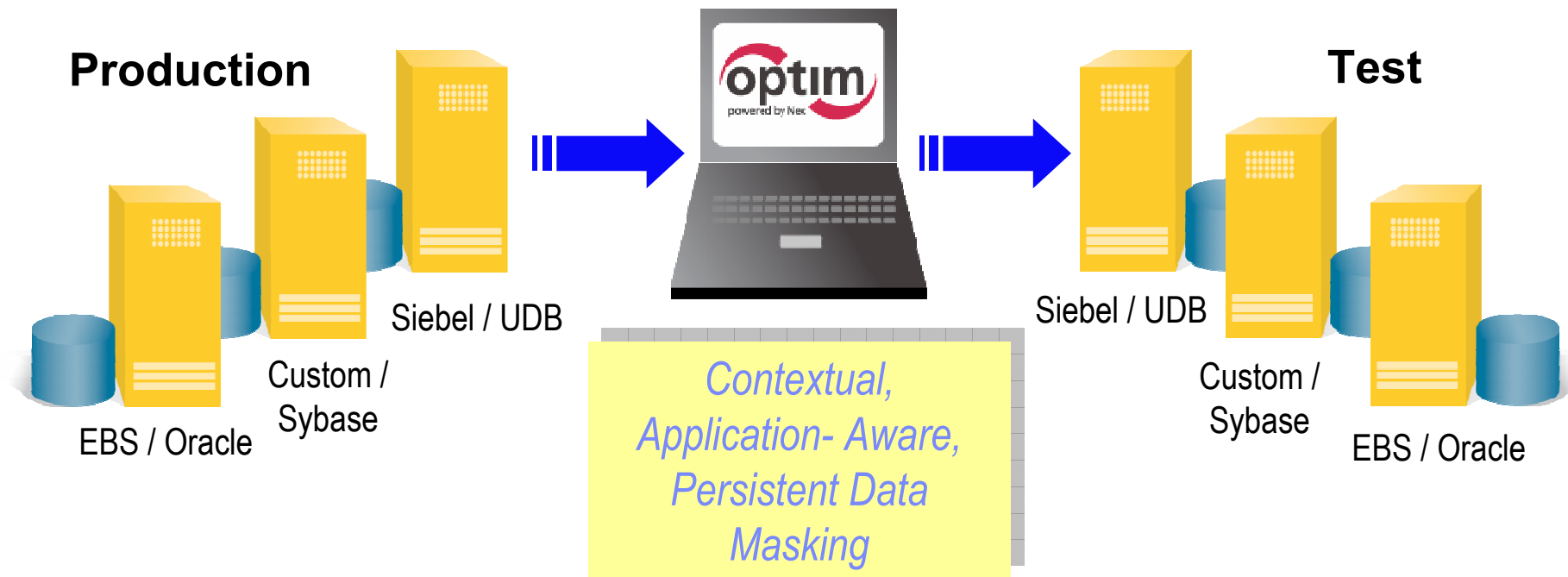
- Single, scalable, interoperable EDM solution provides a central point to deploy policies to extract, store, port, and protect application data records from creation to deletion

The Easiest Way to Expose Private Data ... Internally with the Test Environment

- **70% of data breaches occur internally (Gartner)**
- **Test environments use personally identifiable data**
- **Standard Non-Disclosure Agreements may not deter a disgruntled employee**
- **What about test data stored on laptops?**
- **What about test data sent to outsourced/overseas consultants?**
- **How about Healthcare/Marketing Analysis of data?**
- **Payment Card Data Security Industry Reg. 6.3.4 states, “Production data (real credit card numbers) cannot be used for testing or development”**

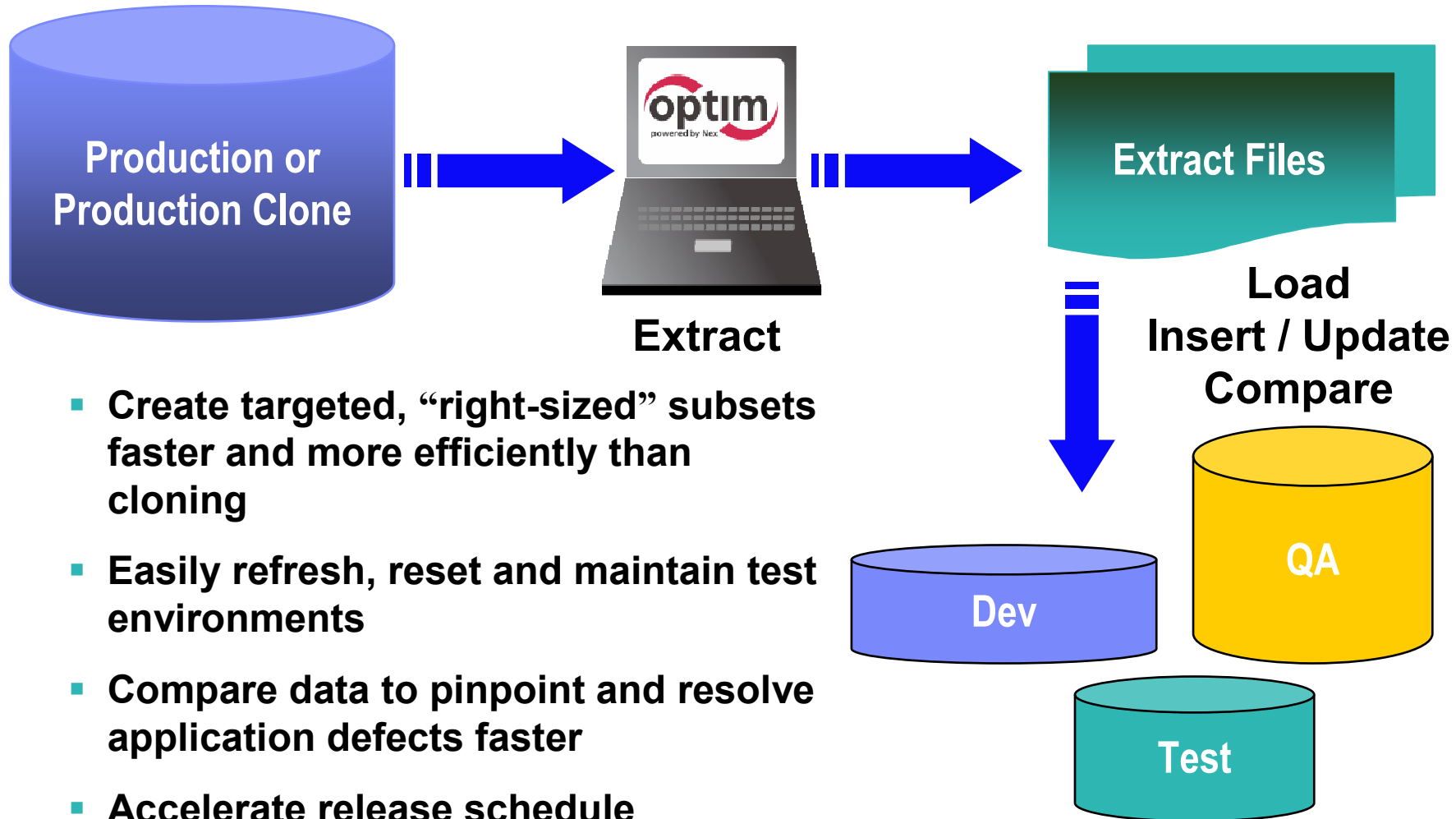
*** The Solution is Data De-Identification ***

Optim™ Data Privacy Solution



- Substitute confidential information with fictionalized data
- Deploy multiple masking algorithms
- Provide consistency across environments and iterations
- Enable off-shore testing
- Protect private data in non-production environments

Optim™ Test Data Management Solution



- **Create targeted, “right-sized” subsets faster and more efficiently than cloning**
- **Easily refresh, reset and maintain test environments**
- **Compare data to pinpoint and resolve application defects faster**
- **Accelerate release schedule**

The Problem

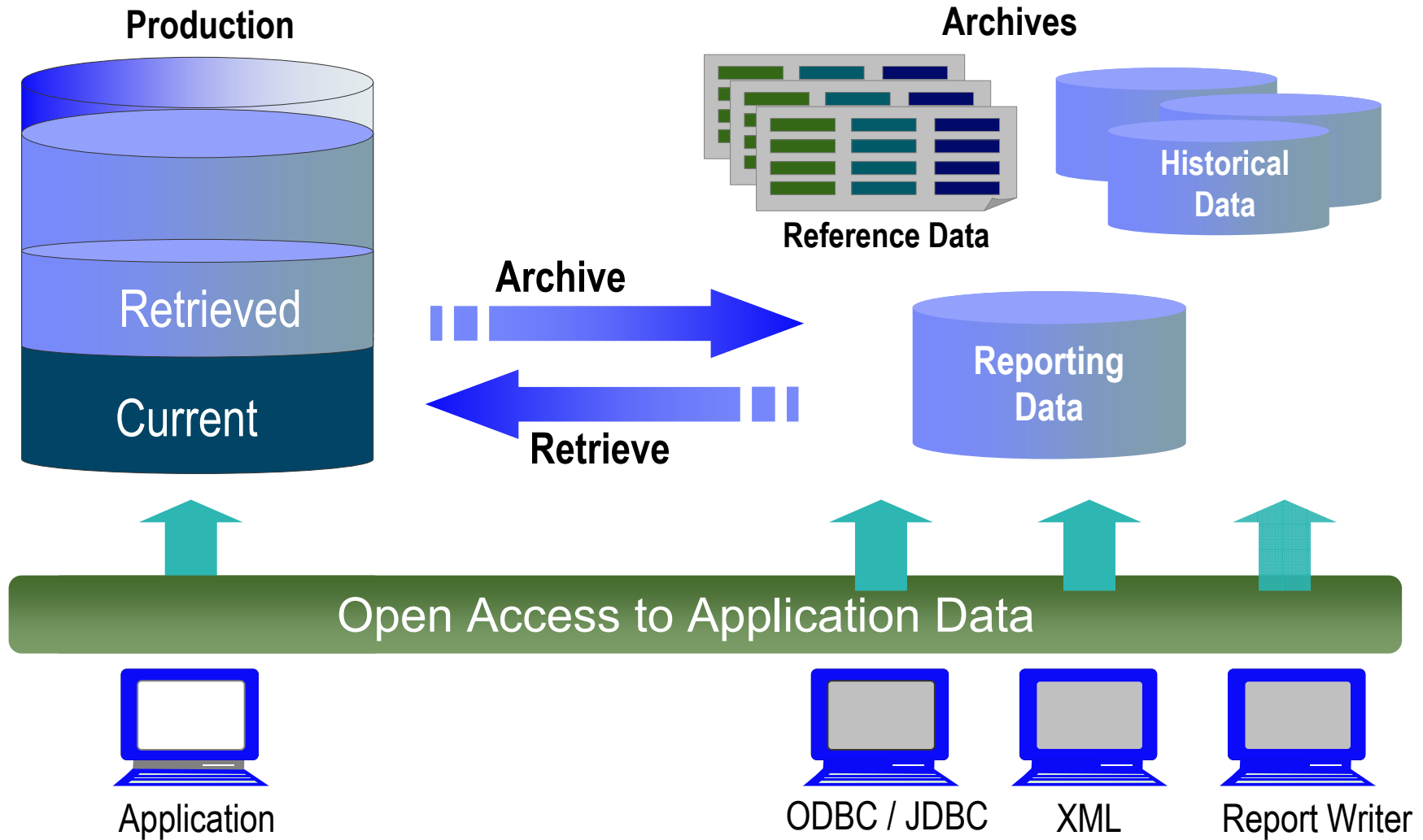
- **Mergers & acquisitions**
- **Organic business growth**
 - eCommerce
 - ERP/CRM
- **The digital revolution**
- **Records retention**
 - Basel II
 - SOX
 - Euro-SOX
- **Data multiplier effect**
- **Forrester estimates that 85% of data stored in databases is inactive**



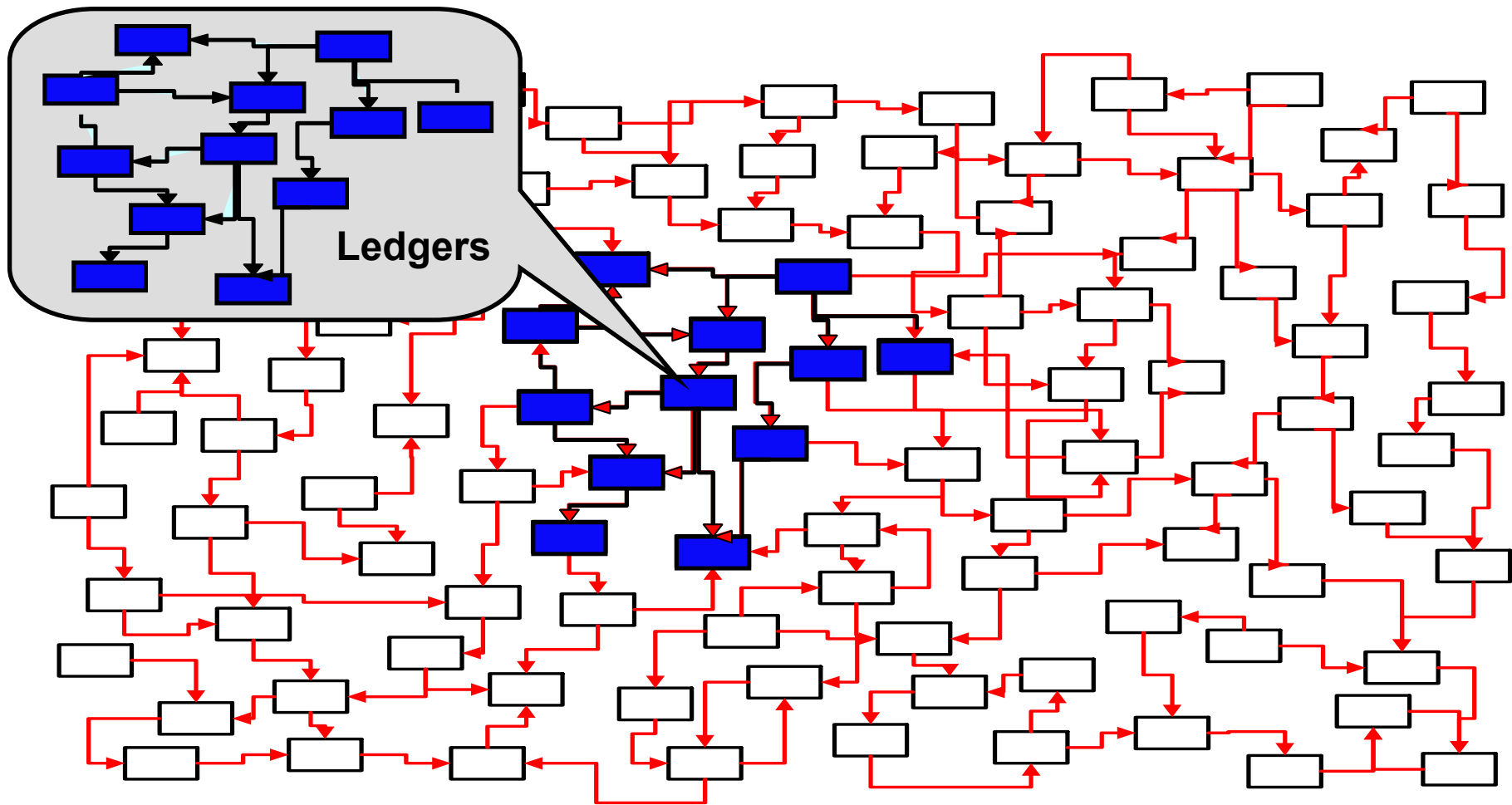
* Source: Noel Yuhanna, Forrester Research, Database Archiving Remains An Important Part Of Enterprise DBMS Strategy, 8/13/07



The Answer – The Optim™ Data Growth Solution



Archiving a Complete Business Object



Why Optim™ Data Growth Solution?

- **Manage data across the enterprise including multiple applications, databases, and platforms**
- **Segment and manage data at the complete business object level**
- **Increase database performance/response time and minimize batch windows**
 - Remove historical business records from Production
- **Archive to selected target format**
 - Compressed, indexed file
 - XML file
 - Archive database
- **Implement tiered storage strategies to maximize ILM efficiencies**
 - CAS devices (EMC Centera, IBM DR550)
 - Existing tape libraries
 - Optical disk
- **Multiple access methods to archived business records**
 - Native Application access
 - Self-Help Access (Canned Reports, Query Tools)
 - Application Independent access (Original app/version is not needed)

What Customers are Saying

“Optim has already yielded the returns we were looking for, and we have just touched the tip of the iceberg...”



“We can easily comply with data privacy regulations without incurring additional costs...”



“The bottom line is that Optim's archiving capabilities will help us exceed our SLA...”



“Our backup times are 20% faster...”

