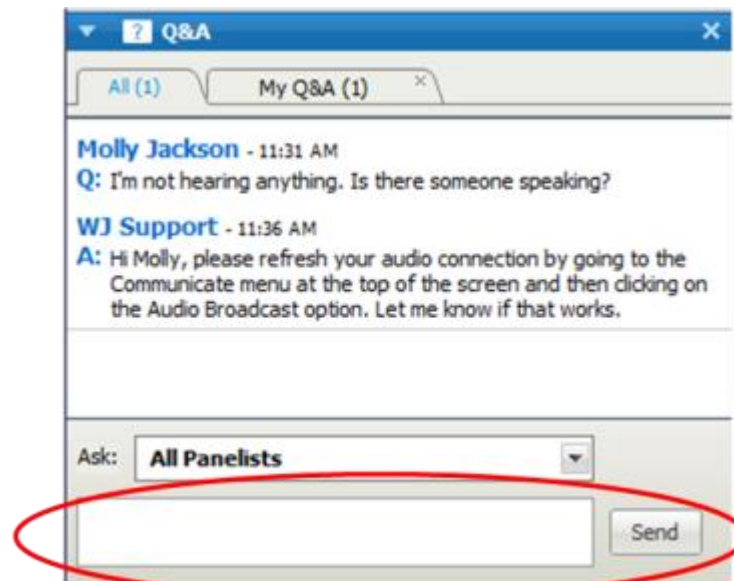
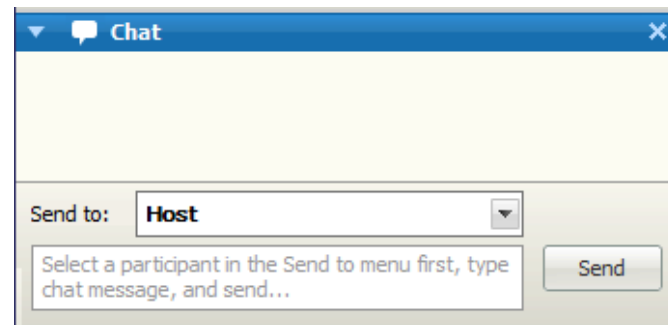


# Merging Data: Methodology and Complexities

# Webinar Mechanics



- Submit text questions.
- Q&A addressed at the end of the session. Answers will be posted within two weeks on our new LinkedIn Group, EBS Answers:  
<http://www.linkedin.com/groups/EBS-Answers-4683349/about>
- Everyone will receive an email with a link to view a recorded version of today's session.
- Polling questions will be presented during the session. If you want CPE credit for this webinar, you must answer all of the polling questions.



# Companies Need to Change Their Oracle® E-Business Suite Without Reimplementing

## eprentise Can...

- Consolidate Multiple EBS Instances
- Change Underlying Structures and Configurations
  - Chart of Accounts, Other Flexfields
  - Merge or Split Ledgers or Sets of Books, Operating Units, Legal Entities, Inventory Organizations
  - Calendars, Currency, Costing Methods
  - Asset Revaluation, Inventory Valuation
- Separate Data for a Divestiture

## ...So Our Customers Can:

- Avoid a Reimplementation
- Reduce Operating Costs and Increase Efficiencies
- Adapt to Change
- Reduce Complexity and Control Risk
- Improve Business Continuity, Service Quality and Compliance
- Streamline Operations with Visibility to All Parts of the Business
- Establish Data Quality Standards and a Single Source of Truth

***Finished But Not Done®***

# Learning Objectives

**After completion of this presentation you will be able to:**

**Objective 1:** Discover the reasons for merging data.

**Objective 2:** Understand the complexities of merging data.

**Objective 3:** Provide a process for successfully merging data and validating success.

# Agenda

- ❑ Merging Data – Business Examples
- ❑ Complexities of Merging Data
- ❑ Planning and Executing a Data Merge
- ❑ Validation and Ensuring Success
- ❑ Questions

# Objective 1

- ❑ Discover the reasons for merging data

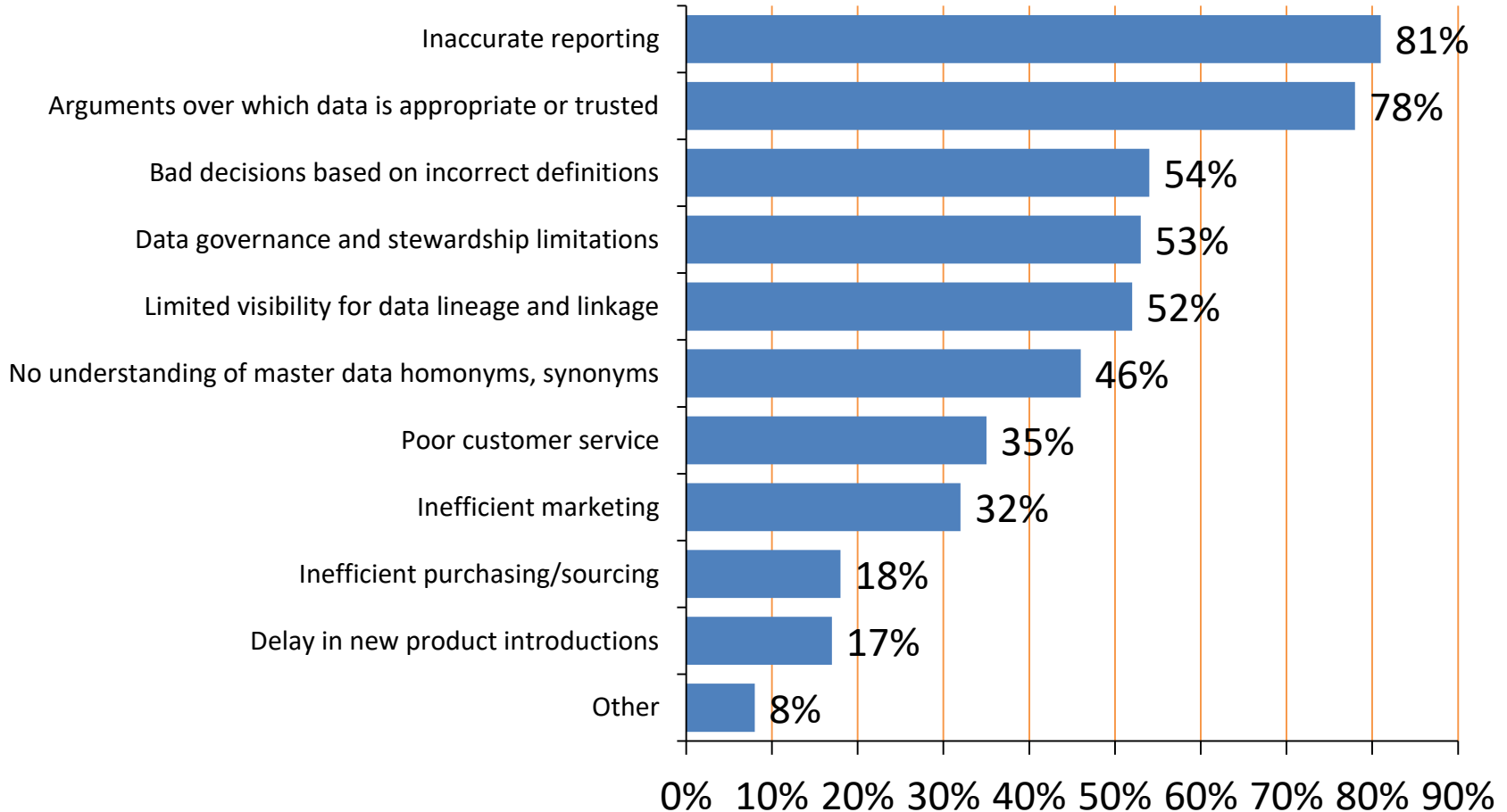
# Merging Data – Efficiencies of Operating as One

The act of consolidating data into a single structure or business object to meet a business requirement

- ❑ Removing silos
- ❑ Complying with legal and statutory requirements
  - Simplifying reporting requirements
  - Tax requirements
- ❑ Harmonizing data after mergers and acquisitions
- ❑ Operating a shared services center
  - Changes from a Regional to a Global organization to leverage supplier and customer relationships
- ❑ Implementing process and data standards throughout the enterprise
  - Standardized pricing and discount policies
- ❑ Smaller IT infrastructure footprint produces lower cost of ownership

- ❑ Streamlining operations
  - A single instance significantly reduces costs
  - A single operating unit allows for standardization, operation of a shared services center
  - A single ledger allows for standardized reporting and a streamlined close
  - A single business group allows consistency in jobs, grades, easy transfers for assignments
  - Managing inventories
- ❑ Effecting a single source of truth
  - Consolidating financials
  - Intercompany consolidation
  - Interfaces only have to be written once
  - Analytics have a complete view of all the data without ETL from multiple diverse environments

# Common Drivers for Database Consolidation



Source: The Data Warehouse Institute



# Business Consolidation Benefits: Strategic and Operating Highlights

## More than 20%...

- **Improved reconciliation process** through consolidated information.
- **Improvement in manufacturing process** from leveraging integrated supply chain applications linking sales to production.

*Source: Mainstay Partners LLC, adapted from IT Consolidation: The Art and Science of Doing More with Less*

## More than 50%...

- **Average process improvement** through information consolidation.
- **Faster close time** through information consolidation.
- **Average improved data accuracy and quality.**
- **Reduction in invoicing time** via integrated application and data.
- **Reduction in order entry time** by leveraging integrated application suite (one global customer table).

## More than 80%...

- **More productive reporting.**
- **Reduced time-and-expense processing time**, and speedier reimbursements.
- **Journal entry process improvement** via consolidated applications. (Tenfold improvement)
- **Reduction in order processing time.**
- **Fewer customer inquiries** via improved data quality and availability.
- **Processing improvement** via integrated applications.

# Business Consolidation Benefits: Financial Highlights

- ❑ **\$100,000 savings** from faster, more accurate billing made possible by information consolidation.
- ❑ **\$1 million in HR productivity gains** by entering data once.
- ❑ **8% headcount reduction.**
- ❑ **\$11 million savings** from improved manufacturing using integrated supply chain application integrated with sales and forecasting.
- ❑ **8% reduction in DSO** (days sales outstanding).
- ❑ **1.1% savings in procurement costs** through a centralized application, resulting in millions of dollars in savings.
- ❑ **80% reduction in procurement costs** via a centralized process.
- ❑ **15% cost reduction** by moving to a single financial system.

*Source: Mainstay Partners LLC, adapted from IT Consolidation: The Art and Science of Doing More with Less*

# Benefits of Merging OUs

- ❑ Improves operational efficiency
  - Allows transfers between inventory orgs
  - Simplify invoice to pay process
  - Invoice validation, create accounting, transfer to GL from a single OU
- ❑ Faster close cycle and reduced reconciliations
- ❑ Fully supported by GL, FA, PO, AP, Projects
- ❑ Leverage purchasing (discounts, credit limits) and invoicing across the organization
- ❑ Reduce number of configurations
  - Eliminates need for supplier setup in multiple OUs
- ❑ Standardize business processes
- ❑ Facilitate shared services operations

# Objective 2

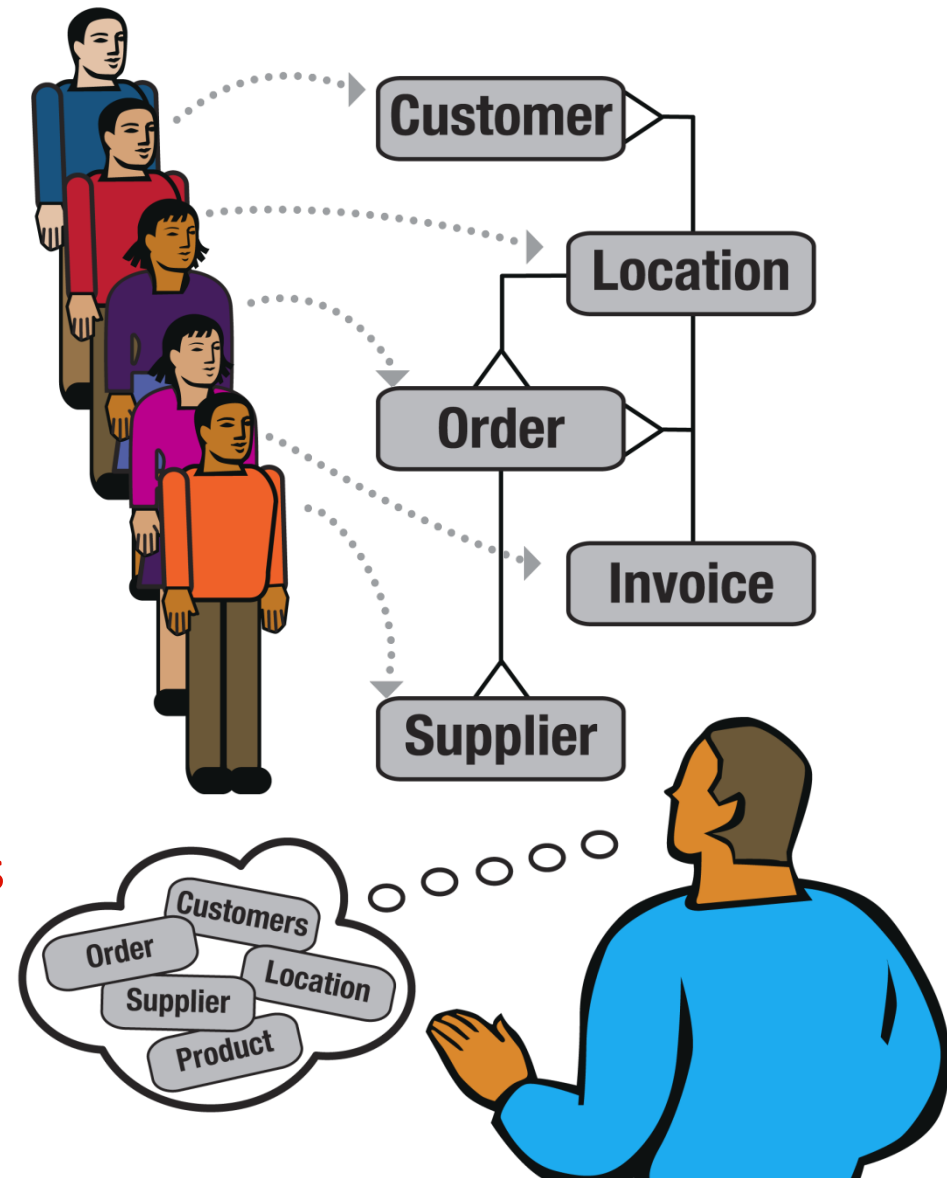
- ❑ Understand the complexities of merging data

# Potential Conflicts

- Data in source(s) and target is not the same format or type
- There are different display characteristics
- There are different, and potentially conflicting attributes between the source(s) and target
- The same ID may be used in the source and target and represent different data
- Data in the source and target may have the same name or characteristics but represent different data
- Source data is duplicated in the target
- Data may be missing from the source, and required in the target
- Dates may not be consistent between the source(s) and target

# When Data Is Not Consistent

- ❑ Silos
- ❑ Sharing information beyond the enterprise
- ❑ Who needs to know what?
- ❑ Finding trusted sources
- ❑ Poor data quality
- ❑ Threats to security
- ❑ That backlog
- ❑ Evaluating new technologies



# Silos

## ❑ A fragmented legacy of systems and databases

- Spreadsheets
- Documents
- Standalone applications
- Vendor packages
- Multiple ERP systems

## ❑ Information is locked in the silos

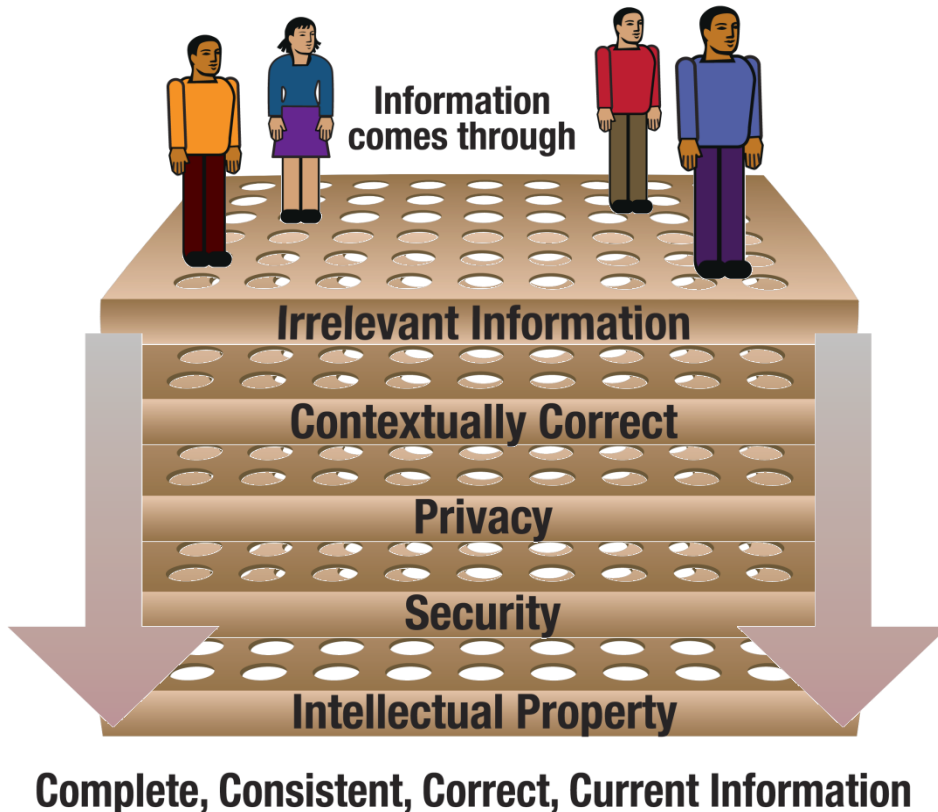
- Not available to those who need it
- Inconsistent between silos
- The enterprise lacks a catalog of the info it has

## ❑ Silos may be filled with

- Antiquated systems that just never got replaced
- Disparate systems inherited from merged companies
- Applications built or bought by departments without considering enterprise needs



# Finding Trusted Sources



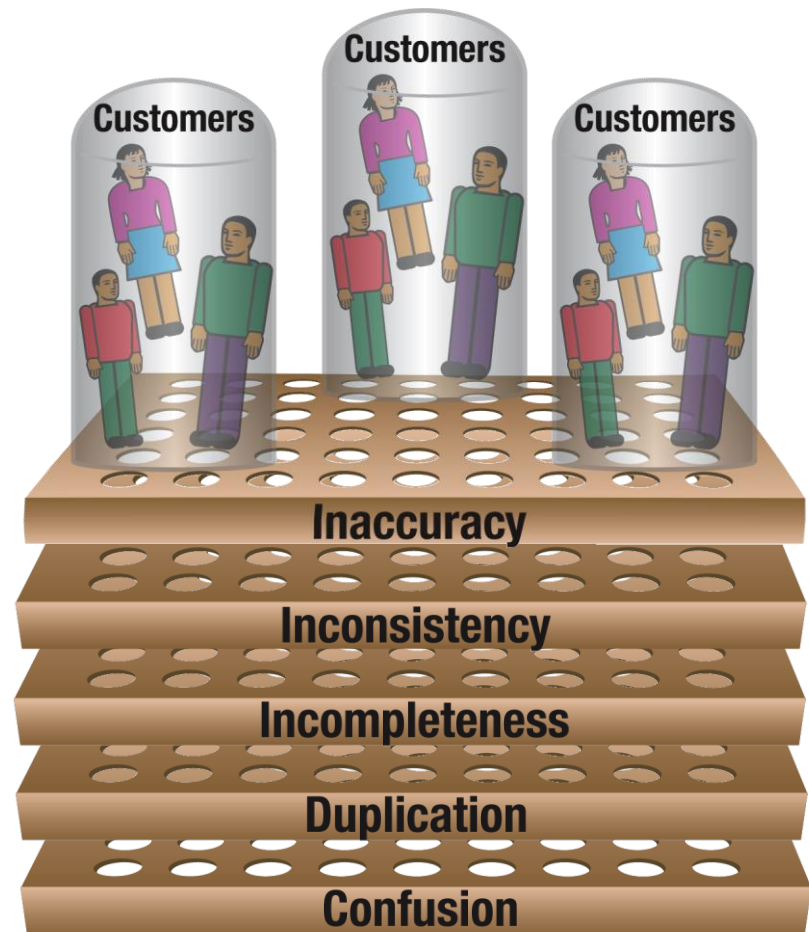
- ❑ Each needed item of information must
  - Originate from the most trustworthy sources available
  - Be reviewed and corrected as necessary to reduce errors
  - Be analyzed, combined with other information, labeled, and re-presented to meet end user needs
  - Be transmitted without distortion from its original source to those who need it
- ❑ The challenges of evaluating and establishing trusted sources are compounded by
  - Rapid change
  - Need for new kinds of information
  - Reliance on external sources



# Poor Data Quality

Customer Name	Address	Phone
John Smith	111 S.Street	407-555-1212
Johnathan Smith	111 South St	407-555-1212
Jon Smith	111 South Street	407-555-1212

Customer Name	Address	Phone
General Technology Company	1 S. Street	407-555-1212
GT Company	1 South St	407-555-1212
GT Co	1 South Street	407-555-1212



# Size and Uppercase Conflict Example

You can't merge bigger into smaller, and you can't merge mixed case into an uppercase only target

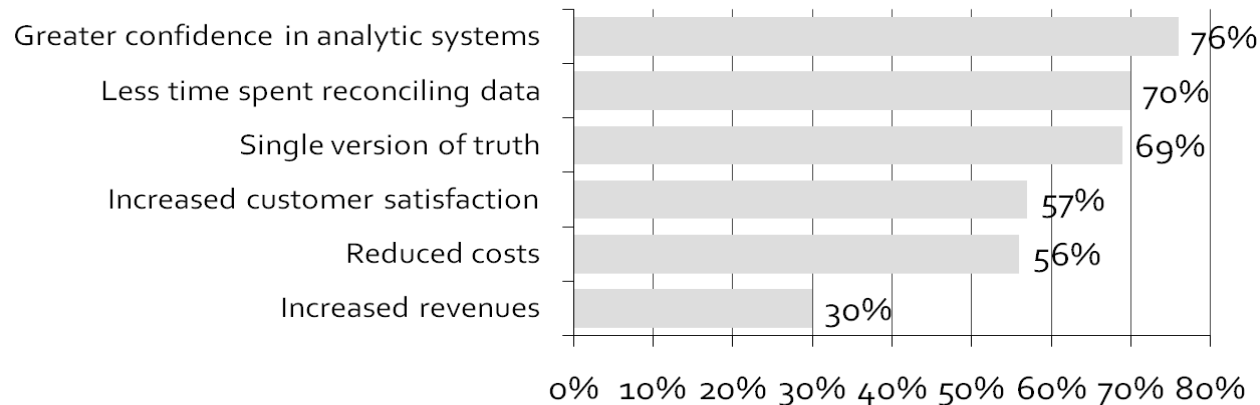
FLEX VALUE SET NAME	MAXIMUM SIZE	ALPHANUMERIC ALLOWED FLAG	UPPERCASE ONLY FLAG	APPLICATION TABLE NAME	VALUE COLUMN NAME	ID COLUMN NAME
AP_SRS_OPEN_INTERFACE_SOURCE	25	Y	N	AP_LOOKUP_CODES	DISPLAYED_FIELD	LOOKUP_CODE
AP_SRS_OPEN_INTERFACE_SOURCE	80	Y	N	AP_LOOKUP_CODES	DISPLAYED_FIELD	LOOKUP_CODE
FA_ADI_CORP_BOOK	15	Y	N	FA_BOOK_CONTROLS_SEC BC2, GL_SETS_OF_BOOKS SOB	BOOK_TYPE_CODE	
FA_ADI_CORP_BOOK	15	Y	N	FA_BOOK_CONTROLS_SEC	BOOK_TYPE_CODE	
FA_BOOK_DEFERRED_DEPRN	15	Y	N	FA_BOOK_CONTROLS bc, FA_CALENDAR_TYPES ct	bc.book_type_code	
FA_BOOK_DEFERRED_DEPRN	15	Y	N	FA_BOOK_CONTROLS_SEC bc, FA_CALENDAR_TYPES ct	bc.book_type_code	
FA_BOOK_TYPE	15	Y	Y	FA_BOOK_CONTROLS	BOOK_TYPE_CODE	
FA_BOOK_TYPE	15	Y	Y	FA_BOOK_CONTROLS_SEC	BOOK_TYPE_CODE	
GPIARSTMT_STMT_DATE	9	Y	Y	gpi_ar_statements_audit	statement_date	DISTINCT statement_date
GPIARSTMT_STMT_DATE	9	Y	Y	custom.gpi_custom_statements_audit	statement_date	DISTINCT statement_date
GPI_AP_CHECK_NUM	30	Y	Y	ap_checks ch, ap_bank_accounts ba, ap_bank_branches bb	ch.check_number	distinct ch.check_number
GPI_AP_CHECK_NUM	30	Y	N	ap_checks ch, ap_bank_accounts ba, ap_bank_branches bb	ch.check_number	distinct ch.check_number
GPI_AP_SITE_CODE_BY_SUP_NAME	15	Y	Y	po_vendor_sites_all povs, po_vendors pov	povs.vendor_site_code	DISTINCT povs.vendor_site_code
GPI_AP_SITE_CODE_BY_SUP_NAME	15	Y	N	po_vendor_sites_all povs, po_vendors pov	povs.vendor_site_code	DISTINCT povs.vendor_site_code
GPI_AP_SRS_ACTIVE_VENDORS	80	Y	Y	PO_VENDORS PO	PO.VENDOR_NAME	PO.VENDOR_NAME
GPI_AP_SRS_ACTIVE_VENDORS	80	Y	N	PO_VENDORS PO	PO.VENDOR_NAME	PO.VENDOR_NAME
GPI_AP_SRS_VENDOR_NAME	80	Y	Y	PO_VENDORS	VENDOR_NAME	VENDOR_NAME
GPI_AP_SRS_VENDOR_NAME	80	Y	N	PO_VENDORS	VENDOR_NAME	VENDOR_NAME

# Impact on Master Data

- ❑ Resolves conflicts - Identifies exact duplicates based on constraint columns
  - Name – prefixed or suffixed
  - ID or Number – incremented by max seq number of target
  - Exact duplicate with different ID – re-pointed to target ID
- ❑ By default, for the non-constraint columns, takes the target attributes (tax id, credit limit, etc.)
  - Business Decisions – discounts, credit limits, price lists, signing limits, etc. May be manual post-steps
- ❑ Data that exists in the source, but not in the target is moved into target as is
- ❑ Data in target but not in source remains
- ❑ Most data is at OU level. Comes into the consolidated instance within a separate ledger and OU.
- ❑ Cleanup (supplier merge, disabling inactive employees, item descriptions) will be a combination of using standard Oracle functionality, some manual updates, and possibly some eprentise filtering criteria during consolidation

# Reducing Costs - Data Quality

- ❑ High quality, consolidated data provides ROI benefits due to the exposure of hidden costs or expenses that are simply unknowable without a truly consolidated system.
- ❑ For example, an insurance vendor consolidated previously separate renewals, cancellations, and new policy databases, and in doing so, revealed a pattern of fraudulent activity that was costing the company \$14 million per year.
- ❑ Other benefits of high-quality data include but are not limited to:



*Source: The Data Warehousing Institute, March 2006.*

# Instance Consolidation Conflict: Single Key Flexfields

- ❑ Change “Single Instance” key flexfields in target instance to accommodate source key flexfield structures instance
- ❑ Single flexfields per instance listed below:

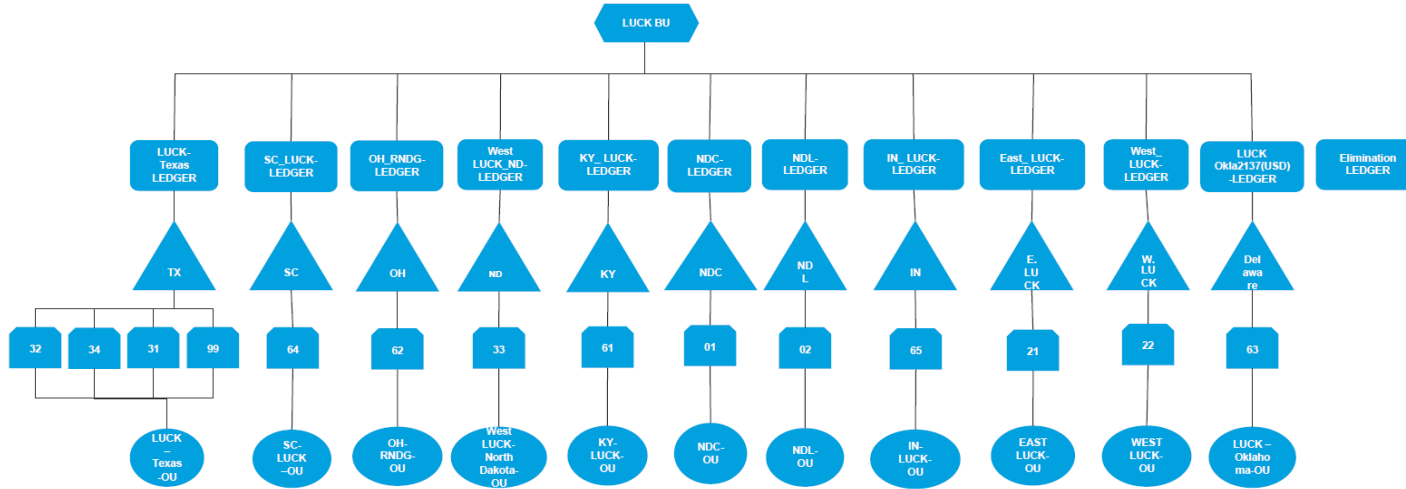
APPLN_NAME	ID_FLEX_CODE	ID_FLEX_NAME	Allowed setup within the instance
Assets	CAT#	Category Flexfield	Single
Assets	KEY#	Asset Key Flexfield	Single
Assets	LOC#	Location Flexfield	Single
Inventory	MSTK	System Items	Single
Receivables	CT#	Territory Flexfield	Single
Inventory	MDSP	Account Aliases	Single
Inventory	MICG	Item Catalogs	Single
Inventory	MKTS	Sales Orders	Single
Inventory	MTLL	Stock Locators	Single
Inventory	SERV	ORACLE_SERVICE_ITEM_FLEXFIELD	Single
Complex Maintenance Repair and Overhaul	AHLO	AHL Operation	Single
Complex Maintenance Repair and Overhaul	AHLR	AHL Route	Single

# Streamline Business Processes: Merge Ledgers

Org Type	Org Name	Ledgers Before	Ledgers After
Legal Entity	Dorado Corporate Barbados	<b>Dorado Gold Corp Barbados (62)</b>	<b>Dorado of North America (1)</b>
Operating Unit			
Inventory Org			
Inventory Org	Dorado BIBC Master Inventory Organization		
Legal Entity	Dorado Corporate Toronto	<b>Dorado Gold Corp Toronto</b>	
Operating Unit			
Operating Unit	Dorado Corporation	* move balancing segment transactions to another Canada set of books and convert currency for remaining transactions to USD before merge	
Inventory Org	Dorado Toronto Inventory Organization		
Operating Unit	CORP Dorado Technology Center		
Inventory Org			
Inventory Org	CORP Information Technology		
Inventory Org	CORP Technical Services - Maintenance & Engineering		

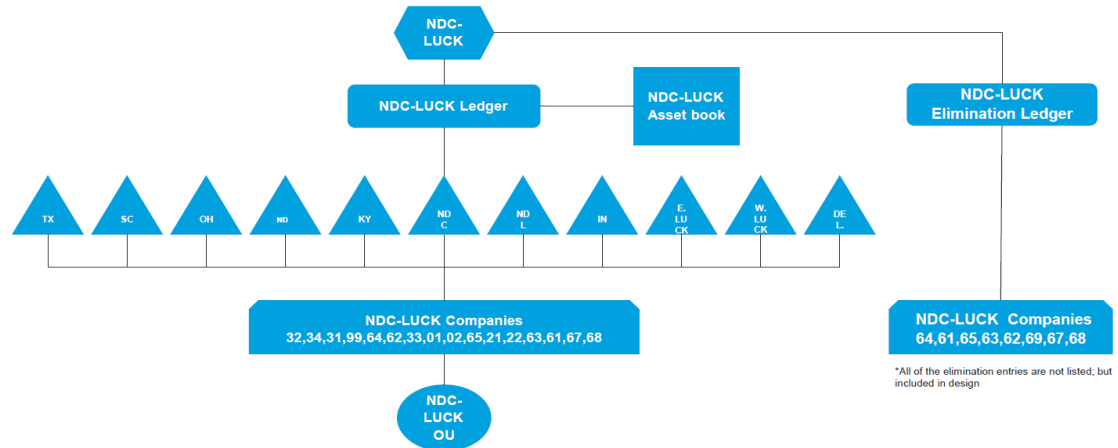
# Streamline Business Processes: Merge Operating Units

## Current Structure



## New Enterprise Architecture

One Ledger, Multiple Legal Entities, One Operating Unit



\*All of the elimination entries are not listed, but included in design

# Objective 3

- ❑ Provide a process for successfully merging data and validating success the reasons for merging data



# Approach to Merging Data

## ❑ **Coexistence**

- Little integration
- Separate with parallel processing  
(eg; Chart of Accounts, Organizations, Customer Master)

## ❑ **Absorption**

- Full integration into existing processes
- Align calendars and charts of accounts with the acquiring company
- A single instance to align Sets of Books (or ledgers), Legal Entities, Operating Units, Inventory Organizations, etc

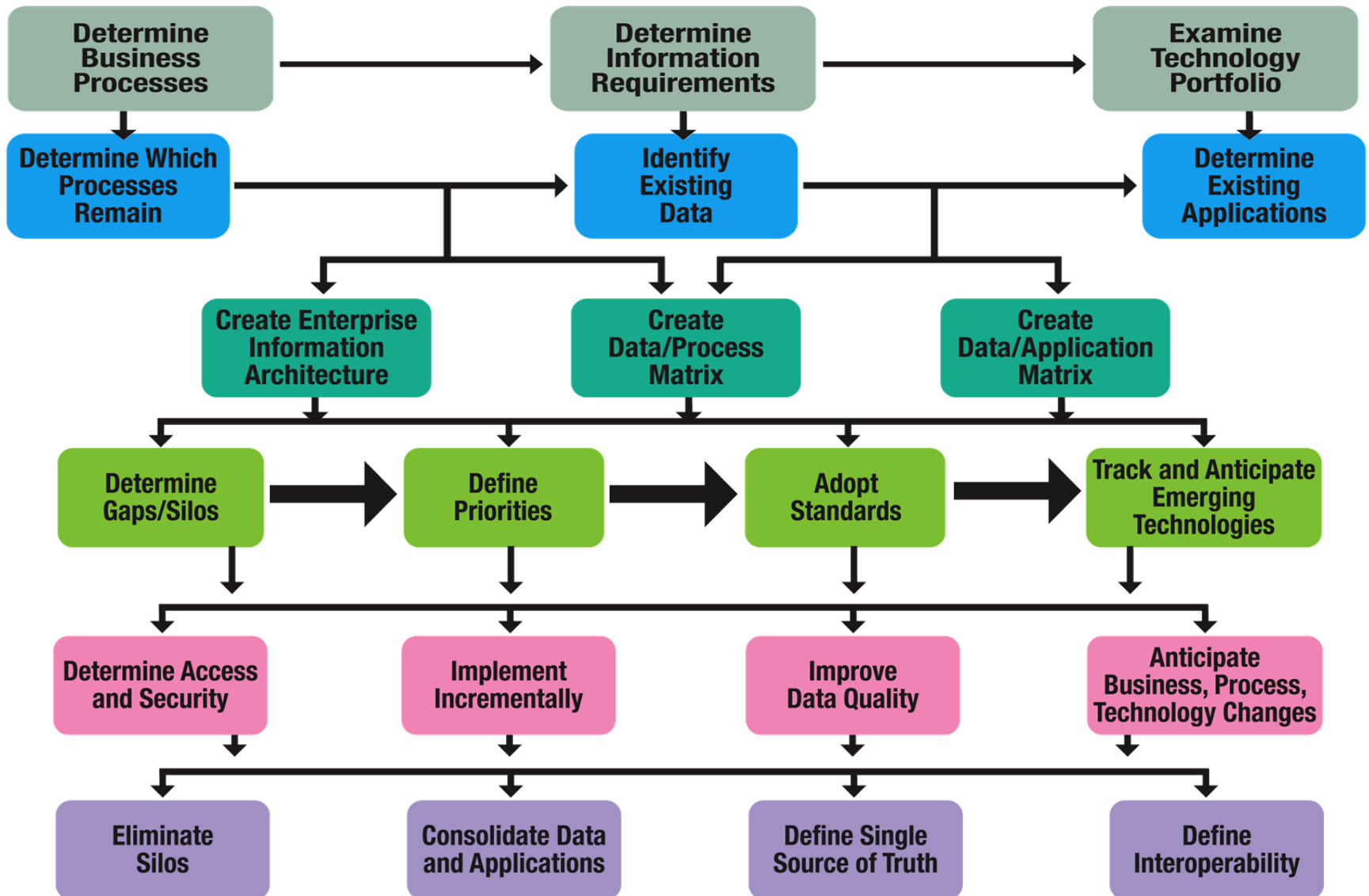
## ❑ **Synthesis**

- Support of new key business strategies
- Consolidation of best of breed processes

# The Process of Merging Data

- ❑ Planning the merge
- ❑ Analyzing the data
  - Conflicts
  - Duplicate Data
- ❑ Analyzing the processes
- ❑ Merging instances
- ❑ Merging other structures
- ❑ Validating the data

# Planning the Merge



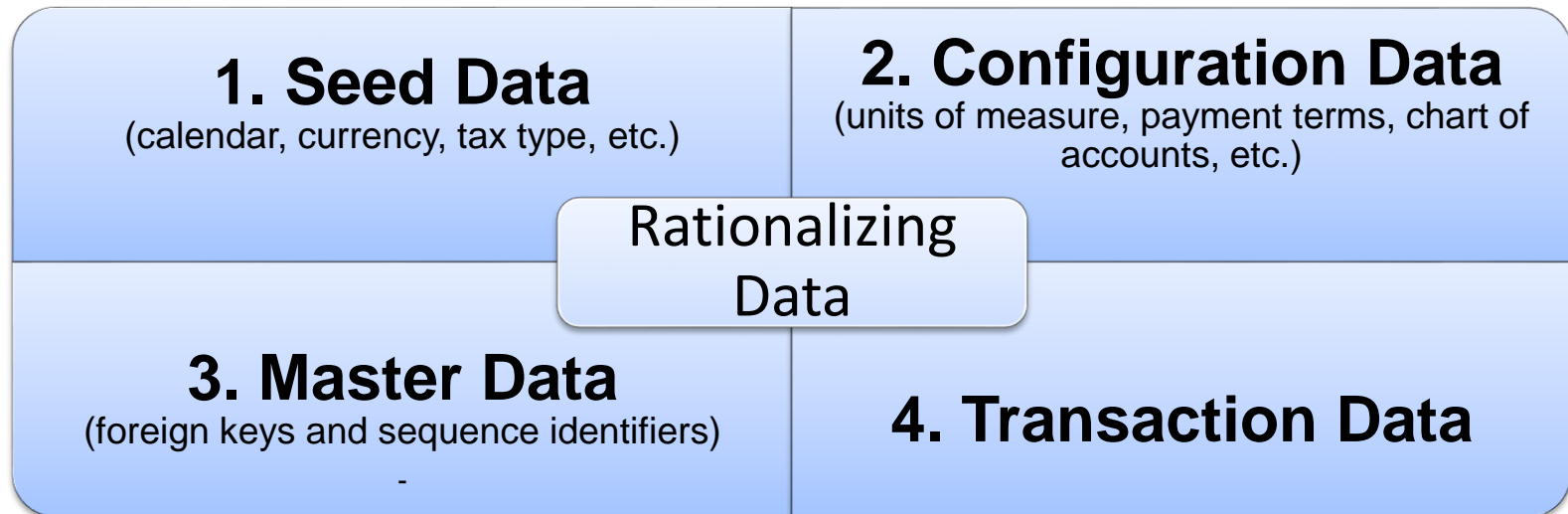
# Analyzing the Data

## 1. Gap Analysis – Comparison of Data Elements in Source and Target Systems:

*Three possible scenarios:*

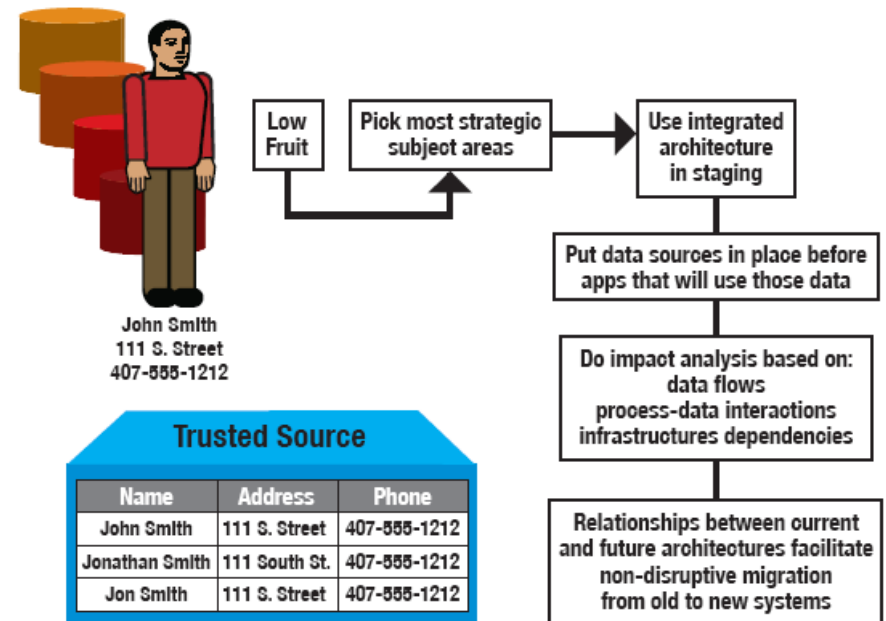
Metadata elements differ in source and target:	Target database modification
Metadata elements in both systems but in different formats:	Data format reconciliation
Metadata elements exist exclusively in target:	Source data modification

## 2. Rationalize the data among the source and target systems.



# Build Sustainable Data Quality into Merge Activities

- ❑ Establish trusted sources
- ❑ Reconcile semantics
- ❑ Consolidate silo data
- ❑ Eliminate duplicates and confusions
  - Customers
  - Suppliers
  - Products
- ❑ Clean up inconsistencies in existing data
- ❑ Adopt practices and tools for proactive quality maintenance in future
  - Catch and resolve quality problems as the data enter the system



# Core Process Integration

- ❑ Reorganize within a single instance to align;
- ❑ Sets of Books (or ledgers), Legal Entities, Operating Units, Inventory Organizations, etc to standardize business processes and leverage synergies of both companies or business units.

# Alignment

## Aligning versions of Oracle EBS instances

The alignment of operations with inconsistencies, different meanings of data, or even different patch levels requires a huge manual effort for reconciliation, translation, and maintenance.

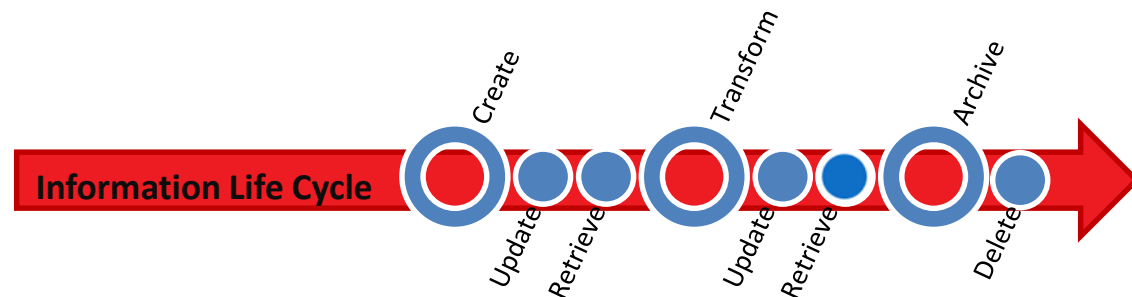
- Either patch or upgrade all of the EBS versions so that all are at the same level.
- Adopt a company-wide patch program to install, test, and implement so that there is consistency in the functions of the applications, and so that business processes are repeatable across the organization.
- Validate the updated instance prior to merge, to ensure instances are working and ready for merge.
- Once merged and validated then move forward with any additional updates required.

# Merge

## Merging Oracle EBS instances

The consolidation drives collective agreement on how the business should be run, what data assets need to be shared, and how business processes should be standardized on a foundation of common enterprise-wide operating procedures.

- ❑ Review and standardize seed data for consolidation, considering naming conventions, abbreviations.
- ❑ Review common core entity data, such as customers, vendors, and suppliers for alignment or separation. Standardize future data structure.
- ❑ Review and agree on transactional data archiving, processing, and transformation to ensure processing is consistent and accounted.





# Validation and Success

- ❑ How do you know the merge is a success?
- ❑ Validation is critical regardless of the method chosen to merge your data. In both scenarios the business processes should be reviewed for key outputs and reports. These outputs and reports should be checked historically to be consistent with the previous systems.
- ❑ In a test instance prior to production, each business process should be represented with a test scenario. These test scenarios should include new transactions, as well as actions against existing data. Most important the test scenarios should included the expected outcome.
- ❑ A typical approach to merging EBS data or instances may include 3 practice or test runs;
  - Run 1 – Merge and test high level functionality, revisit any business decisions that may have provided and unexpected outcome
  - Run 2 – A more detailed review of historical, current and test transactions
  - Run 3 – A perfect run with detailed testing and validation completed before moving to production.

# Questions?

# Thank You



**- One World, One System, A Single Source of Truth -**

Teri Williamson

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<http://www.linkedin.com/groups/EBS-Answers-4683349/about>