Best Practices for Information Lifecycle Management

Aaron Rangel, V.P Product Management

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> Timeless Data Management

Agenda

- ILM and compliance
- 11 ILM best practices
- Customer success stories
- Summary

ILM for structured data

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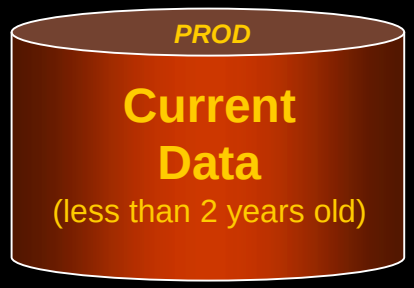
How is compliance affecting ILM?

- New FRCP rules
- Emphasis on classifying data & policies
- Policies give you visibility
- Keeping information forever is NOT a best practice
  - Costs
  - Liabilities
- eDiscovery capabilities
- Legal holds

ILM for Structured data

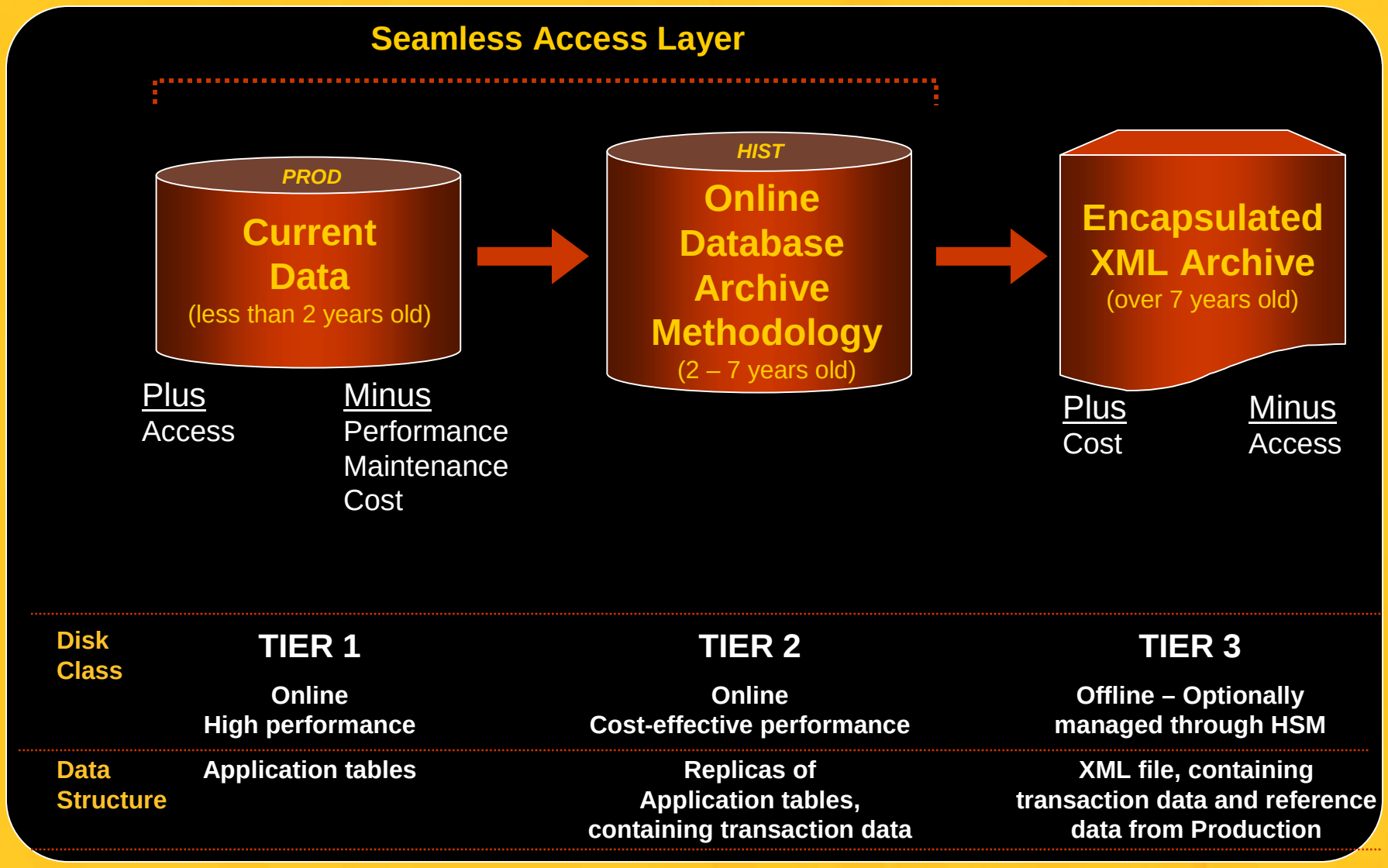


	Current Data	Encapsulated XML Archive
Plus	Access Transact able	Cost Application neutral
Minus	Performance Maintenance Cost	Access not thru native app
Disk Class	**TIER 1** **Online** **High performance**	**TIER 3** **Offline – Optionally managed through HSM**
Data Structure	**Application tables**	**XML file, containing transaction data and reference data from Production**

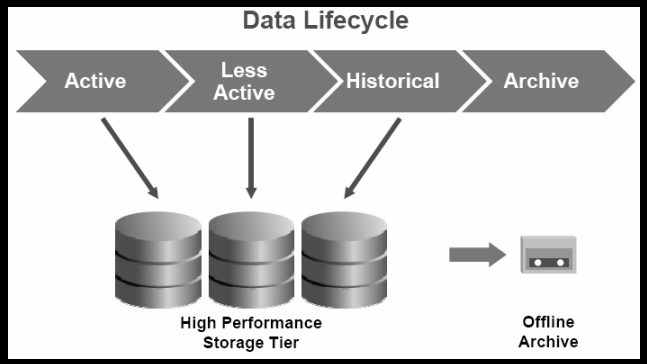
ILM for structured data

- Moving data at the right point in its lifecycle
  - Too early
  - Too late
- Determining the right time?
  - Not easy
    - ERP, HR, CRM apps have hundreds of modules
    - Different access expectations
- How is this challenge addressed?

ILM for Structured data



Business drivers for ILM



- Performance
  - Data Entry/Batch Processes take too long
- Compliance requirements
  - SOX, HIPAA, FDA
- Hardware upgrades & storage Costs
- Operational issues
  - Upgrades
  - Maintenance windows
  - Test & development

11 ILM Best Practices

11 ILM best practice steps

1. Reviewing your application portfolio
2. Understanding the data in each application
3. Determining success criteria
4. Defining policies
5. Importance of pre-packaged business rules
6. Customizing business rules
7. Simulation

11 ILM best practice steps for Oracle Applications

8. Create access policies
9. Ensure restoration
10. A robust compliance feature set
11. Use a time tested approach

1. Reviewing your application portfolio

- Identify candidate applications to retire
- What is application retirement?
  - Removing the application & supporting hardware stack
  - Data is still accessible in read only mode
  - Save costs

1. Reviewing your application portfolio

- Eligibility criteria for retirement
  - Costs > Business Value
  - Rarely accessed
  - High costs
- Capabilities for application retirement
  - Model & extract data
  - Preserve original context
  - Access data in original format
  - eDiscovery & reporting
  - Set retention policies

2. Understanding the data in each application

- What modules are growing the most?
- What is the business value of the data?
  - What needs to be retained vs. purged?
- How often is the data accessed?
  - PO < 3 months accessed frequently
  - PO > 3 months accessed 1-2 times a year
  - PO > 2 years accessed rarely
- The type of access over time
  - Thru native application (Online), offline (browser)

2. Understanding the data in each application

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3. Determine your success criteria

Key drivers of your ILM requirements

- Performance Improvement
  - Batch processing
  - Reports and queries
  - Maintenance windows
- Proactive ILM strategy
- Save costs
- Operational efficiency

Critical to planning the implementation

Business stakeholder buy-in

4. Establish your policies

- How long will data remain in tier 1, 2 and 3?

Data type	Tier 1	Tier 2	Tier 3
PO's	12 months or less	24 months or less	60 months

- OOTB policies for many modules
  - ERP, CRM, HR apps are complex
  - Relationships defined at application later
  - All you have to do is enter criteria

4. Establish your policies

- Define policies for all modules or a few high volume modules
- Flexibility is key
  - 1or more policies per module

Type of Customer	Years in tier 1
Platinum	3 years
Gold	1yr

  - Each policy associated with multiple criteria
    - Set of books + age in months

4. Establish your policies

- Consistency across modules within
  - Financials
  - Order to Cash
  - Procure to Pay
  - Payroll and Benefits
  - CRM

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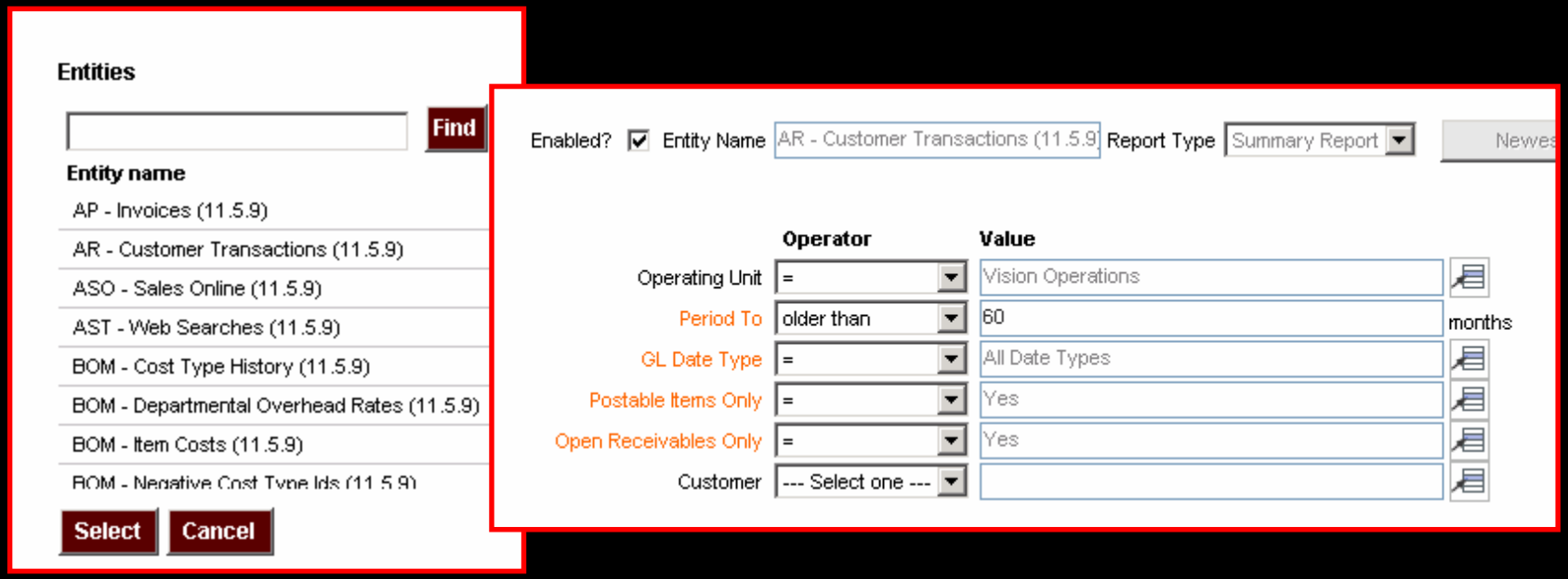

- Select from LOVs
- Dynamic lists from your application environment
- Use a number of months – not a hard-coded date (define one, rerun many times)

What is a Business Rule?

Application logic that determines whether a transactional data can be moved

Oracle Applications has complex transactional chaining

Business rules MUST cascade throughout the application to ensure that application integrity is maintained

5 - Pre-Packaged Business Rules

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7 – Simulating policies and applying business rules are iterative

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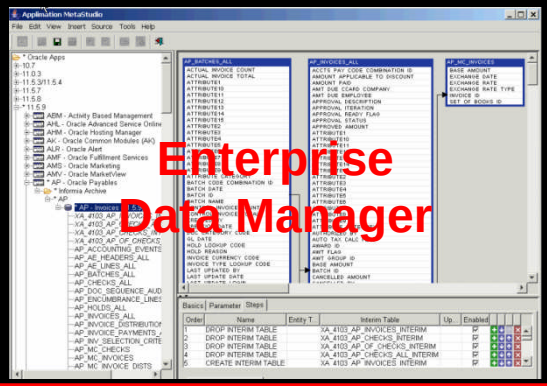

Enterprise Data Manager

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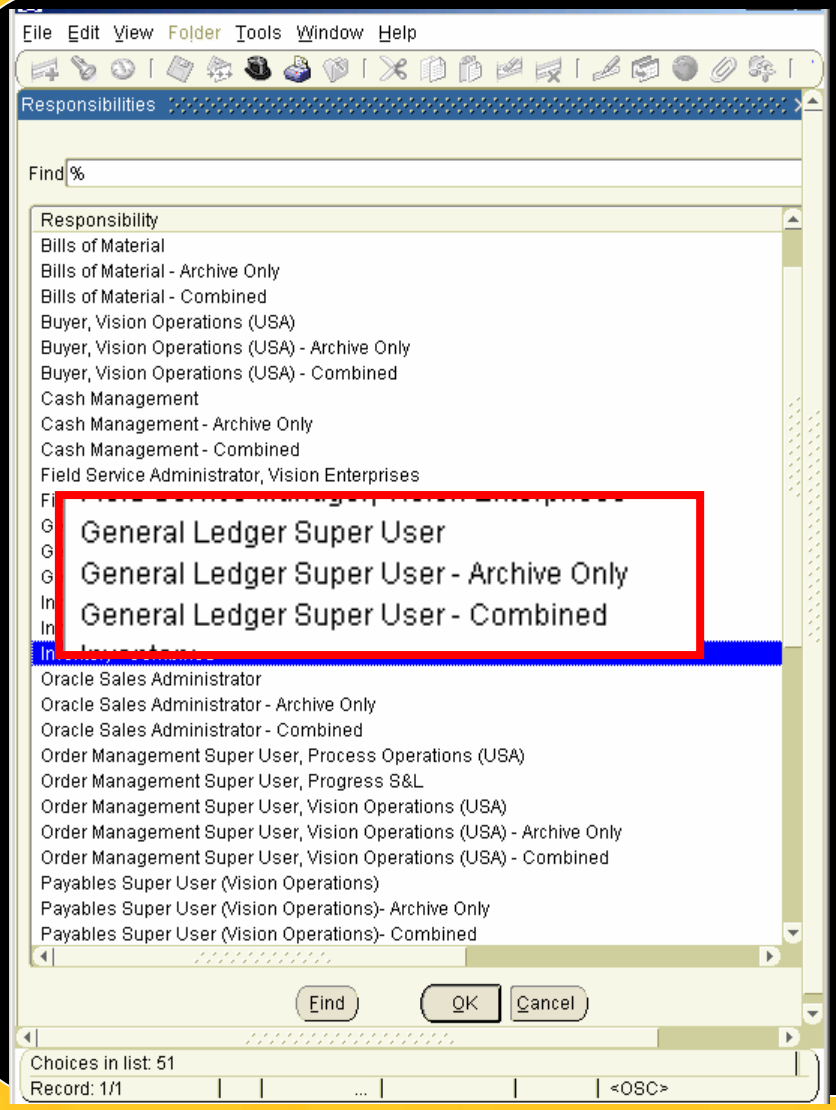
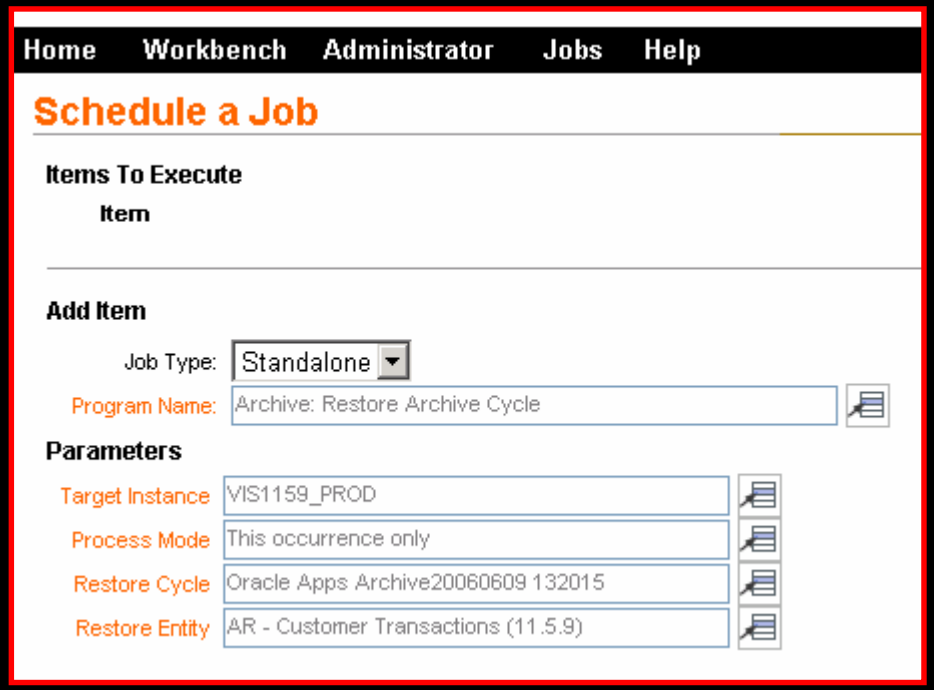


- Should all users have access to archived data
- How should access to the offline archive be controlled

9 - Ensure Restoration



- "Undo" any archived data automatically
- Restore an entire cycle or a single transaction
- Safety net factor
- Critical for gaining stakeholder acceptance

10 –Robust compliance feature set

- eDiscovery
- Policy managers that manage retention
  - Visibility into when retention periods expire
- Integration with single instance storage solutions

10 - Follow a Time-Tested Methodology

Customer Success Stories

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ILM Goals

Ingersoll Rand	Shrunk production by 46% 1.3 TB → 700 GB
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Ingersoll Rand	Time of each upgrade test cycle reduced by 30%
HANOVER	Oracle beta customer archiving 11i data before upgrade to R12

Summary

- Overview of Applimation
- ILM and the business drivers
- Compliance driving ILM
- 10 ILM best practices
- Customer success stories

Contact Applimation

Thank you for attending!

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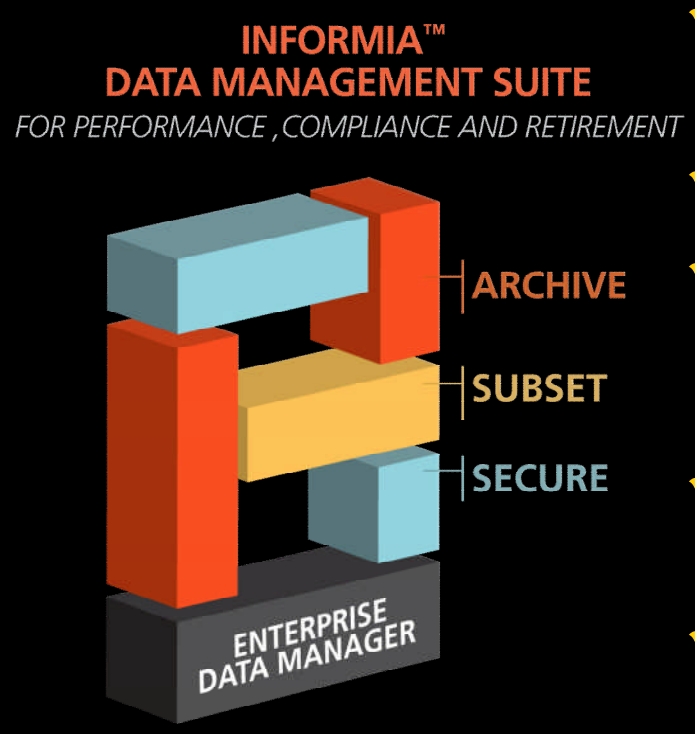
Oracle's ILM capabilities

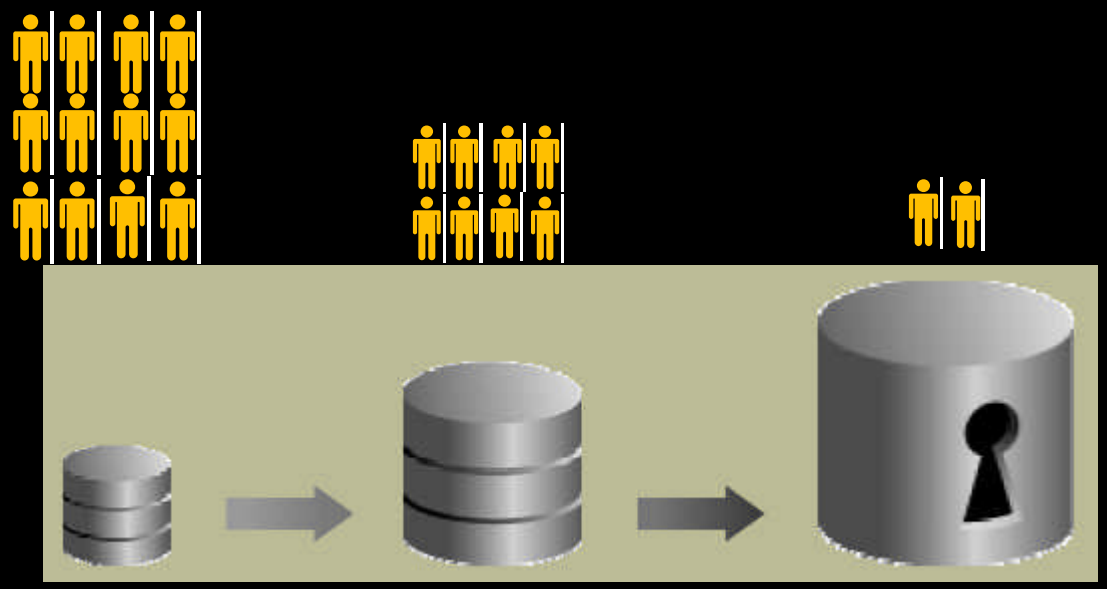
- Table based NOT business logic based
- Data is not moved out of the database
- A lot of overhead
  - Create partitions on hundreds of tables
  - You have to create partitions on the right date field
- At the end of the day, you have to archive out of the database
- More suited for smaller applications, fewer tables

Introduction to Applimation



- ✓ A leader in enterprise data management space
- ✓ Unified, integrated product suite
- ✓ Deep expertise with Oracle Applications, PeopleSoft and Seibel
- ✓ 150 + customers using Informia Solutions
- ✓ Oracle Certified Advantage partner
- ✓ Only Archiving vendor in Oracle's AIPSC

Understanding the data lifecycle and the need to retain data



This month

This Year

Previous Years

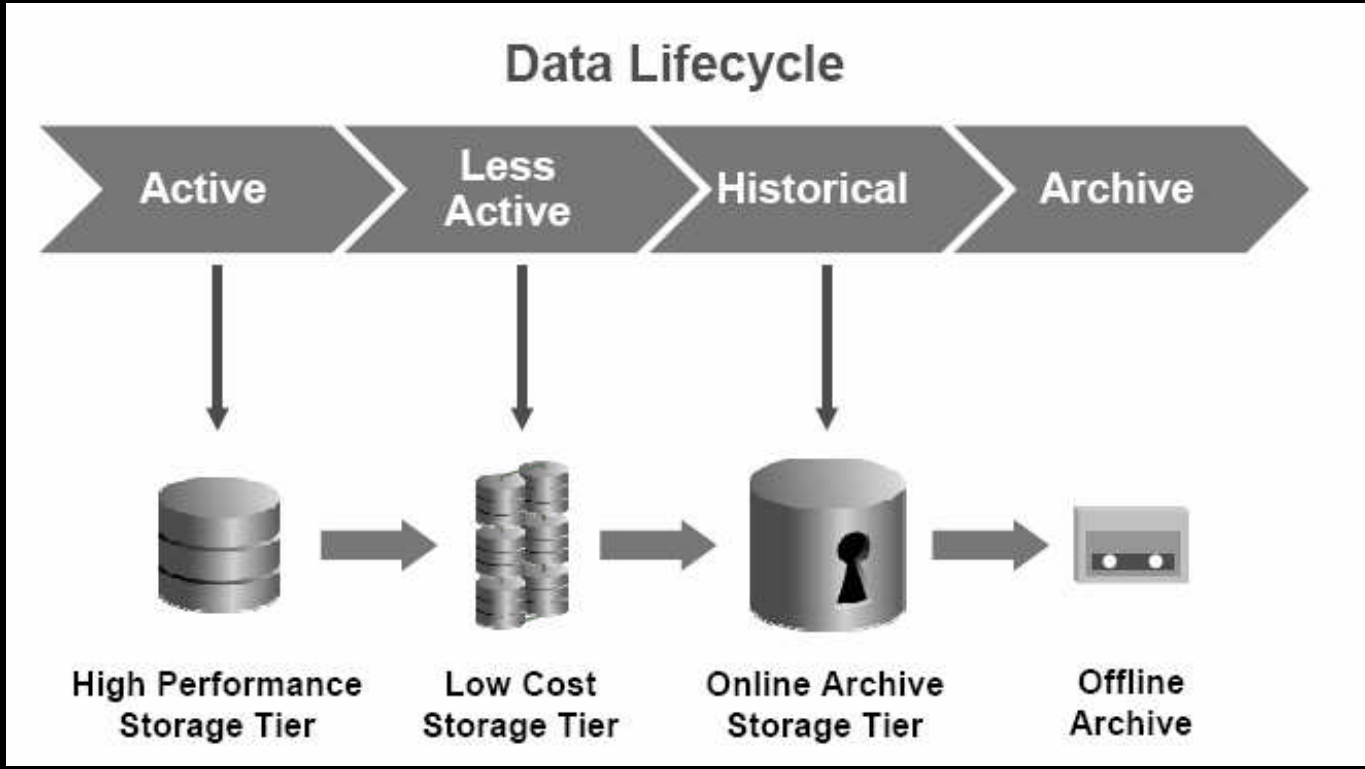
Vast amounts of data need to be retained for compliance

Reduce costs of storing data

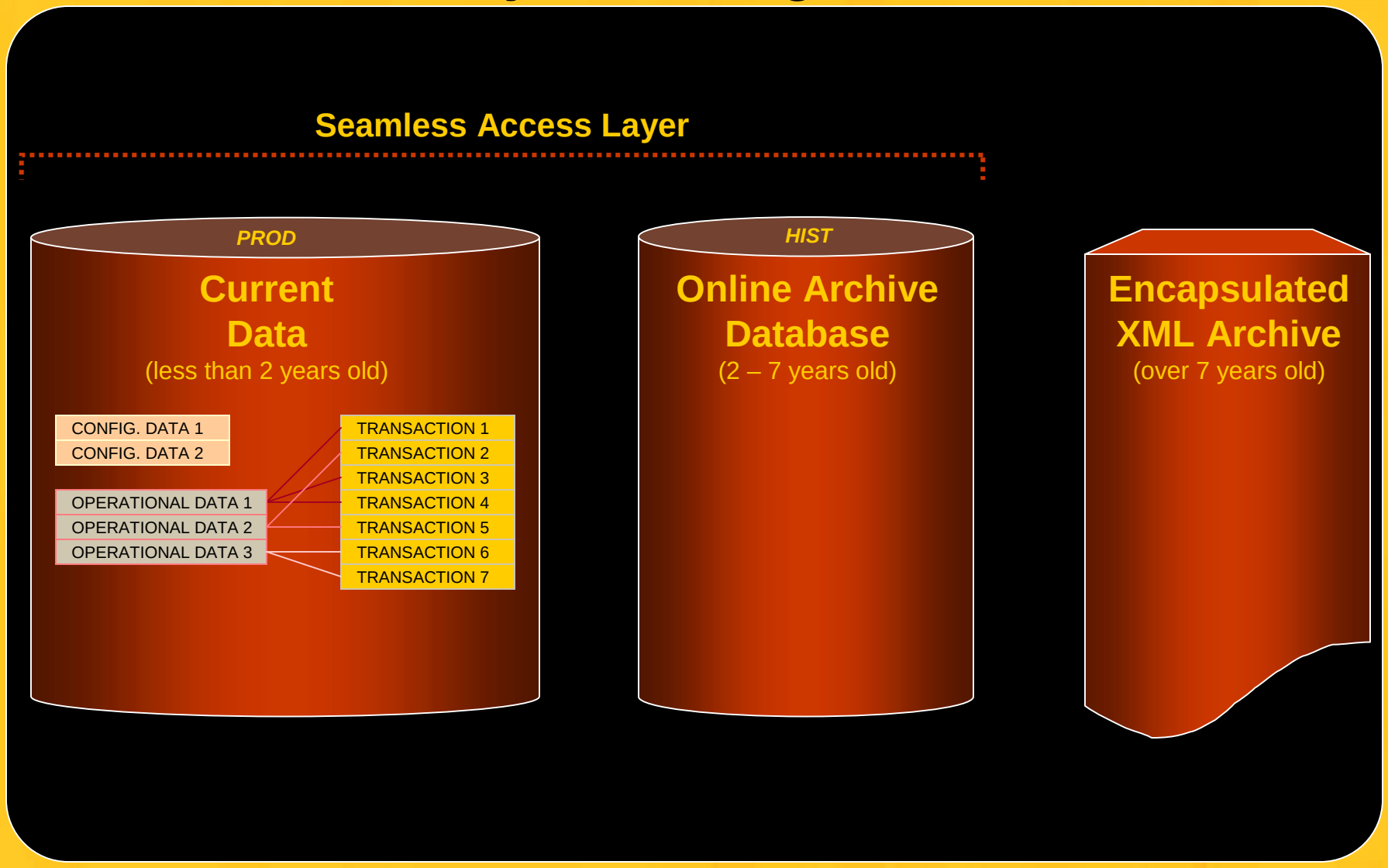
Active → Less Active → Historical → Archive

What is ILM?

Policies, processes, practices, and tools used to align the business value of information with the most appropriate and cost-effective IT infrastructure from the time information is conceived through its final disposition

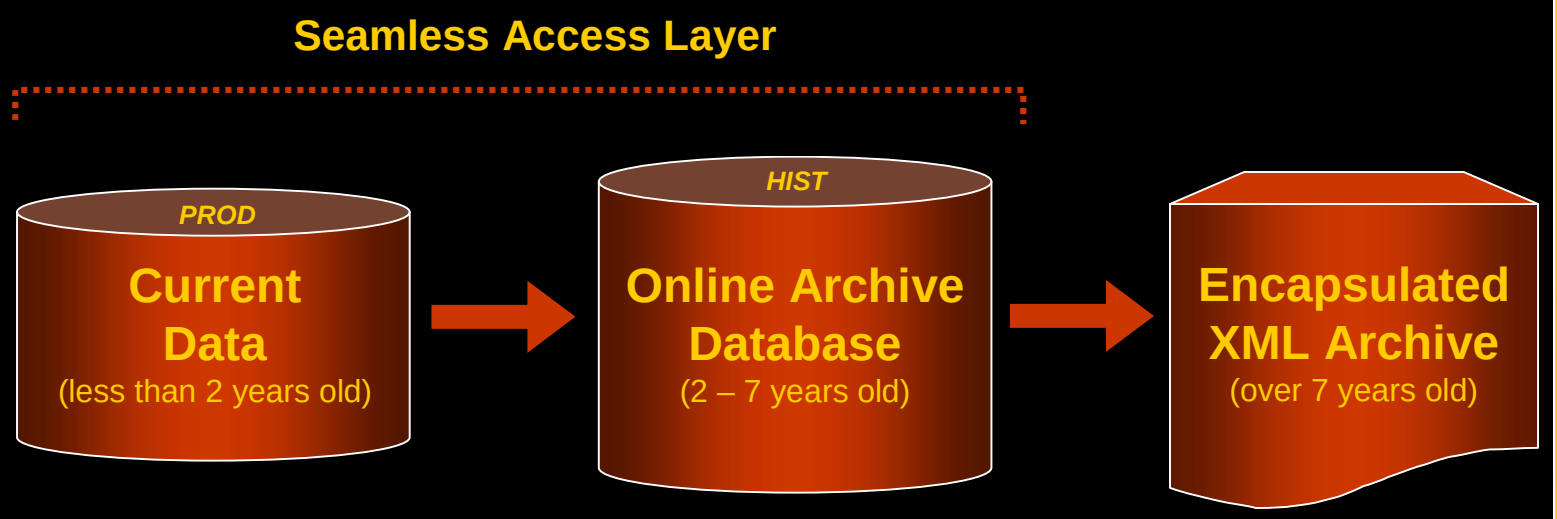


Multi-stage Archiving for Information Lifecycle Management



Importance of a seamless access layer

- Access data in tier 1 and 2 from native application



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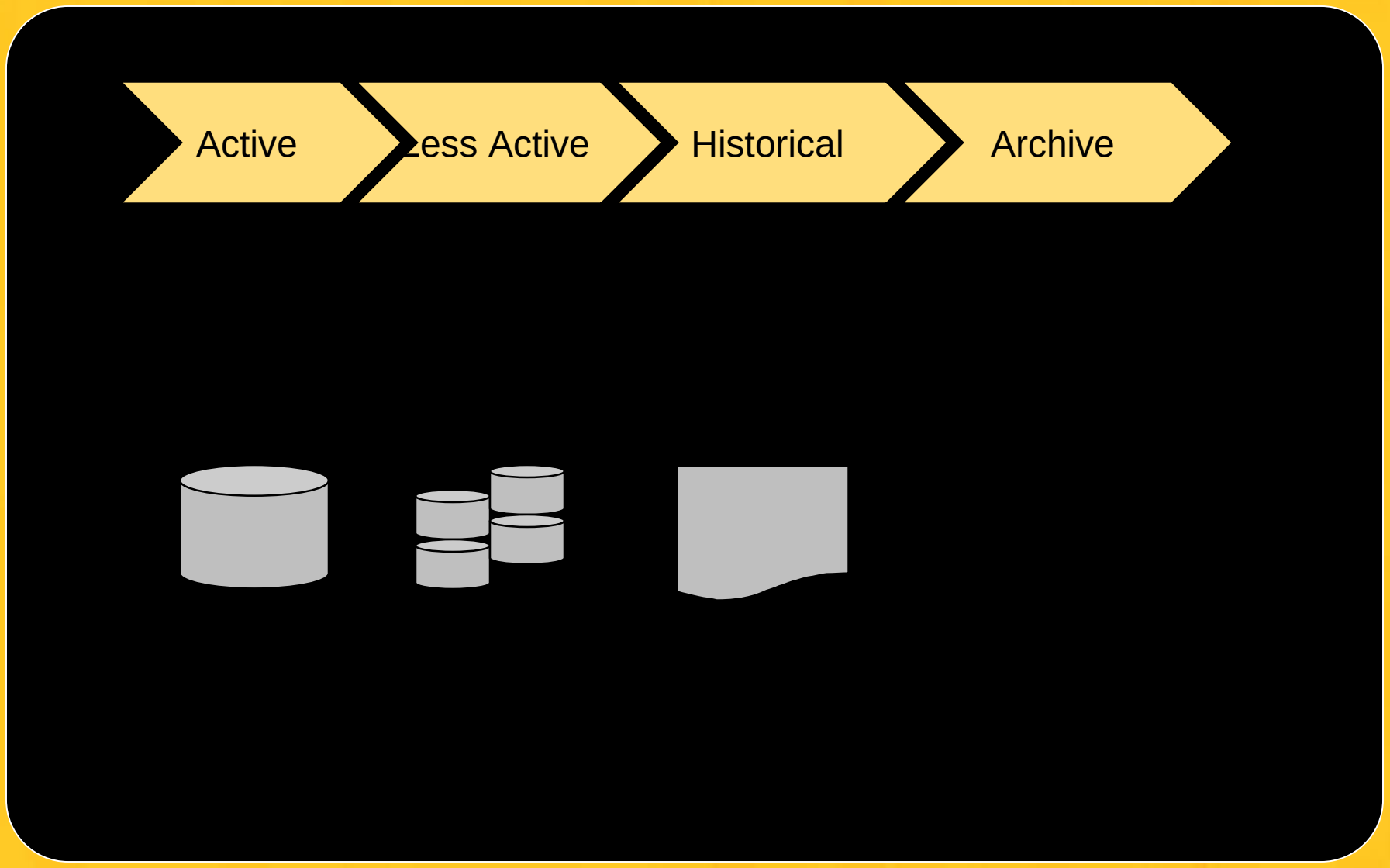
Matching data lifecycle to storage

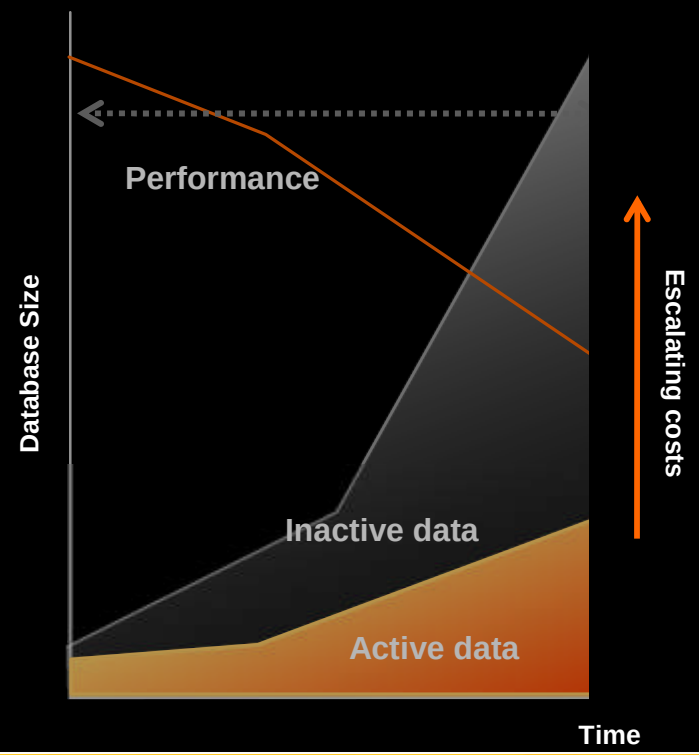


The challenge of increasing data growth

Benefits:

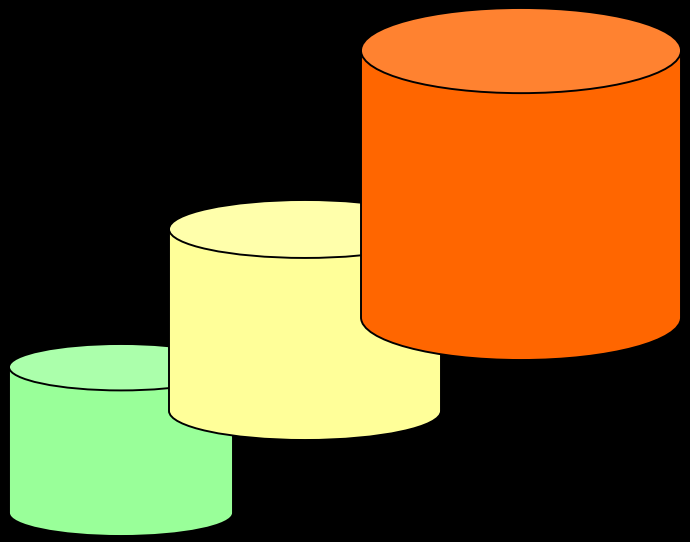
BEFORE SOLUTION

- Growing storage costs
- Diminishing performance
- Increasing maintenance & compliance work



Business reasons to manage growth

- Performance
  - Data Entry / Batch Processes taking too long to complete
- Compliance requirements
  - SOX regulating data retention
  - Data must be retained for potential audits
- Storage Costs
  - Continuously purchasing storage to keep up with growing data size
- Application Upgrades
  - Increased growth due to larger footprint



Systemic problems caused by data growth

- Batch processing and data entry taking longer
  - Users wasting time due to long wait times
- Maintenance windows expanding
  - Back and recovery processes at risk due to long timeframes
- Production size unwieldy to copy for testing and development

Data Management Options

- Purchase additional hardware
- DBAs tune application standard code
- Purge using Vendor provided purge routines if available

THE PROBLEM: constantly spending on hardware, tuning only does so much, purging doesn't archive

9 Archiving Best Practices for Oracle Applications

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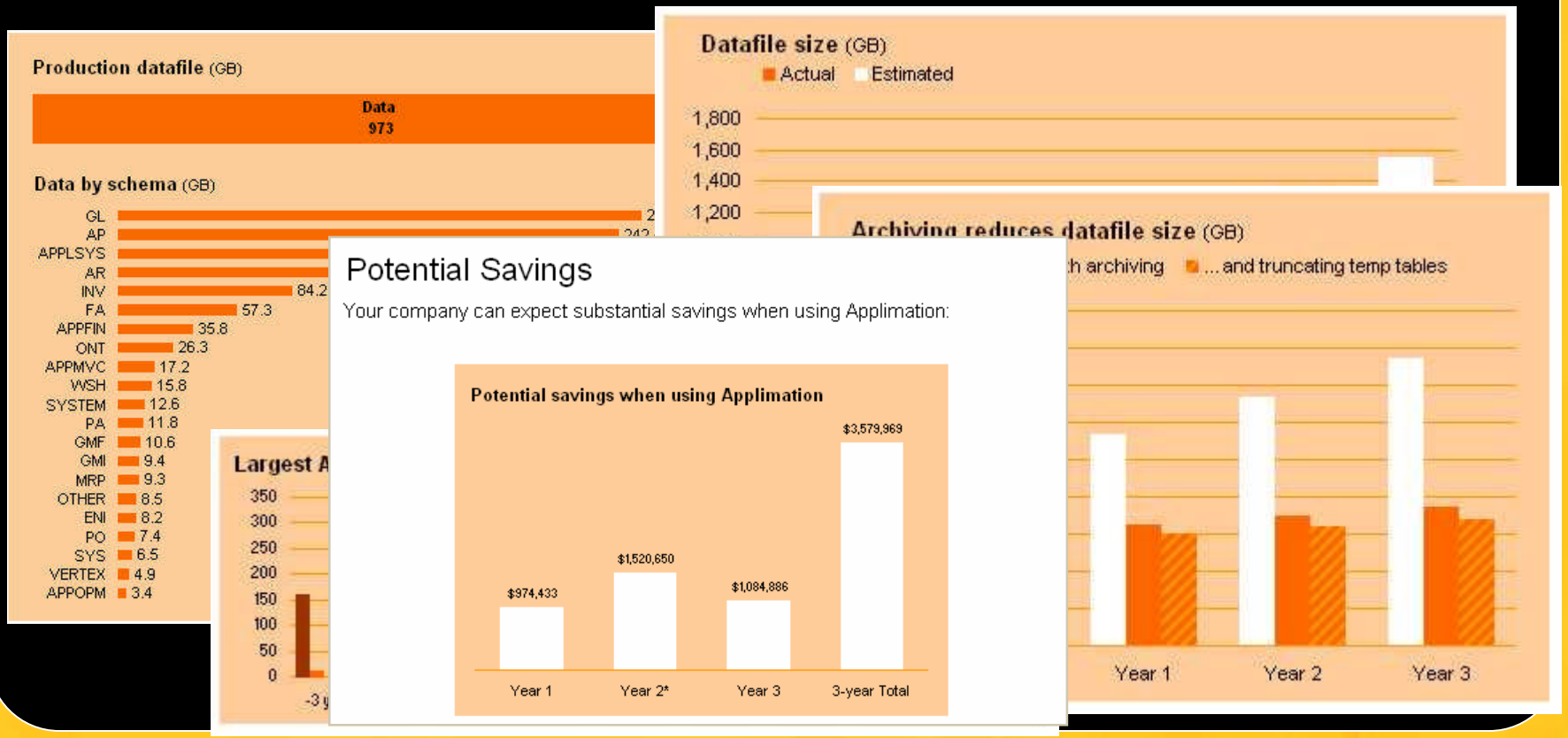
#1 – Understand Your Data Growth Trends

- Insight into application data – current state and future growth
- Simulate archiving policies – your policies and your data
- Calculate ROI based on your polices and data



2 - Determine Success Criteria

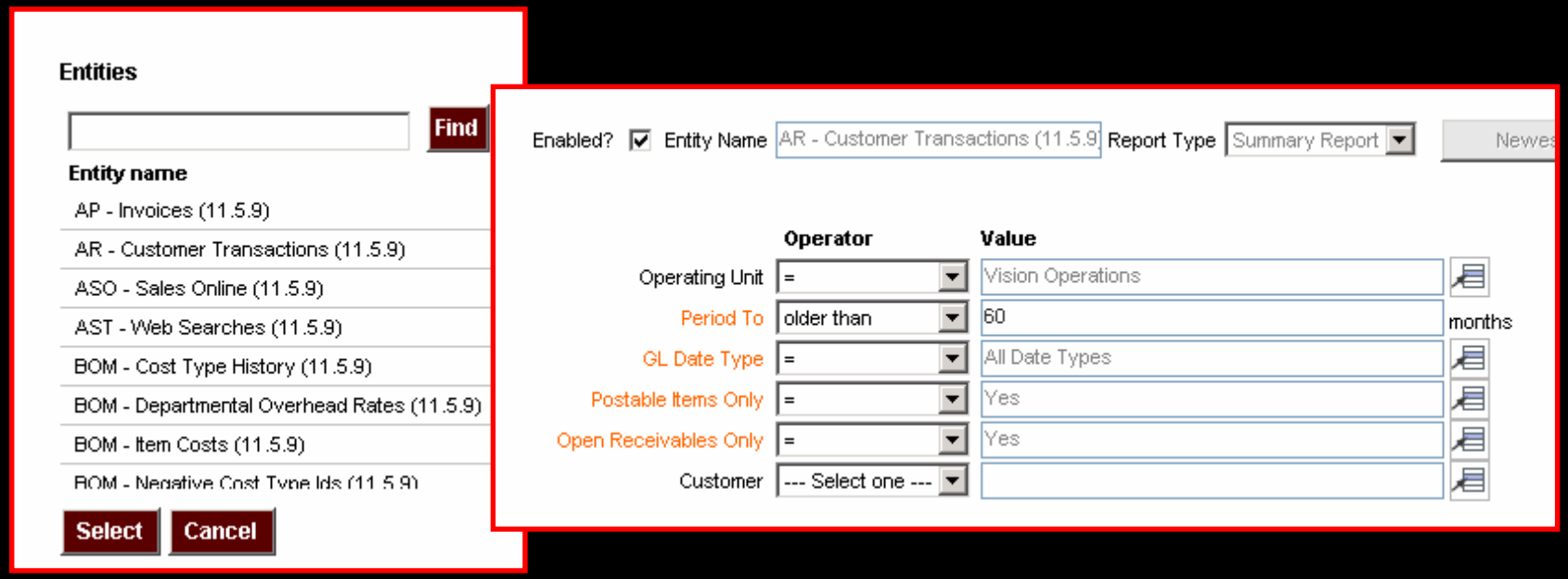
What are trying to achieve?

- Storage reduction
- Performance Improvement
  - Batch processing
  - Reports and queries
  - Maintenance windows
- Planned Upgrade

Critical to planning the implementation

Achieving stakeholder buy-in

3 - Establish a Data Retention Policy



- Built in Entities and criteria – no need to define the criteria yourself
- Select from LOVs
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What is a Business Rule?

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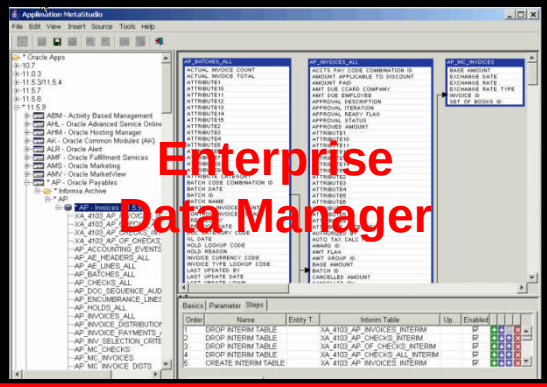

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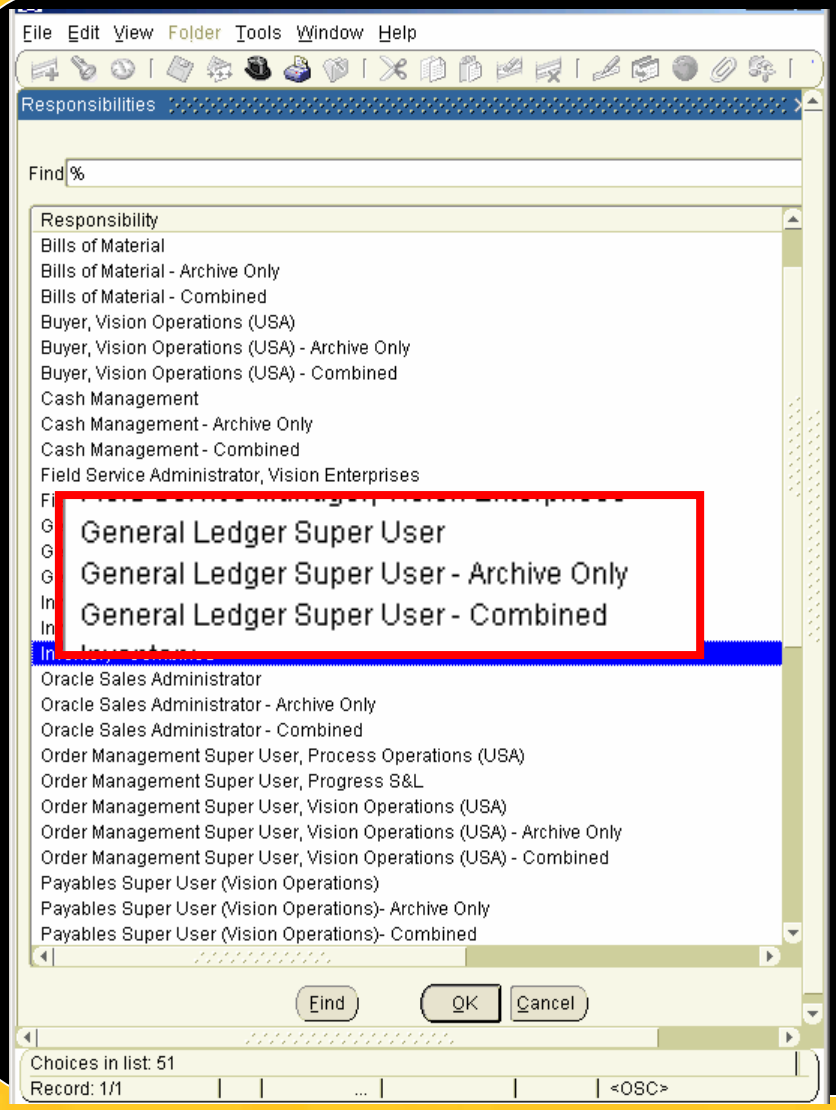

- Use existing Oracle Applications security
- Fully control who has access to archived data
- Authorized users only have to switch responsibilities

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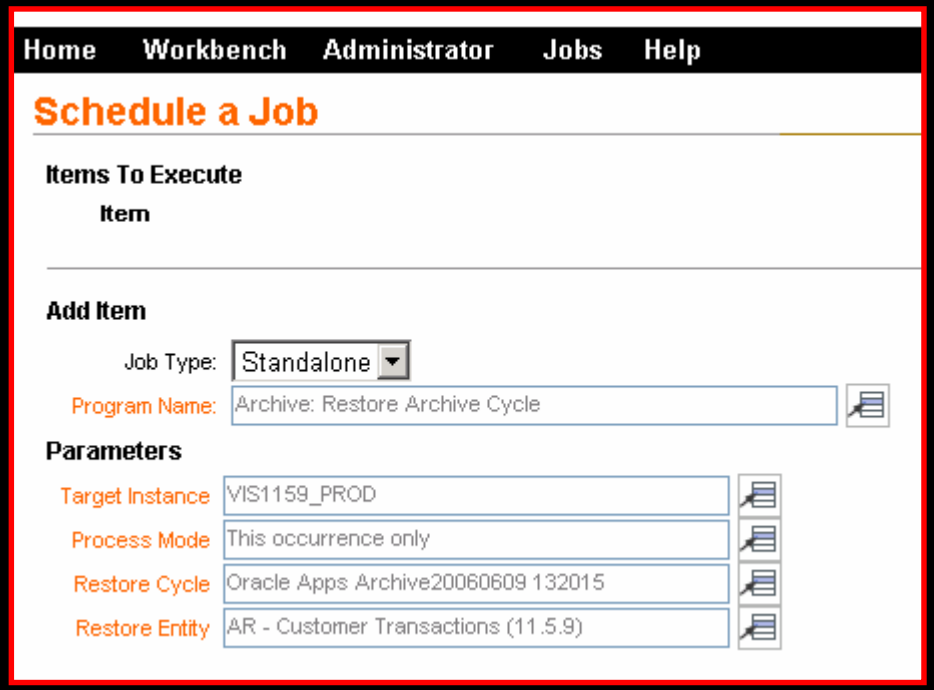

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