

IBM Software Group



Information Management

Optim Enterprise Data Management Solution

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IBM Optim Sales UKISA

Data Growth at 40% per year

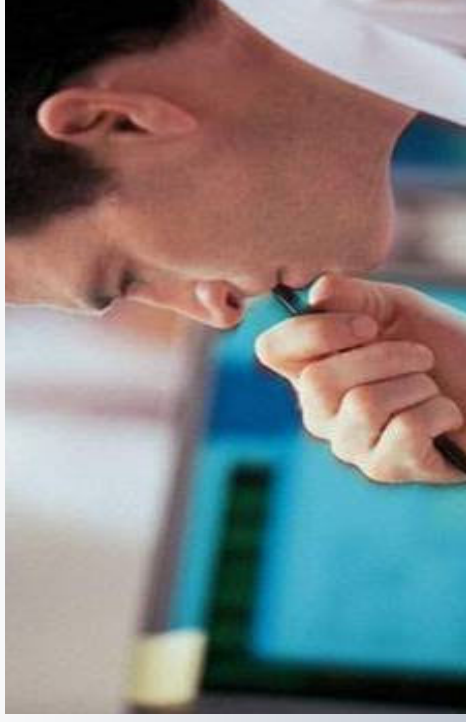
Data Privacy strategic risk to business

High Cost of infrastructure and development

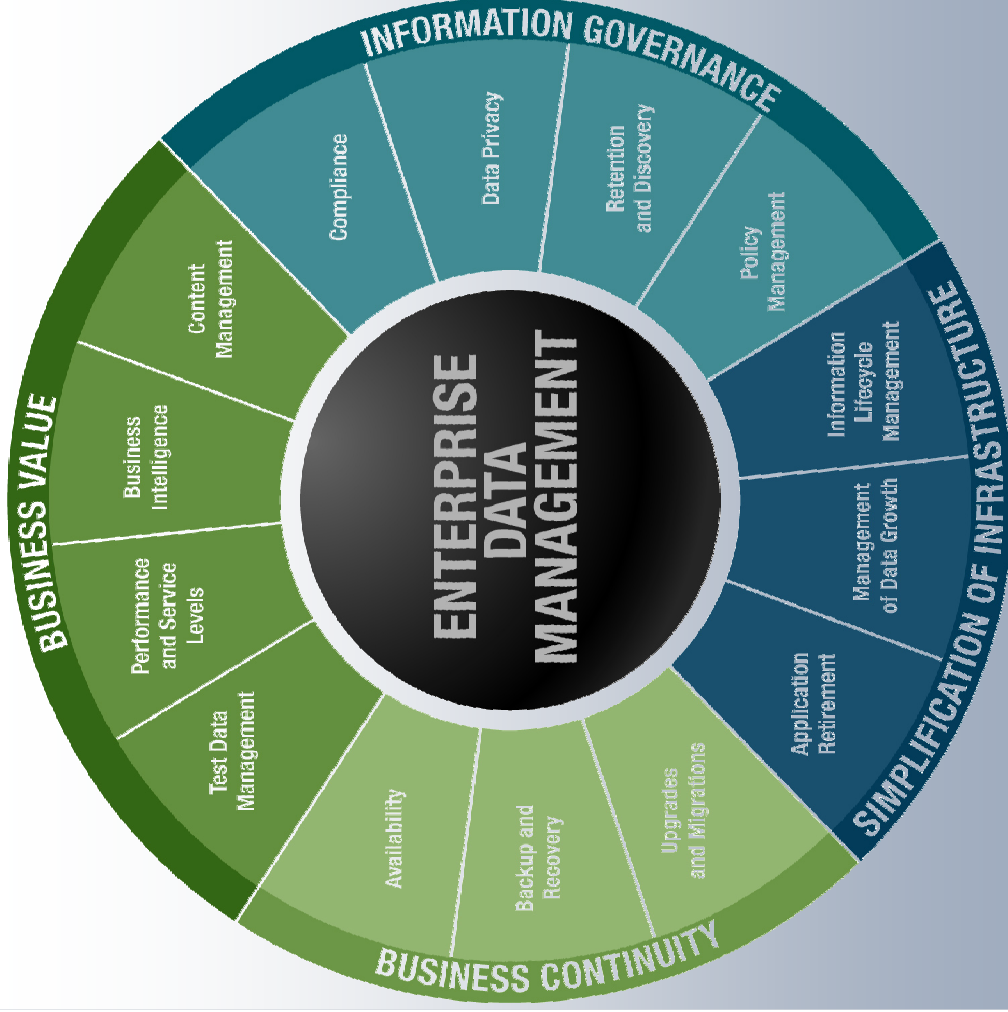
Compliance with growing policies and regulations

Business Continuity for 24x365 competitiveness

Accelerating Demand to access and analyze data

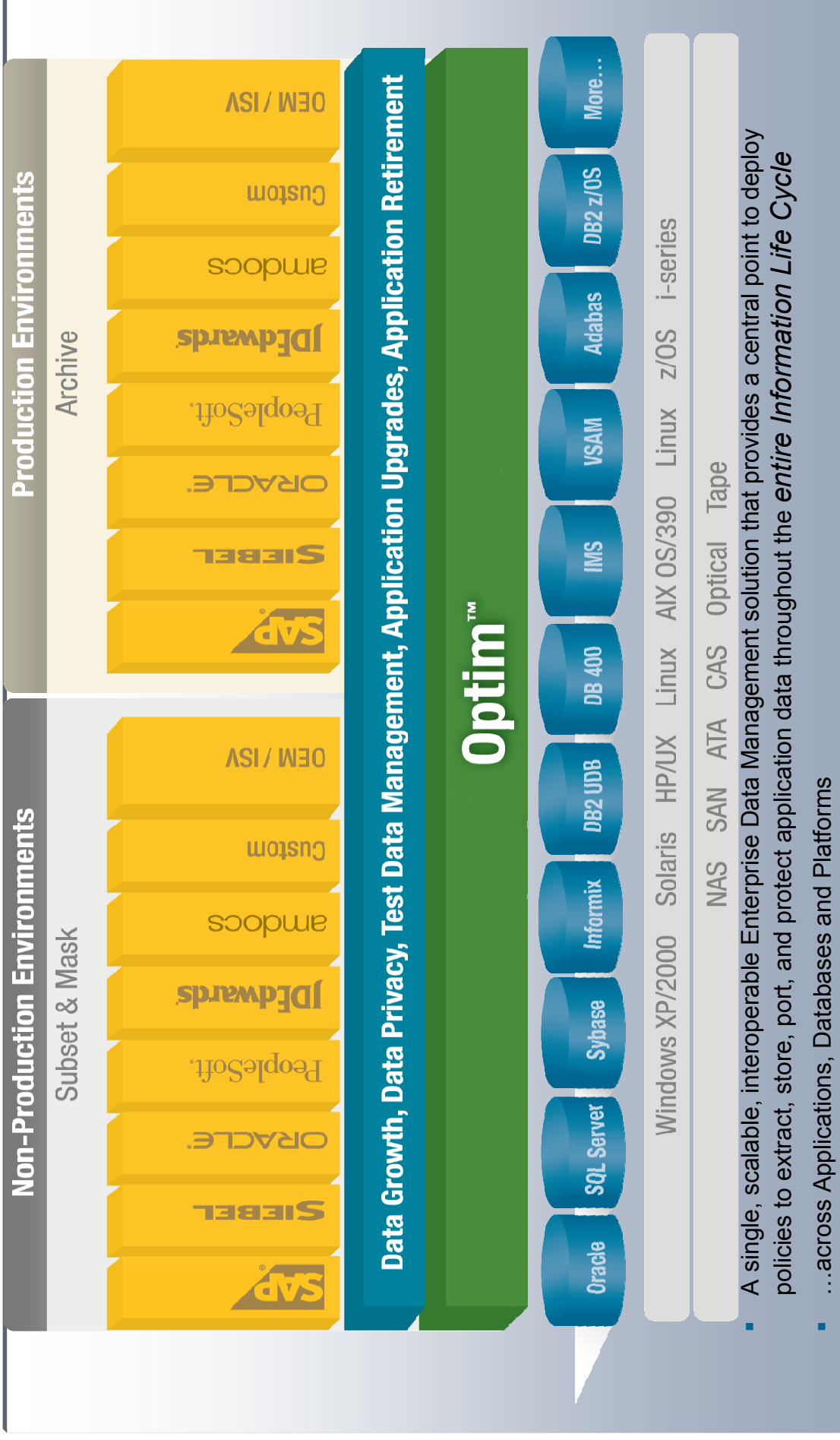


IBM® Optim™ Solves EDM Challenges

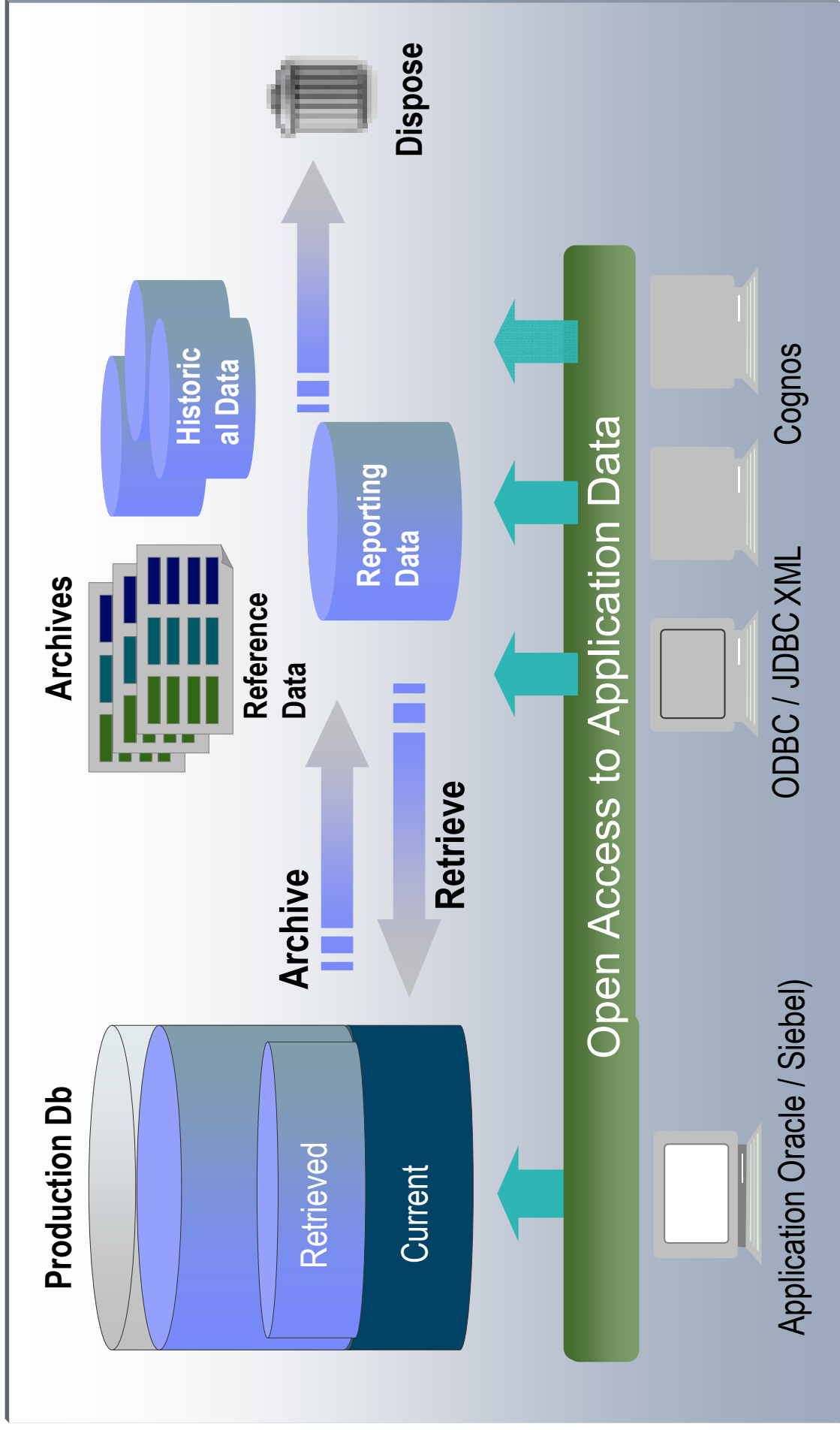


- **Data-Growth**
 - Improve your data performance
 - Control data growth, save architecture costs
 - Streamline application upgrades / data migration
- **Data Privacy**
 - Mask confidential data
 - Ensure your business complies with privacy regulations/policies
- **Test Data Management**
 - Create targeted, right sized test environments
 - Improve application quality
 - Speed iterative testing processes and time-to-deployment
- **Compliance**
 - Support data-retention compliance
 - Enable application retirement

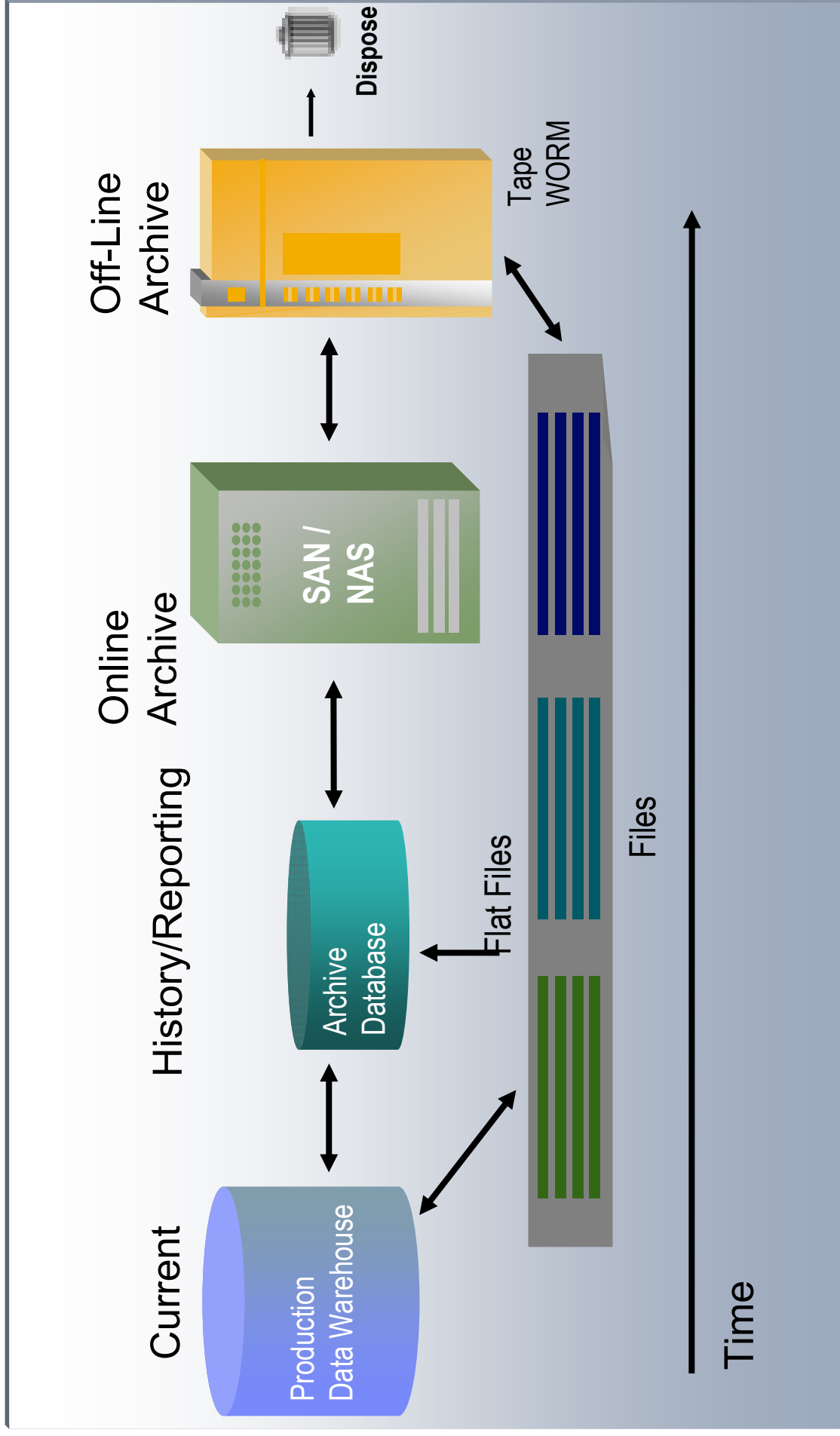
IBM® Optim™ Enterprise wide Solution



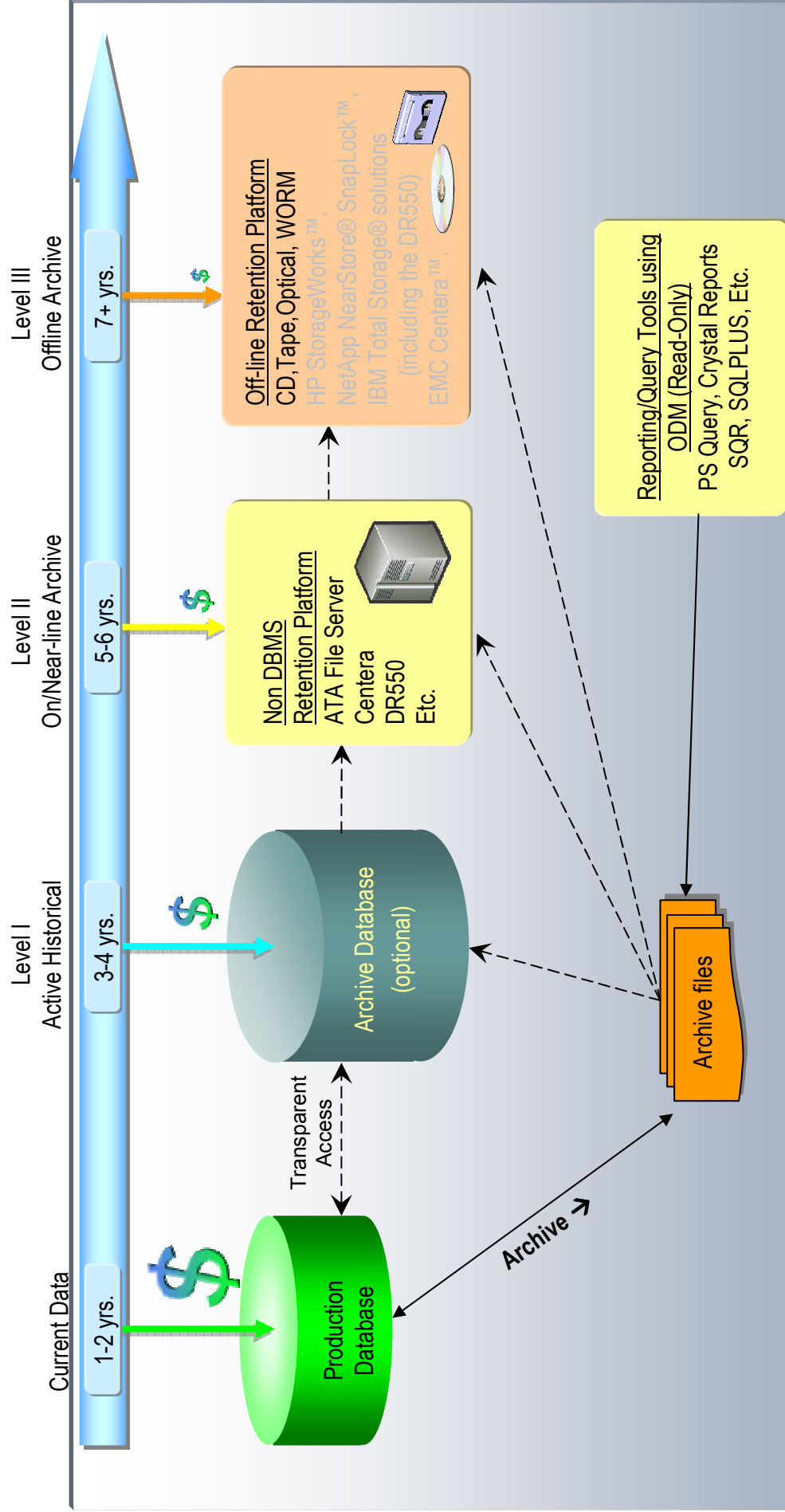
How does the Optim Data Growth Solution Work?



Cost-Effective Tiered Storage



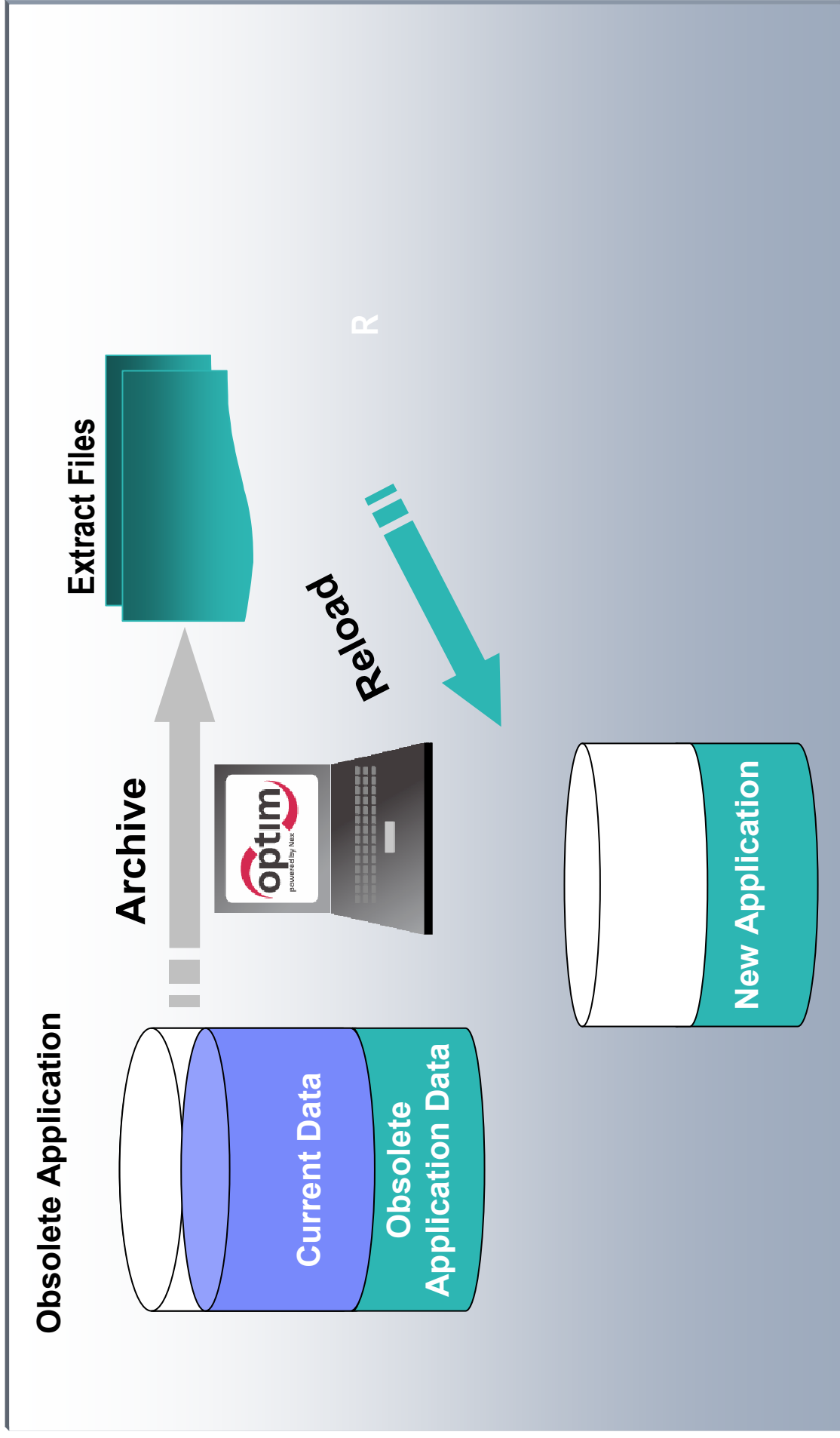
A Sample Archive/Retention Strategy



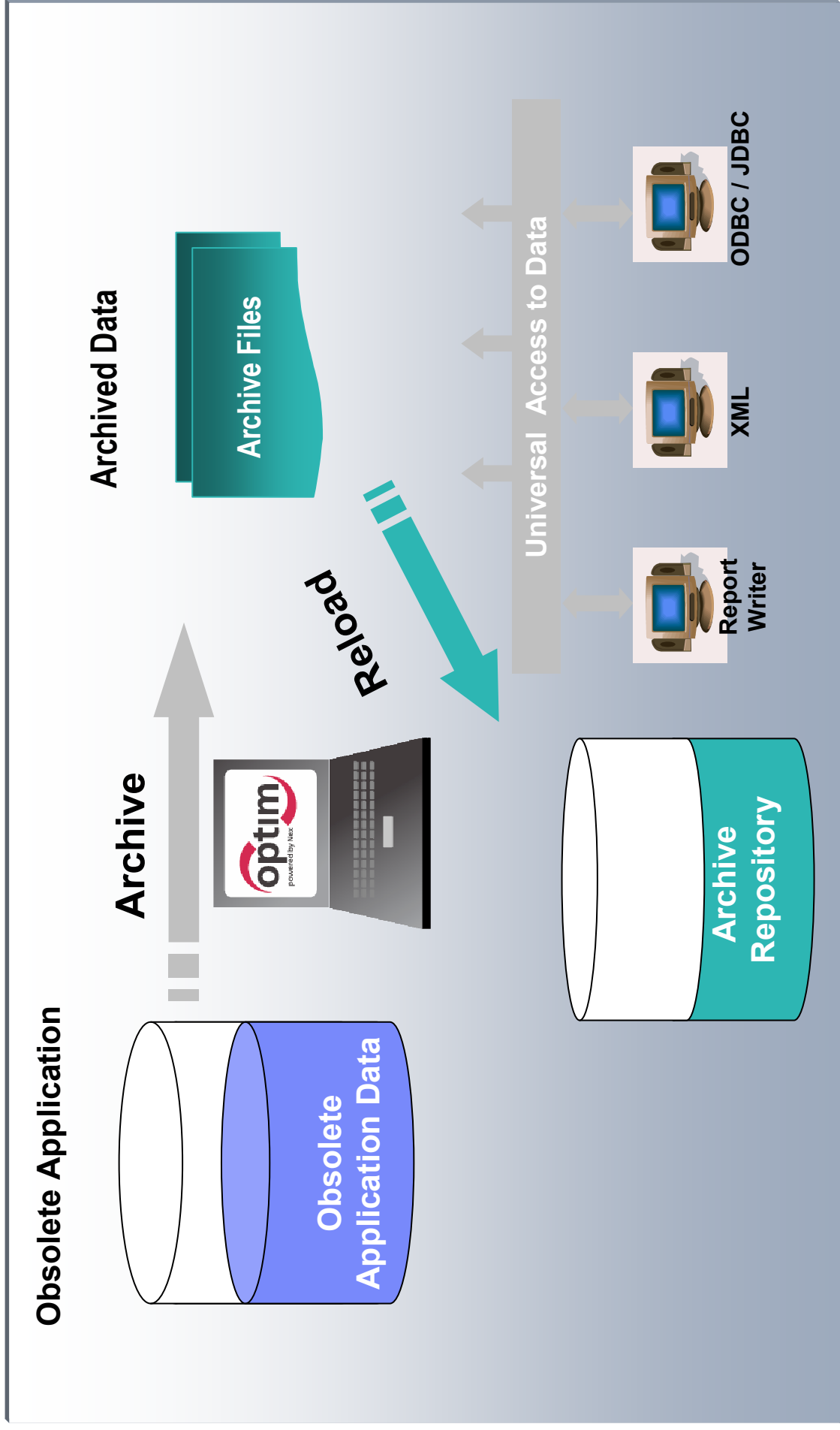
* Adjust timeframes and storage media to meet access requirements.

-----> : denotes optional

Optim™ Solution for Application Retirement/Migration



Optim™ Solution for Application Retirement/Migration



- Fines and penalties
- Loss of customer loyalty
- Loss of revenue
- Share price erosion
- Negative publicity
- “Brand equity” damage
- Damage to company reputation
- Increased operations costs
- Inability to exploit outsourcing / partnering

COMPUTERWORLD

THE VOICE OF IT MANAGEMENT

16/07/2007 08:25:49

Ex-Boeing worker accused of stealing up to \$15 billion worth of documents

Gerald L. Eastman allegedly stole documents that could cost Boeing up to \$15 billion



Ex- Fidelity worker steals company data

Ellen Messmer, Network World

■ 2.3 million financial customer records compromised



FSA slaps Nationwide with £980,000 fine

Stolen laptop contained 11 million client records

Robert Jaques, vnunet.com, 15 Feb 2007

Production Database

F. Name	L. Name	Credit Card#	NI#
John	Denver	5298774132478855	JE 98 46 37 H
Vanessa	Jones	4324115574123154	HU 93 73 92 B

Data before Masking

Valid

Valid

Test Database

F. Name	L. Name	Credit Card#	NI#
James	Edwards	5298458711224956	PD 83 36 28 D
Susannah	Hickey	4324584612457744	SN 82 62 74 U

Data after Masking... Masked with Valid CC# and NI#

How are these numbers valid?

For National Insurance Numbers

A national Insurance Number (NI) consists of nine alphanumeric characters. The first two characters are 'alpha' characters. The central, six-digit field is an 'alpha'. The final character is an 'alpha'. All numbers must fit the latest available criteria for each section.

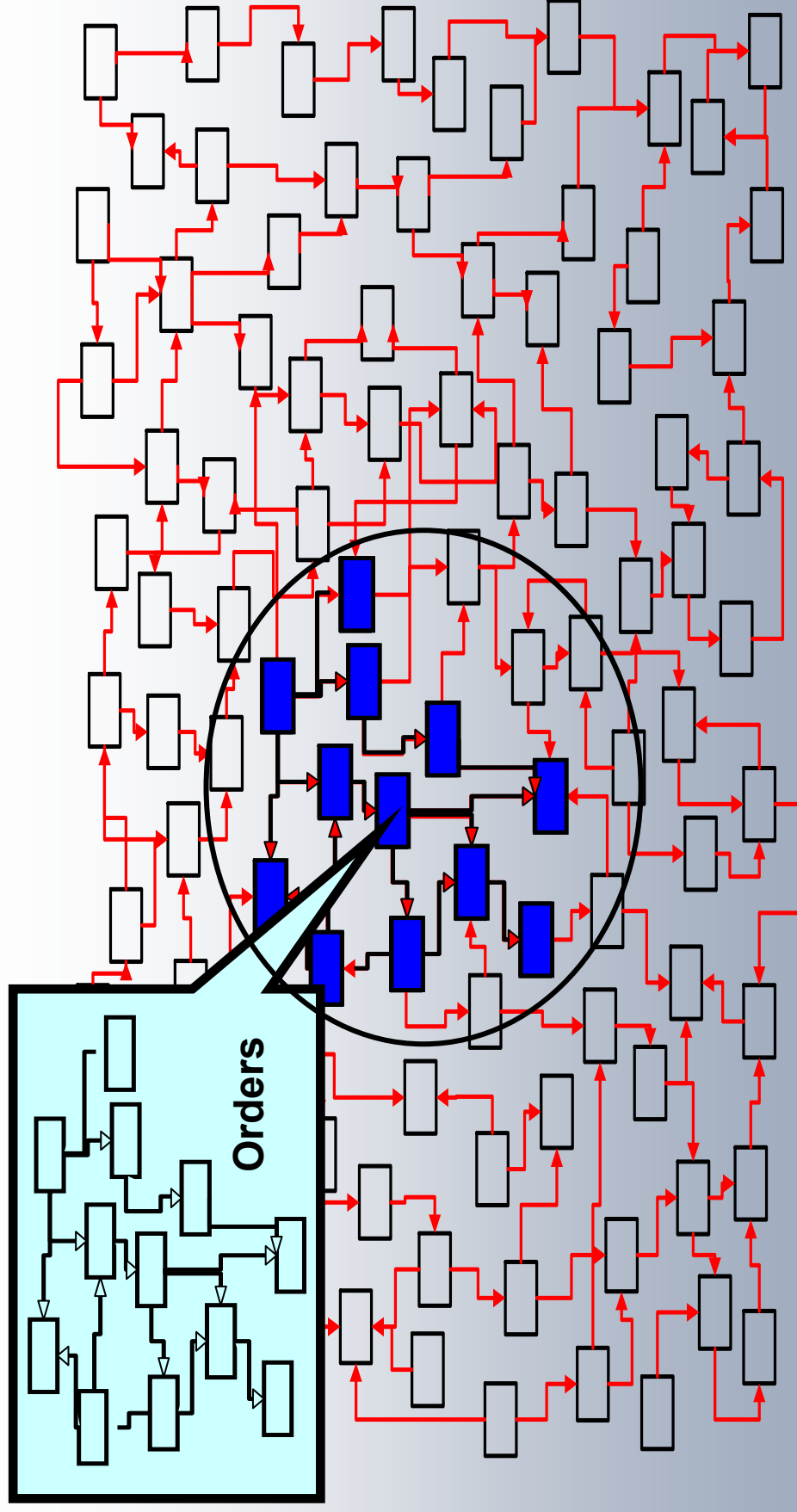
For Credit Card Numbers

Most credit card numbers are encoded with a "Check Digit". A check digit is a digit added to a number (either at the end or the beginning) that validates the authenticity of the number. A simple algorithm is applied to the other digits of the number which yields the check digit.

Working with Complete Business Objects



OPTIM enables extraction/manipulation of Complete Business Objects, preserving full referential integrity whilst selecting only those objects/relationships that are relevant to the Business Object:



Masking with Key Propagation:

Original Data

Customers Table

Cust ID	Name	Street
08054	Alice Bennett	2 Park Blvd
19101	Carl Davis	258 Main
27645	Elliot Flynn	96 Avenue

Orders Table

Cust ID	Item #	Order Date
27645	80-2382	20 June 2004
27645	86-4538	10 October 2005

Referential integrity is maintained

De-Identified Data

Customers Table

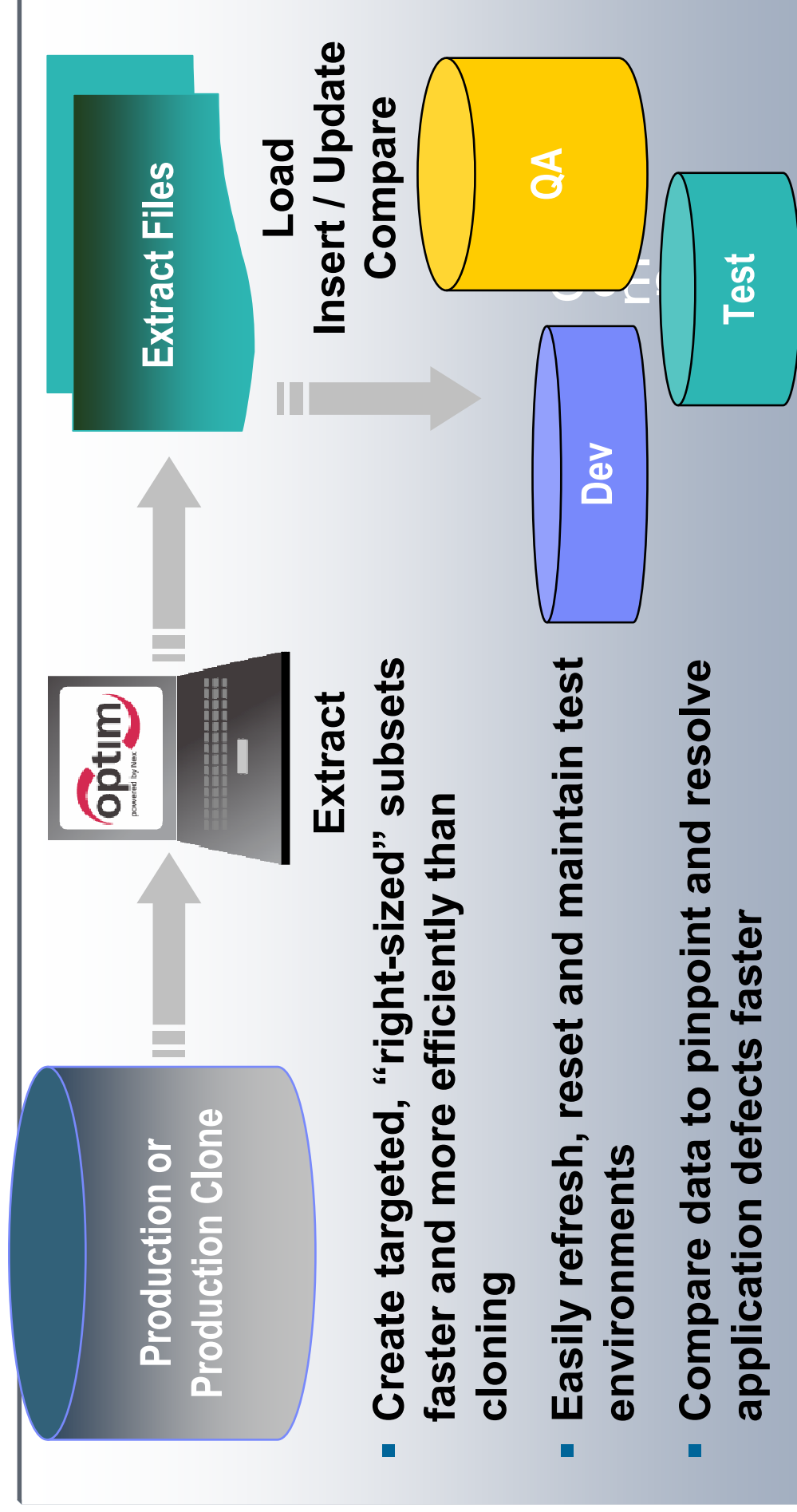
Cust ID	Name	Street
10000	Auguste Renoir	Mars23
10001	Claude Monet	Venus24
10002	Pablo Picasso	Saturn25

Orders Table

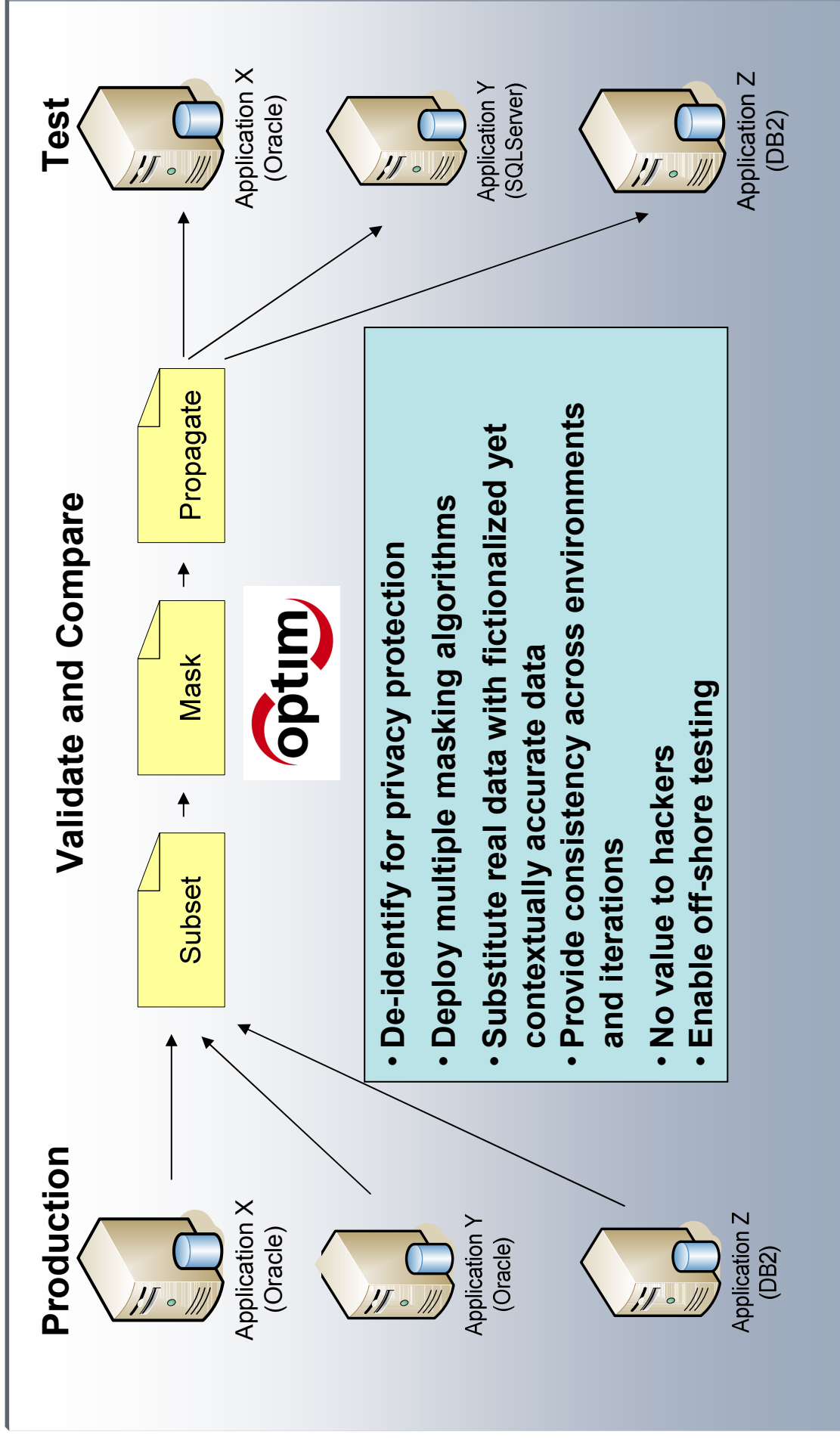
Cust ID	Item #	Order Date
10002	80-2382	20 June 2004
10002	86-4538	10 October 2005

- **Key propagation**

- Propagate values in the primary key to all related tables
- Necessary to maintain referential integrity



- **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**



About the Client:

\$300 Billion Retailer



- **Application:**
 - **Multiple interrelated retail transaction processing applications**
- **Challenges:**
 - Comply with Payment Card Industry (PCI) regulations that required credit card data to be masked in the testing environment
 - Implement a strategy where Personally Identifiable Information (PII) is de-identified when being utilized application development process
 - A masking solution was needed that could mask data across the Enterprise in both Mainframe and Open Systems environments
- **Solution:**
 - IBM Optim™
- **Client Value:**
 - Satisfied PCI requirements by giving Wal-Mart the capability to mask credit data with fictitious data
 - Other PII such as customer first and last names can be masked to ensure that “real data” can not be extracted from the development environment
 - Adapted an enterprise focus for protecting privacy by deploying a consistent data masking methodology across applications, databases and operating environments

Business Deliverables

- Data Retention requirements met
- Data Compliance requirements met
- Data Privacy requirements met
- Performance improvements
 - Batch Programs
 - On-line Inquiries
 - Month-end close time improved
- System time-outs reduced
- Auditing requirements met
- Delivering high quality “non sensitive” data for application development

Delivering the right data at the right time to enable the business to perform

Technical Benefits

- Resources better aligned to business requirements
- Reduce time, complexity and business impact for application upgrades
- Reduce time for disaster recovery
- Reduce back-up time
- Reduce cost of storage
- Future proof systems (major system changes easily supported- like decommissioning, ERP changes, etc.)
- Third party integration data volume issues prevented (RF equipment, etc.)
- Test database creation facilitated

Providing a cost effect end to end Enterprise Data Management structure



“Our backup times are 20% faster”



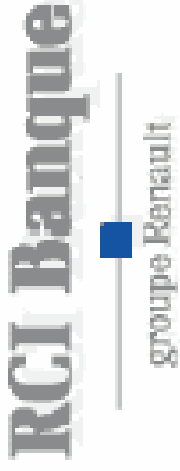
Saving up to \$720k per year in storage deferrals

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



Cut upgrade window by 20%

“We will never again lose sleep over a major PeopleSoft upgrade, thanks to Optim”



“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 SLAs”



Saved \$1 million by leveraging Optim to retire mainframe applications

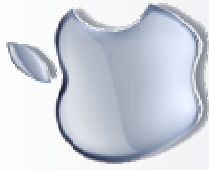
IBM® Optim™ Customers



Johnson & Johnson



i n v e n t



VOLT



Anthem®



BAE SYSTEMS

