



Structured Data Life Cycle Management

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Agenda

- **The Problem**
- **Analysts are saying**
- **The Use Cases**
- **Examples of Customer requirements**
- **What HP provides**
- **Q/A**



The problem

Overload

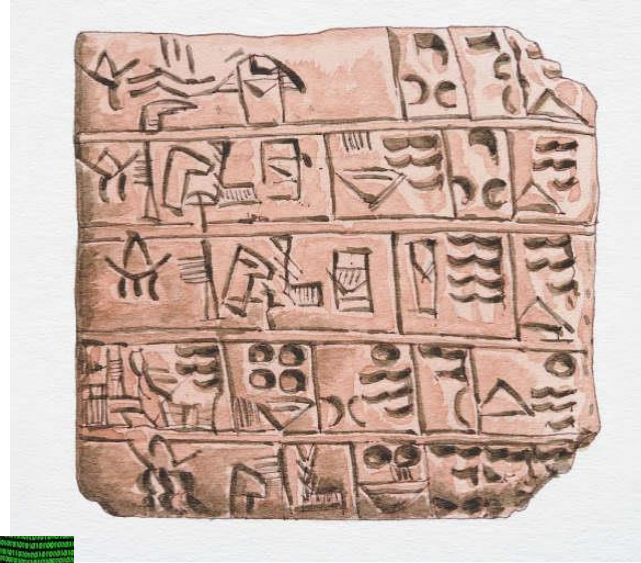
A disaster waiting to happen.



Compliance Archiving

Some Historical Perspective...

*Applications
are temporary,
but
the information
is permanent.*



Data Management 3 main concerns

Performance
Scalability
Efficiency



Information Technology
actors

Operation

Compliance
Legal requirement
Regulations



Compliance/Legal
actors

Litigation

eDiscovery
Search
Record Management



Record Management
actors

Governance

Application Information Explosion - Cost, Productivity, Risk, Value

Storage and
IT admin
costs not
sustainable

How can we use the
data to drive better
business decisions?

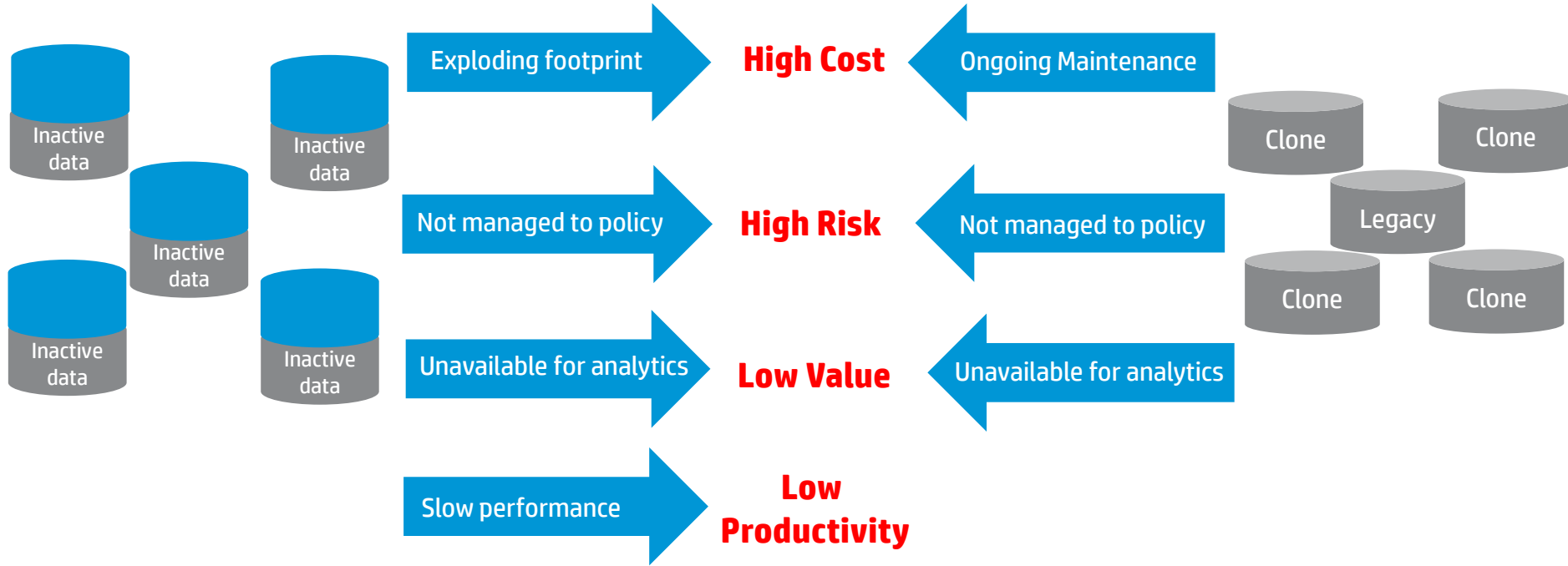
Backup and
restore
taking too
long

Users
bogged
down by
slow DB
queries

How do we
address
compliance
and
eDiscovery?



Bloated Enterprise Application Structured Data





Analysts are saying...

- The database archiving market is projected to grow more than 20% compound annual growth rate (CAGR)
- Market awareness remains small.

Organizations that derive value from data associated with their packaged and custom applications are challenged by the management of this data. They don't understand how to employ retention and deletion; they also **don't see the management of growing volumes as a critical IT function, and rely instead on an approach based on a "storage is inexpensive" paradigm.** This situation has led to numerous issues, ranging from sluggish application performance to the high costs associated with managing applications that should be retired, but can't be simply because no one knows what to do with the data. Given the continual projections for increasing data growth in every facet of business, can organizations do anything other than resign themselves to more storage, more application instances and more IT personnel? This research looks at the market for database archiving as it attempts to answer this question.

- Although infrastructure, architecture, and application delivery impact both the cost and effectiveness of enterprise applications, data plays a pivotal role
- Most large enterprises are aware of the critical role that data management plays in optimizing their application portfolios
- Although a critical mass of enterprises have, or are currently implementing data management-related tooling to improve the cost effectiveness of their application portfolios, full adoption and deployment is by no means complete

Many enterprises are not getting maximum value out of their business application portfolios. While the causes are many and the symptoms varied, in many cases **the root cause is that many applications are simply drowning in data**. As application portfolios and data sources proliferate, a common net result is a downward of application performance and escalating management and maintenance costs. That leaves IT ill prepared to meet the business's changing needs, addressing high profile requirements such as mobile platform integration, improved enterprise collaboration, or leveraging social computing. Many applications are also deemed unreliable because they fail to meet service level agreements, supply trusted data, or provide the visibility that the enterprise needs to navigate rapidly changing markets, customer demands, compliance mandates, and security vulnerabilities.

- **Unstoppable Data Explosion Is Putting Pressure On Enterprises**
- **Data Archiving Remains The Best Option To Tame Production Data Growth**
- **Building A Successful Data Archiving Strategy Requires Careful Planning**
- **Third-Party Archiving Solutions Are Essential For An Enterprisewide Strategy**

With growing data volume, increasing data security breaches, and complex application-performance issues, most enterprises today face significant data management challenges. **Keeping inactive data online not only creates security risk but also increases infrastructure and database cost.** Some enterprises are literally throwing away data to minimize complexity and lower these costs. Although there are several better options available to control data growth, **data archiving is the best long-term solution to significantly improve application performance and reduce the cost of servers and storage.** Data archiving supports many other requirements, including retiring applications, managing test data, improving database manageability, performing data sharing, and ensuring regulatory compliance. Application development professionals and information architects should consider building an enterprisewide data archiving strategy for large databases and applications.

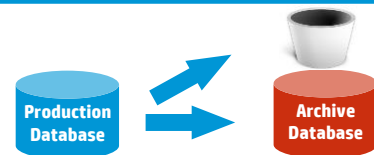


The Use Cases

Solution coverage

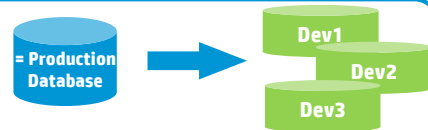
Performance archiving

Archive data to secondary database
Retain access via application



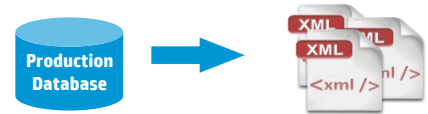
Test data management

Create referentially intact subsets for test and development



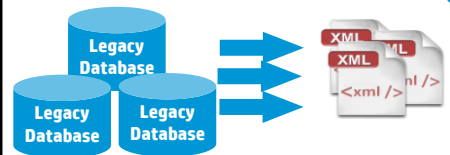
Compliance archiving

Archive data to XML based archive
Retain access via standard reporting tools



Application retirement

Wizard driven for fast deployment
Automation for multi source cases

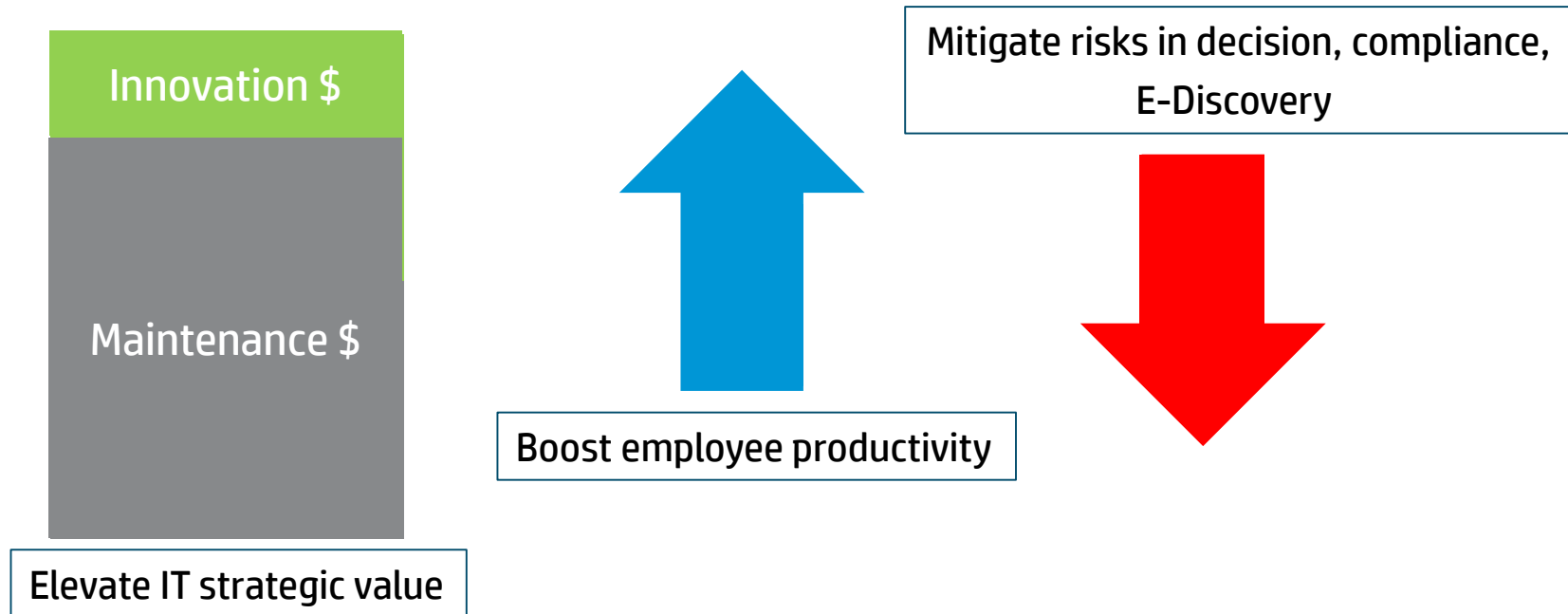


eDiscovery/Enterprise Search

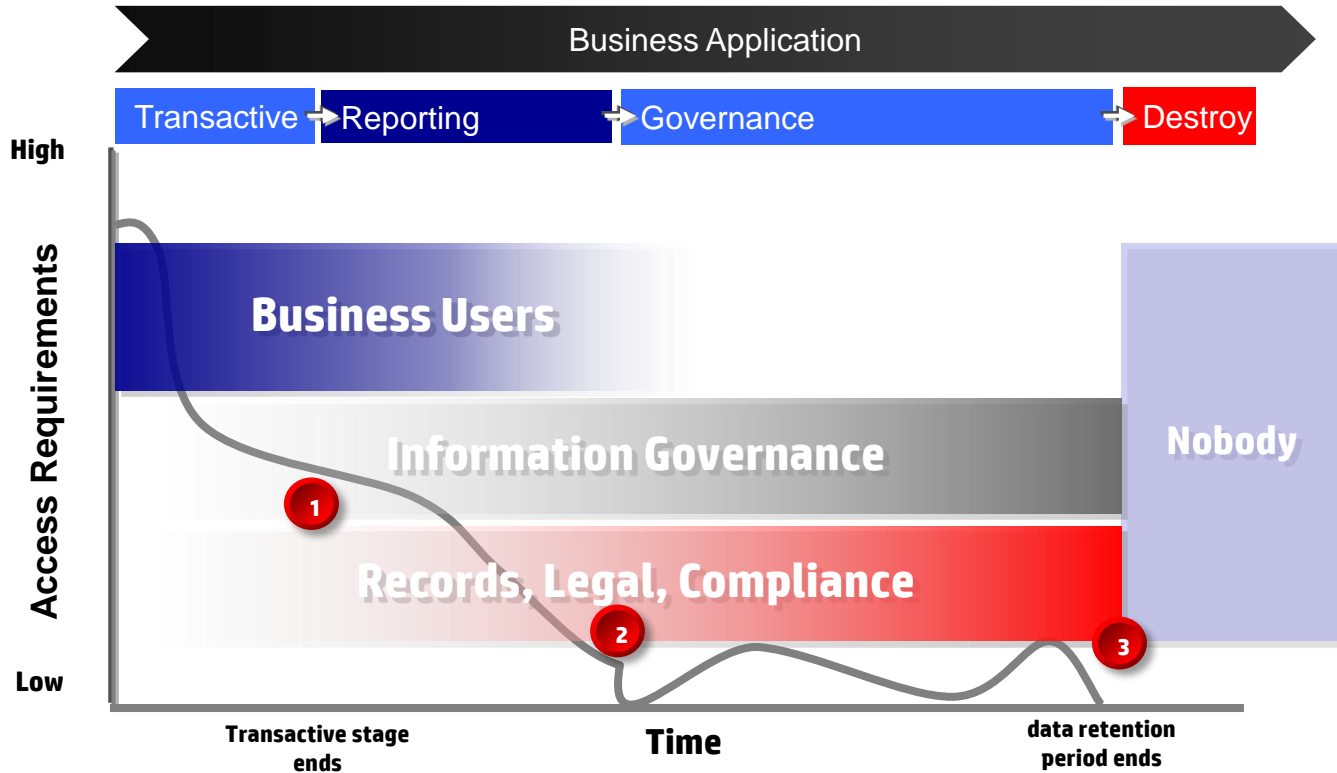
Natural language universal search across structured and unstructured data



Better business performance with competitive edge



Information Governance





Examples of Customer requirements

IT Services industry

Customer requirement

Data center consolidation driving Retirement of up to 3000 applications

On going archiving for several PeopleSoft and other ERP application instances (around 200)

Databases installed in multiple countries

Solution:

Cover structured, semi-structured, and unstructured data

Major Software vendor

Customer requirement

On going archiving for very large eBusiness implementation and other database instances

Retirement of inactive applications for compliance (M&A)

Solution:

Cover structured, and unstructured data

Consumer goods industry

Customer requirement

Mainframe elimination driving Retirement of hundreds mainframe applications

On going archiving for several ERP application instances (around 25)

Databases installed in multiple countries

Requirement to keep the data for many years (Compliance)

Solution:

Cover structured, and unstructured data

Distribution industry

Customer requirement

Reduction of storage footprint

Backup time reduction

Solution:

Cover structured, and unstructured data

Banking industry

Customer requirement

Written, enforceable retention policies

A searchable index of all data stored

Viewable and readily retrievable data

Offsite storage of data

Storage of data on WORM (write once read many) optical media

From RFP (due to Dodd-Frank)

Development environment which assists developers in identifying what data in their databases should be captured, how often and in what manner and building business rules for archive based on this

Performant extract of data on a scheduled basis (nominally daily – sometimes more often) .

Persist data into a central repository, **in a self describing manner**, in a storage efficient way

Efficient mechanisms to “freeze” data held in this repository to worm compliant media

Allow to index this archive information in a variety of ways

Framework to report against archive data without the need to restore it into the source system

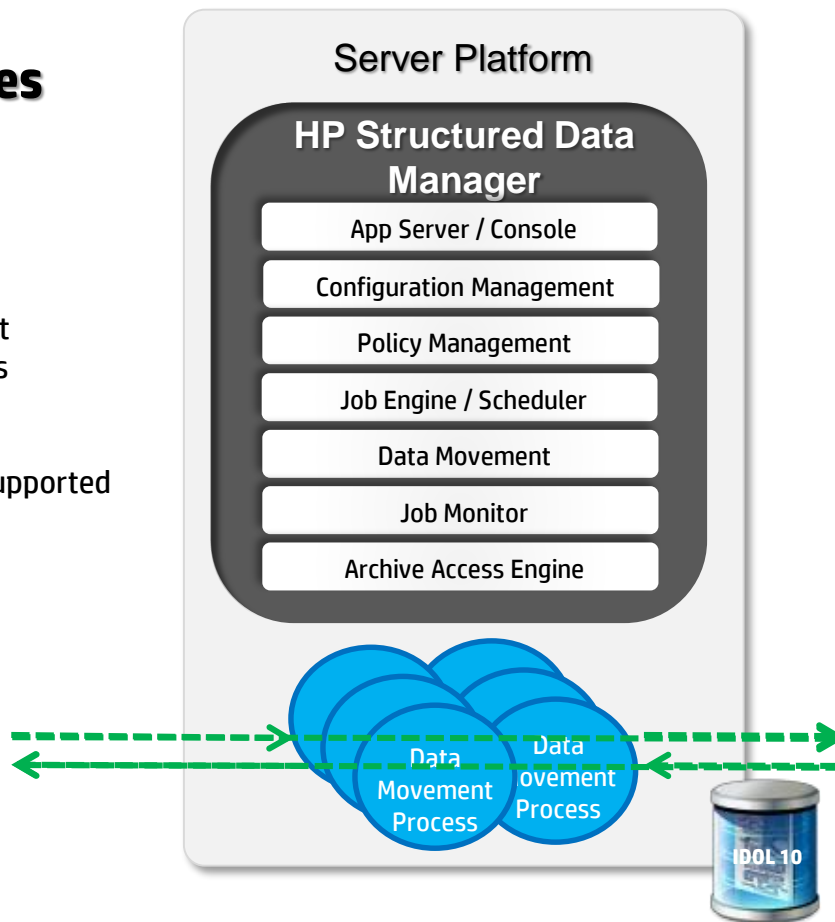
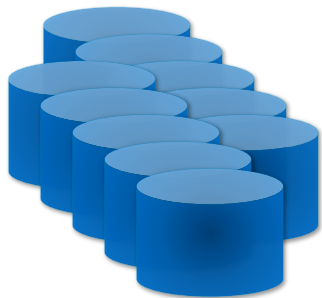


What HP provides

Archiving and Retirement Platform

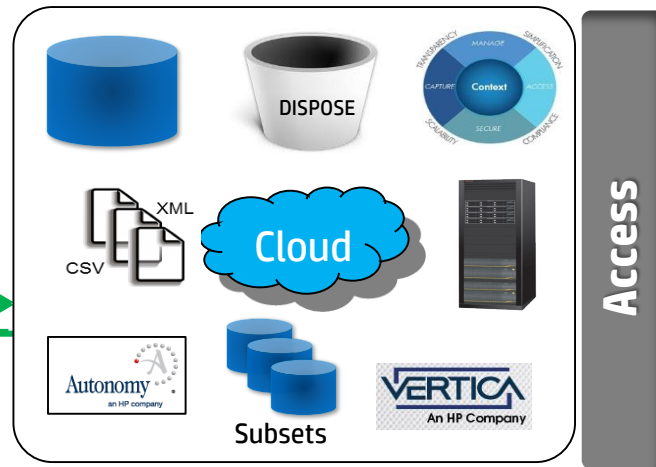
Source Databases

- Oracle
- MS SQLServer
- Sybase
- DB2
- JDBC/ODBC Compliant
- Mainframe Databases
- Obscure Databases
- Files
- Over 300+ Sources Supported
- ...

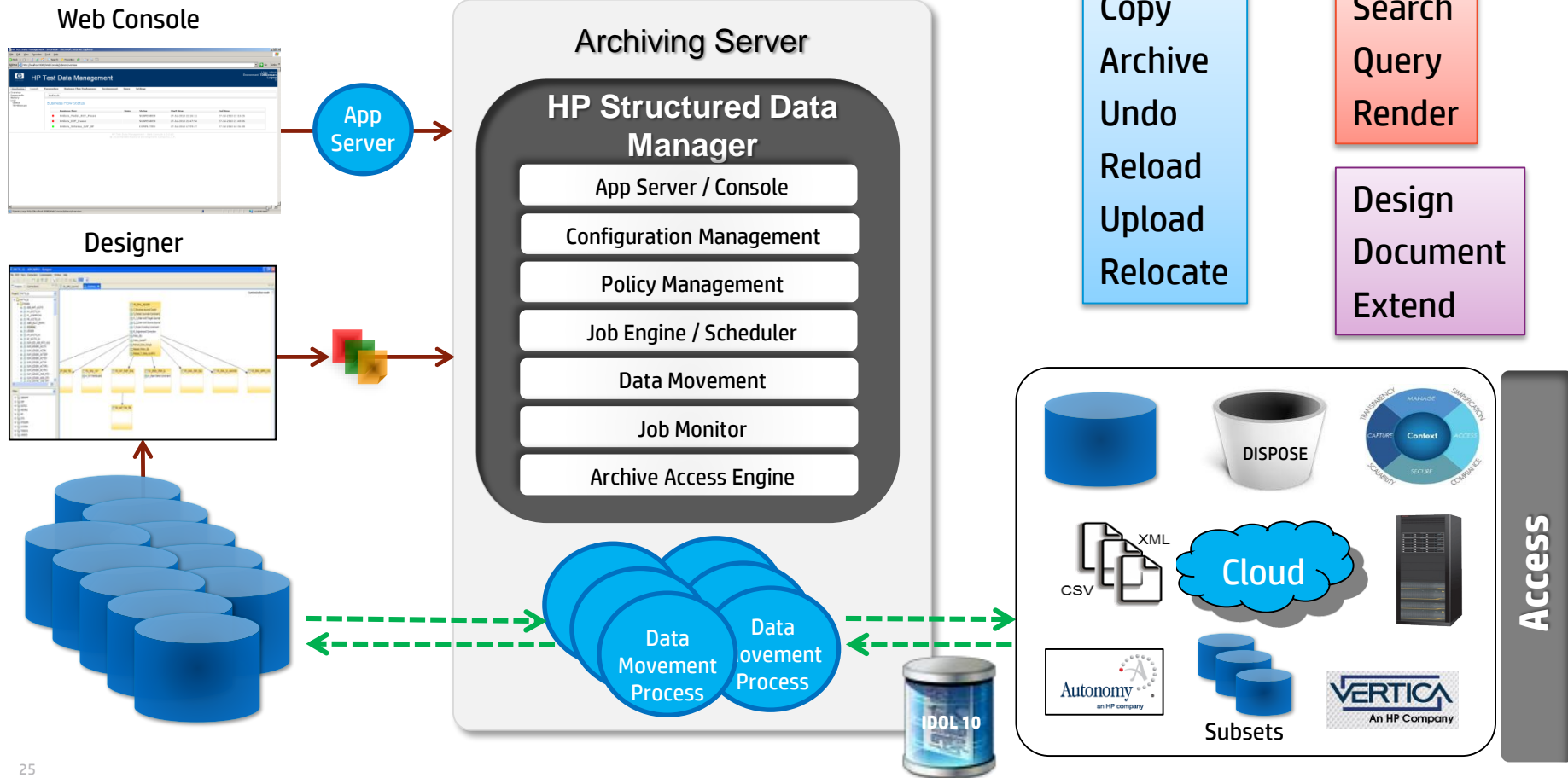


Targets (Compressed)

- Database(s)
- Files - XML & CSV- (NAS, SAN, etc)
- Records Management
- Vertica
- ACA (Compliance Archive)
- CAS (Content Addressable Storage)
- Cloud (HP, Amazon)

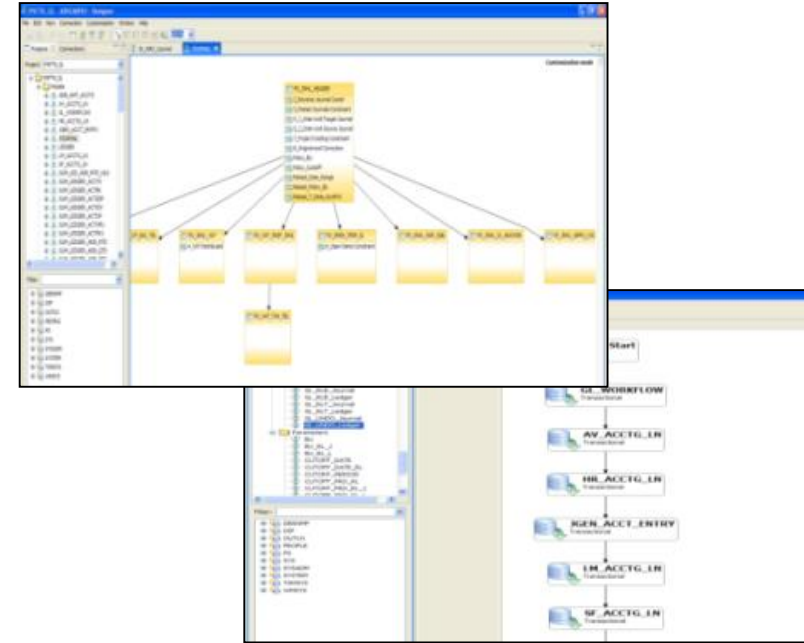


Archiving and Retirement Platform



Application Archive Packs

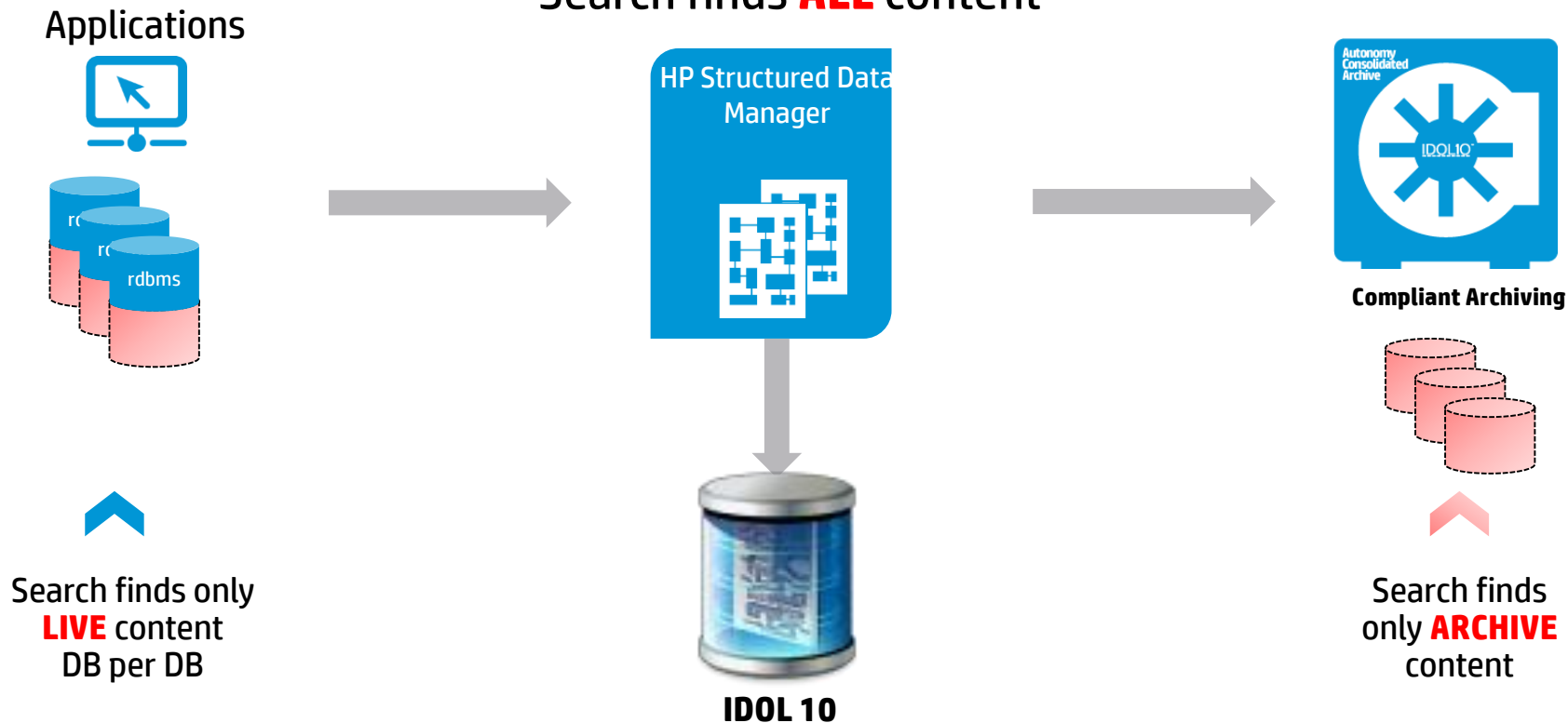
- **Pre-built performance archive modules for common ERP modules**
- **Built/run on top of the AIO platform**
- **Oracle E-Business**
 - 21 Modules per E-Business release
 - 3 Oebs releases supported (11.5.10, 12.0, 12.1)
- **Oracle PeopleSoft**
 - 15 modules per PeopleSoft release
 - 3 PeopleSoft releases supported (8.9, 9.0, 9.1)



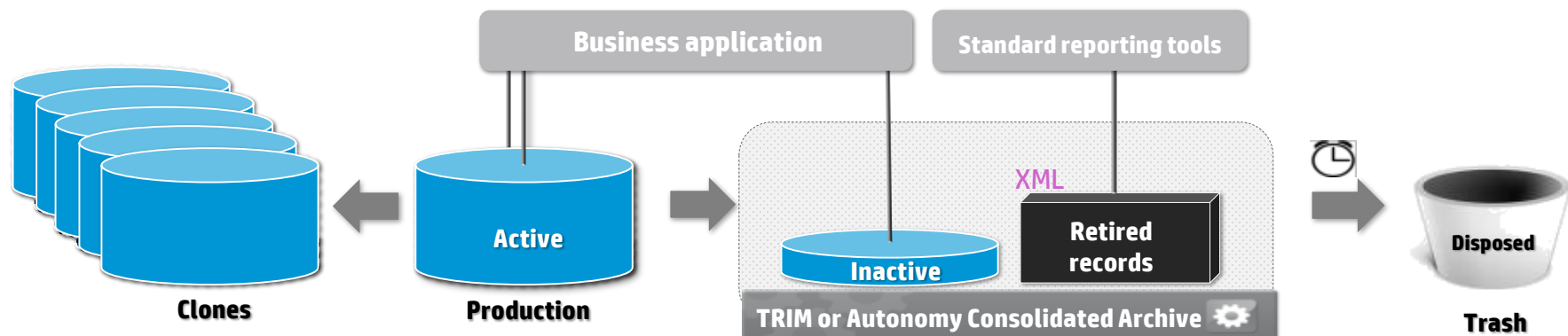
Meaning Based Universal Search

Benefit : Higher Productivity

Search finds **ALL** content



Reduce your tier-1 data footprint



Before	5 Clones – 50 TB	Production - 10 TB	
After	5 Clones – 25 TB	Production - 4 TB	Archive – 2.1 TB

Production & clones

Before

Total 60 TB

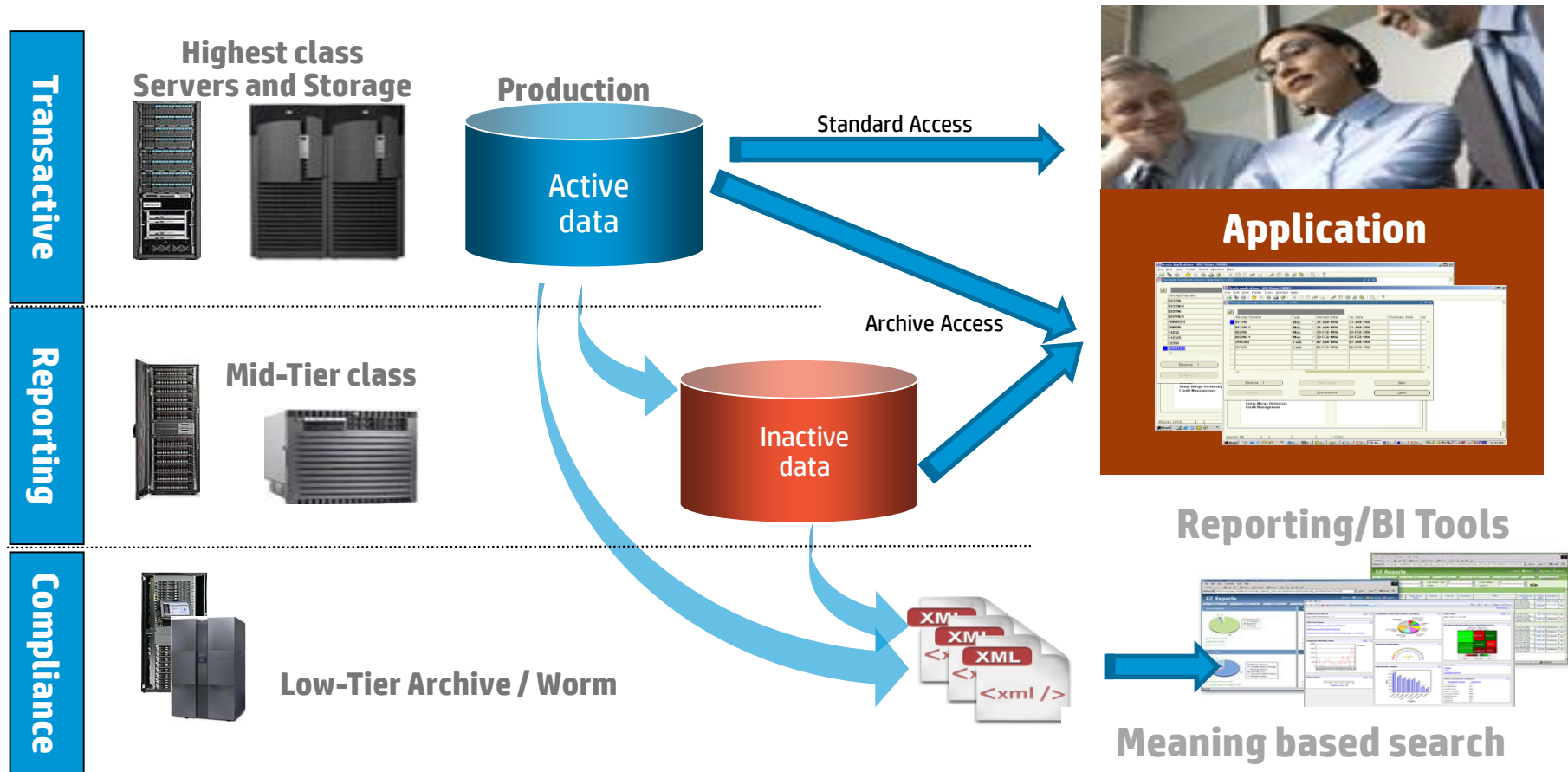
After

Total – 31.2 TB

➔ 48% Reduction*

* Percentage decrease experienced by HP IT in real world usage

Seamless Data Access Preservation



Proven scalability for large enterprises

HP IT's ongoing database archiving

powered by HP Structured Data Manager since November 2009

- Query time reduced by **89%**
- Storage reduced by **48%**
- Full backup window reduced by **37%**

By February 2013:

- **143+ source databases**
900+ db-db jobs
- **81+ billion rows archived**
- **26TB+ (compressed)**





Q&A

How much Data Cholesterol in your DB?