

# A Lifecycle Approach to Customer Data Integration, Quality and Governance

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# Agenda

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- ❑ **Definition of Terms**
  - Why is Customer Data Quality Important?
- ❑ **Common Customer Data Issues**
- ❑ **Best Practice Process Alignment® Methodology**
- ❑ **Proof of Concept**
  - Business scenarios
  - Data scenarios
  - Prototype
- ❑ **Customer Roadmap**
  - Customer Master Issues
  - Data Definitions
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    - Customer
    - Address
    - Site
    - Contact
    - Proposed Customer Model
- ❑ **Next Steps**
  - Customer Roadmap
- ❑ **Questions & Answers**

# SPG at a Glance

<p>About Us</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> SPG provides management consulting services delivering measurable business value and high impact solutions to the Global 5000.</li> <li><input type="checkbox"/> Experts in enterprise master data management, strategy, quality, integration, and governance in complex B2B environments.</li> <li><input type="checkbox"/> Launched the Customer Data Management Practice in 2004 with the introduction of Best Practice Process Alignment (BP<sup>2</sup>A) Methodology.</li> </ul>	
<p>Leadership Team</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Alumnus from Deloitte, Ernst &amp; Young and Accenture</li> </ul>	
<p>Industry Experience</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Manufacturing</li> <li><input type="checkbox"/> High-Tech</li> <li><input type="checkbox"/> Software</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consumer Products</li> <li><input type="checkbox"/> Distribution</li> <li><input type="checkbox"/> Life Sciences</li> </ul>

*“SPG differentiated themselves with quality people, breadth and depth of experience, and a solid business process approach in helping us with our Customer Master and related business processes. By focusing on our success early on, they quickly moved from a provider of consulting services to a true business partner.”*

*Michele Dour, Director Customer Administration Aspect Software*

# Definition of Terms

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## 1. Customer Data Integration (CDI)\*

CDI is the combination of the technology, processes and services needed to create and maintain an accurate, timely and complete view of the customer across multiple channels, business lines, and organizations, where there are multiple sources of customer data in multiple applications systems and databases.

## 2. Customer Data Quality

The extent to which customer data\*\* is available, reliable, consistent, useable, and secure internal and external to an organization.

## 3. Data Quality Governance

Persons (or committees, or departments, etc.) who make up a governing body and who administer, improve and maintain the quality of the data.

\* *Customer Data Integration (CDI) as defined by Gartner*

\*\* *The definition of "customer" often differs within an organization depending on how the data is used.*

# Why is Customer Data Quality Important?

## 1. Issues

1. Cannot view "Global" customer information and relationships
2. The cost of poor data is high - \$600 Billion/year\*.
3. Compliance with regulatory issues such as privacy and SOX.

## 2. Opportunities

1. A unified customer view to gain, maintain and service better than the competition.
2. A catalyst for unlocking the full value in ERP and CRM investments.
3. Economic leverage from mergers and acquisitions.

*"...first time we know about a customer is when they call for issues"*

*"...lots of duplication as a result of acquisitions and system merges...how do we find that customer information?"*

*Global 1000*

*\*The Data Warehouse Institute estimates that data quality problems cost U.S. Businesses more than \$600 billion a year. (2001)*

## Informal Survey

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1. Is poor Customer data quality impacting your business?
  - Have you experienced real loses because of poor customer data?
  
2. Do you trust your customer data?
  - Do you have a formal customer data quality process?
  
3. Do your business interactions depend on reliable customer data?
  - Are you under employing a system because of poor data?

## Common Customer Data Issues

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### ❑ **Variety of data models**

- Customer structures are not consistent with how the business should run
- Models based on historic billing account structure vs. TCA

### ❑ **Duplicate data**

- Duplicate data exists in customer and address records
- Duplicate data exists in one system and also across systems

### ❑ **Cumbersome system duplicate check**

- Users unable to do fuzzy match on the customer name

### ❑ **Lack of standard naming conventions**

- Due to non-availability of naming conventions, users enter data in any format

### ❑ **Undefined relationships**

- Incorrect relationship records between a customer and subsidiary and also a customer and it's partners

## Common Customer Data Issues

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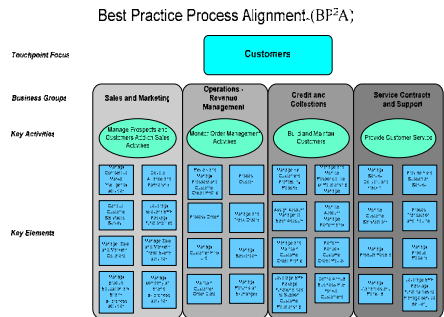
- ❑ **Inadequate / unavailable 360 degree view**
  - Unavailability of a 360 degree view of customer including quotes, orders, invoices, installed base, receipts, projects, etc.
  
- ❑ **Global credit limit and check**
  - Global credit limit and check cannot be properly performed due to the data structure and ownership
  
- ❑ **Different systems to align with Customer Master**
  - Automated interface between Oracle Customer Master and legacy systems to synchronize the customer data
  
- ❑ **Inconsistencies of field mapping and update intervals**
  - Lack of standard processes to map the customer fields effectively between source and target systems
  
- ❑ **Limited manual monitoring and validation of Customer Master data**
  - Lack of data management and governance standards



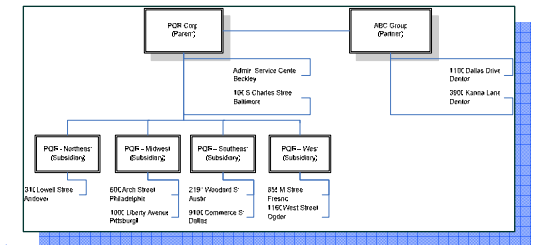
# Our Approach

- Best Practice Process Alignment (BP<sup>2</sup>A) is a process-driven methodology used to achieve cross functional consensus and define the business processes required for customer data quality, integration, and governance.
- The process modeling activities are used to develop a Proof of Concept Prototype and Roadmap.
- These activities ensure clients' business requirements are met and process improvements are adopted by the business stakeholders.

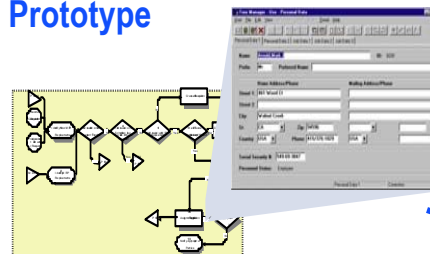
## Business Process Alignment



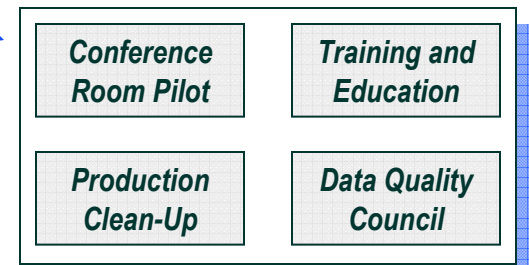
## Business and Data Scenarios



## System Mapping and Prototype



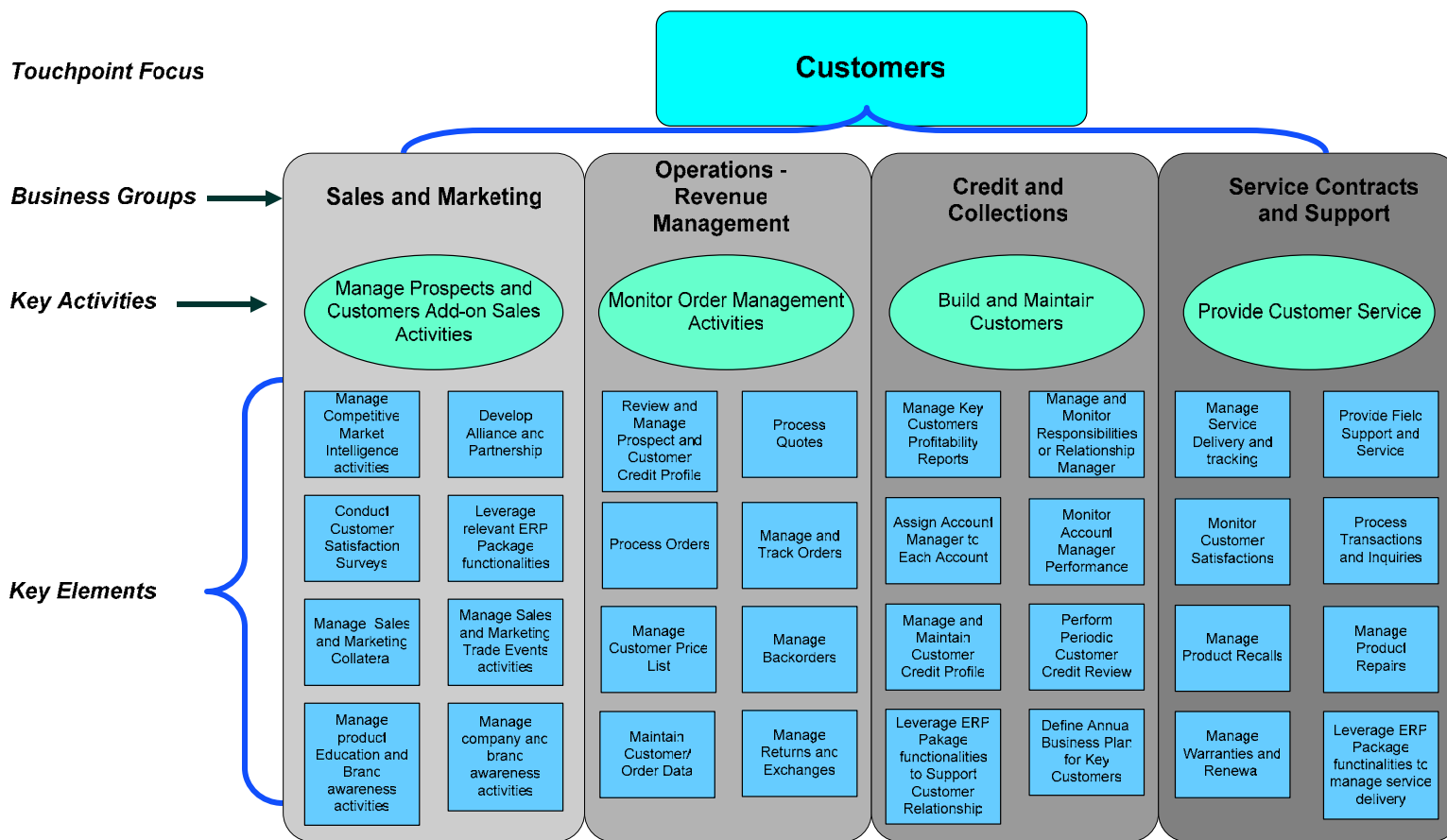
## Customer Roadmap



# Best Practice Process Alignment® (BP<sup>2</sup>A) Methodology

SPG leverages the BP<sup>2</sup>A methodology to focus on processes, key activities and elements by each business group that interact directly or indirectly with customer data.

## Process Decomposition and Flows



# Proof of Concept – Business Scenarios

Business scenarios are built based on stakeholder feedback and the BP2A methodology to assess and validate current Customer Master

Sample Business Scenario Description
Support of merge functionality in the current customer systems to be able to consolidate duplicate company or site information and activity.
Creation of a streamline and unique company master name.
Support the customer numbering in all systems for lookup.
Support the maintenance of tax information for certain VAT country companies to be able to be printed on customer invoices.
Storage of legacy source and reference information for future company lookup.
Support a duplicate check functionality, to prevent creation of duplicate company records, if one already exists.
Creation and maintain of relationships between customers and its subsidiaries or channel partners.
Classification of the companies based on their customer / partner type.
Associate sales channel information with the companies for reporting purposes.
Support the ability to track all relevant Terms and Condition information for a company and utilize this information during the quoting / order entry processes.
Maintenance contact information, such as name, e-mail address, contact methods and details for each company.

# Proof of Concept – Business Scenarios

Sample Business Scenario Description
Creation a unique site name for each address.
Facilitate the use of one or more business purposes for each address.
Storage of any reference information like address id from the legacy system at the address level in the Customer Master.
Creation of a customer master structure, in line with the Trading Community Architecture (TCA) data structure.
Ability to provide revenue and customer hierarchical reporting and transact at the customer level.
Definition of a standard naming convention to be used during the entry of free form fields.
Storage of sales territory information at the site level.
Management of customer contracts / partner programs to manage discounts.
Definition and implementation access and responsibility security controls, for the entry and maintenance of the customer master records and its components.
Generation of alerts if a company / address is created / modified.

# Proof of Concept – Data Scenarios

Data scenarios are pulled together from the various customer systems to complete Customer Master assessment and data validation

## Data Scenario # 1: Duplicate company record exists in different systems

- Company record existing across all the major systems, however, the name of the company exists differently in the different systems
- Customer Number is the same across all the systems

Data	System # 1	System # 2	System # 3	System # 4
<i>Company</i>	ABC TV	ABC TV NETWORK	ABC Television Network	ABC Television Network
<i>Customer No</i>	228204	228204	228204	228204

Data	System # 1	System # 2	System # 3	System # 4
<i>Company</i>	Blue Cross Blue Shield	BLUE CROSS/BLUE SHIELD OF NC	BLUE CROSS AND BLUE SHIELD	Blue Cross/Blue Shield of NC
<i>Customer No</i>	16469	16469	16469	16469

## Proof of Concept – Data Scenarios

### Data Scenario # 2: Duplicate company record exists in the same system

- Company record existing differently in one of the systems
- Customer Number is different in the one system under review

Data	System # 1		
<i>Company</i>	DELICATO	DELICATO VINEYARDS	DELICATO FAMILY VINEYARDS
<i>Customer No</i>	123448	567791	889023

Data	System # 2		
<i>Company</i>	Lockheed Martin	Lockheed Martin Corporation	LOCKHEED MARTIN ATM
<i>Customer No</i>	383917	336488	227393

## Proof of Concept – Data Scenarios

### Data Scenario # 3: Company record exists in some systems, but not all the systems

- ❑ Company record existing differently in some of the systems

Data	System # 1	System # 2	System # 3	System # 4
<i>Company</i>	Does not exist	Does not exist	ABELN ARTIFACTS	ABELN ARTIFACTS

Data	System # 1	System # 2	System # 3	System # 4
<i>Company</i>	Blue Cross Blue Shield	Does not exist	BLUE CROSS AND BLUE SHIELD	Blue Shield
<i>VCN</i>	253623	Does not exist	253623	253623

## Proof of Concept – Data Scenarios

### Data Scenario # 4: Company record exists in all systems, but address record is different in different systems

- ❑ Company record exists in all of the systems, but the address data is different

Data	System # 1	System # 2	System # 3	System # 4
<i>Address Lines</i>	1981 Synder St	P.O. BOX 950	P.O. BOX 950, G3-28	PO BOX 950, PO BOX 950
<i>City</i>	Richland	Richland	Richland	Richland
<i>State</i>	WA	WA	WA	WA
<i>Postal Code</i>	99354-5312	99352	Does not exist	99352-0950
<i>Country</i>	United States	Usa	BENTON (PTBA)	USA



## Proof of Concept – Data Scenarios

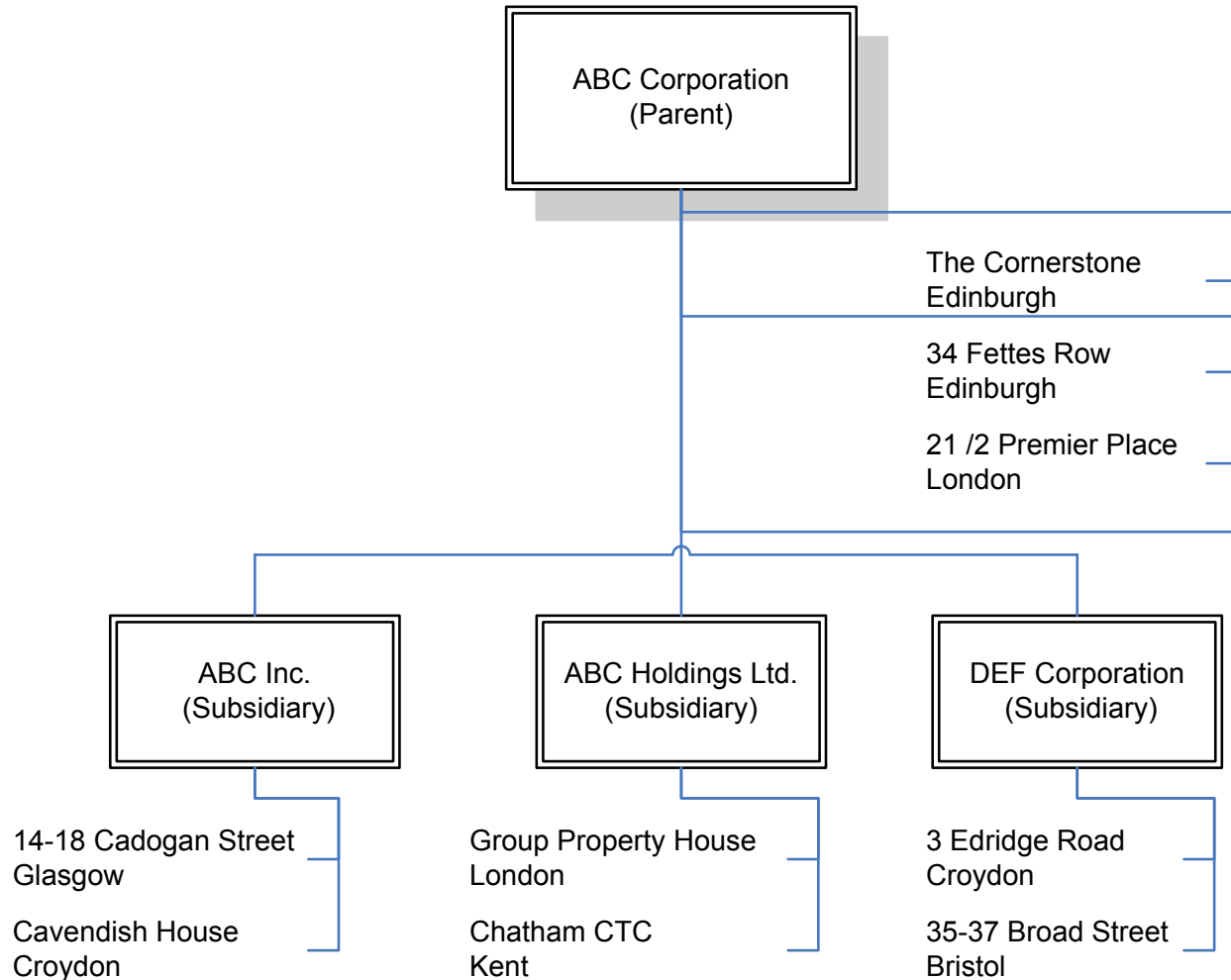
### Data Scenario # 5: Company record exists in all systems, but contact information is different in different systems

- ❑ Company record exists in all of the systems, but the contact data is different

Data	System # 1	System # 2	System # 3	System # 4
Site	Chicago-901	US-CHICAGO	Chicago-901	Does not exist
Address Lines	901 Kiowa Junction Rd.	901 Kiowa Road	901 Kiowa Rd, Suite 2300,	901 Kiowa Rd, Suite 2300
Contact	Ross Norm	Ross Nom	R Norm	R Norm
Contact: E-mail Address	<a href="mailto:ross.norm@lm.com">ross.norm@lm.com</a>	<a href="mailto:Ross.norm@lm.com">Ross.norm@lm.com</a>	<a href="mailto:rnorm@lm.com">rnorm@lm.com</a>	<a href="mailto:rnorm@lm.com">rnorm@lm.com</a>

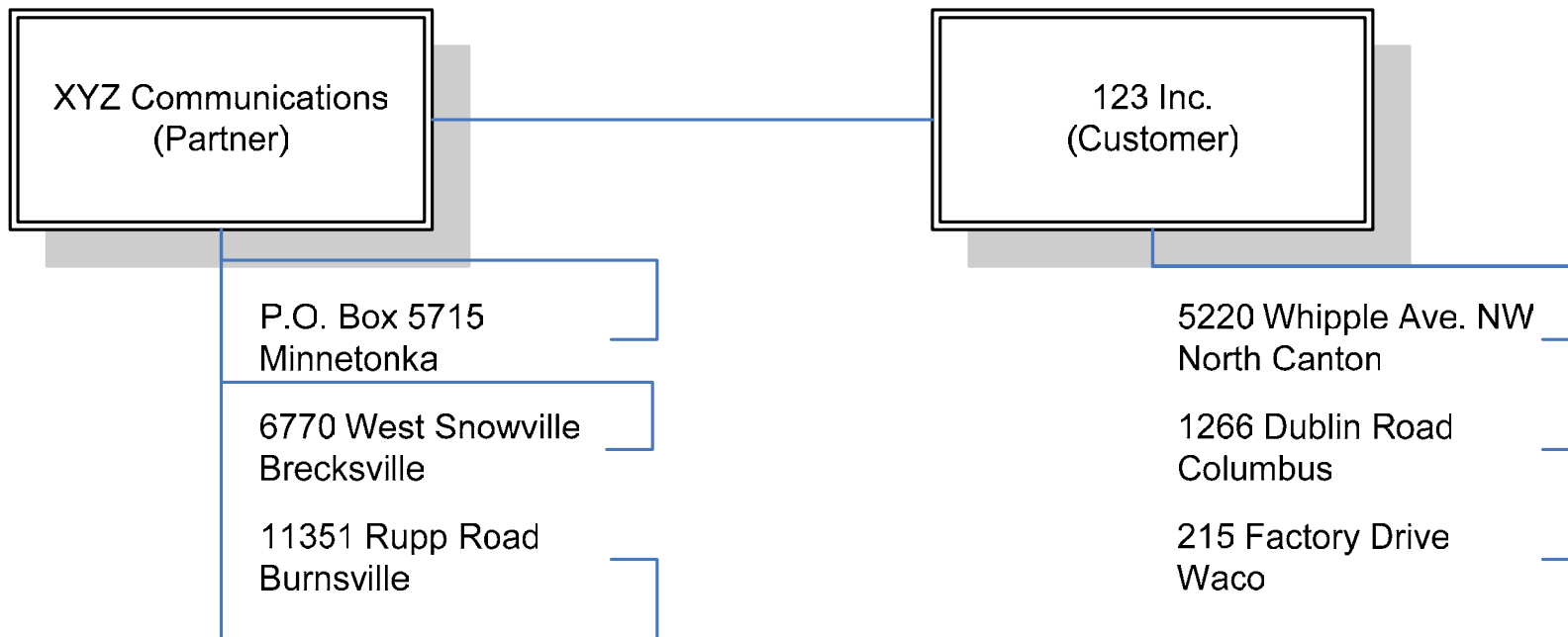
# Proof of Concept – Prototype

## Parent – Subsidiary model



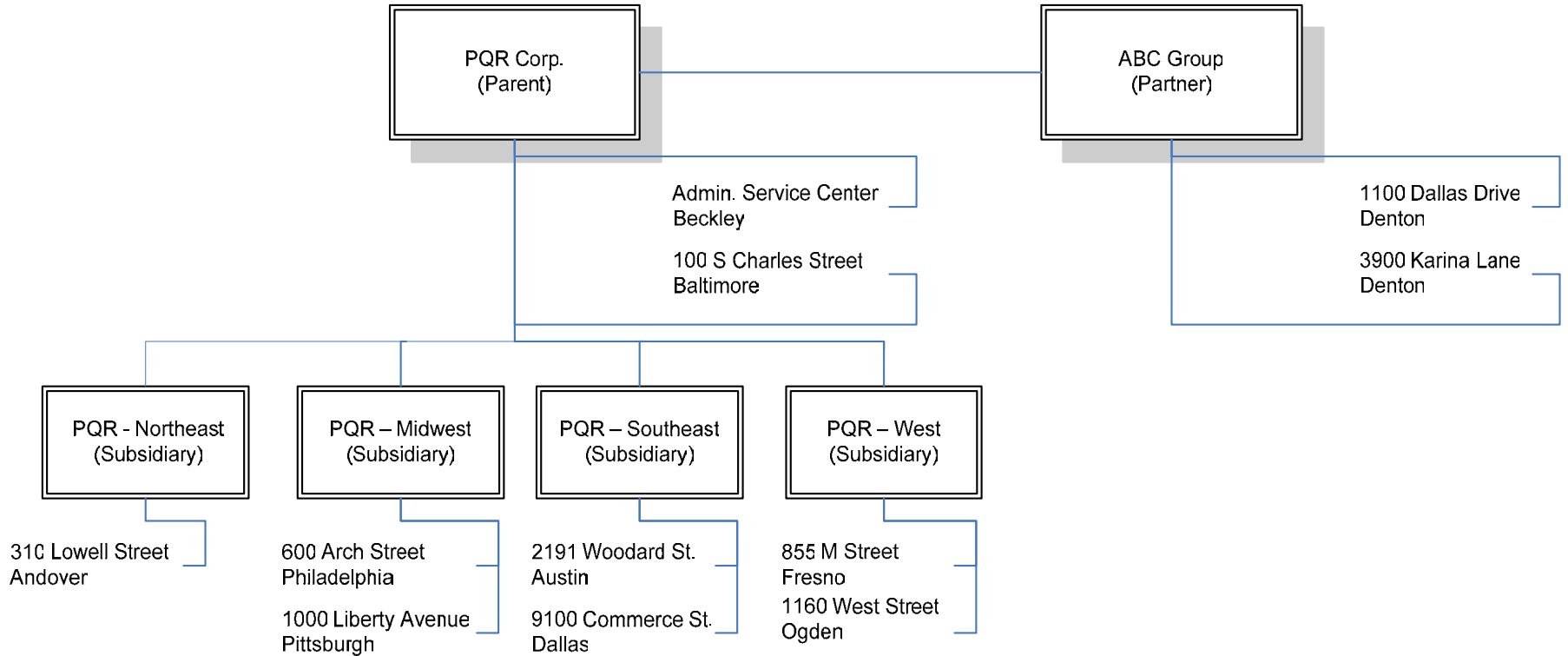
# Proof of Concept – Prototype

## Partner model



# Proof of Concept – Prototype

## Hybrid model



## Customer Roadmap - Objectives

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- ❑ Standardize the naming convention for the Customer Name and Addresses
- ❑ Empower end users with training and guidelines for customer record entry and maintenance
- ❑ Conduct Conference Room Pilot in a Test environment for manual clean-up and consolidation of customer records
- ❑ Performed clean-up and consolidation of the customer records in Production
- ❑ Researched (automated) methods and solutions available to capture and eliminate duplicate records
- ❑ Appointed champions in the various business groups to ensure the Customer Master remains clean after the clean-up exercise
- ❑ Implemented data quality methodology for ongoing maintenance and validation

# Customer Roadmap – Training & Education

- ❑ Create a Corporate Standard Naming and Address Protocol in sync with a governing body like the U.S. Postal Service
- ❑ Develop customer training documents like:
  - *Customer Master Training* document for customer and address entry and maintenance
  - *Customer Master Mapping* document to address the different nomenclature used for standard fields by Oracle forms in different modules. Document addresses nomenclature for integrated CRM systems as well
- ❑ Educate business users on customer entry and maintenance guidelines

1. Click on the **New** button at the bottom of the Customer Standards screen to create a new address.

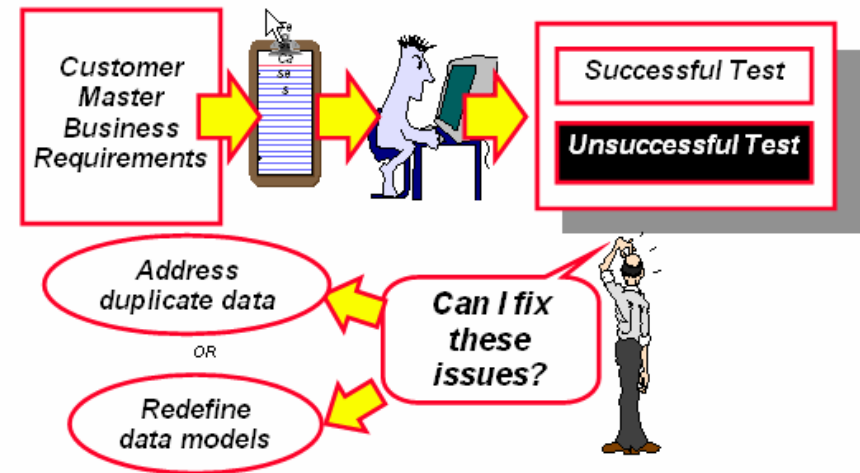
2. Select the Country for the address from the LOV.

Note: Addresses fields may differ based on the Country code.

Form Description	Party Number	Customer Name	Customer Number	Location Number	Site Number
<b>Accounts Receivable</b>					
Customer Master	Yes a.k.a "Organization Number"	Yes	Yes	Yes	Yes
Manual Invoice / Credit Memo	No	Yes	Yes	Yes	No
Cash Receipts	No	Yes	Yes	No	No
<b>Order Management</b>					
Creating Orders>Returns	No	Yes	Yes	Yes	No
<b>Quotes</b>					
Quotes (Figure 1)	Partial	Yes	Yes a.k.a "Account Number"	NA	No
<b>Sales Online</b>					
Viewing in Sales Online (Figure 2, 3)	Yes	Yes	Yes	NA	Yes
<b>Services Contracts</b>					
Creating Service Contracts (Figures 4,5)	Yes	Yes	Yes identified in the billing tab	Yes	No
<b>Installed Base</b>					
Viewing Installed Base		Yes sometimes referred to "Owner Name" or "Owner Party"	Yes sometimes referred to "Owner Account"		Yes a.k.a "Location"

## Customer Roadmap – Conference Room Pilot (CRP)

- ❑ Conduct CRP to manually clean-up and consolidate small number of customers
- ❑ CRP to include clean-up of customers and some of their relationships
  - Simple customers
  - Customers with subsidiaries (Parent model)
  - Customers with partners (Partner model)
  - Customers with both (Hybrid model)
- ❑ Customer Master Merge functionality can be used to merge valid addresses to a newly created customer
- ❑ Goal of the CRP is to assess and scope out the clean-up efforts to be done in the Production environment
- ❑ Select a customer as Patient Zero to be the first customer cleaned up in the Production instance



## Customer Roadmap – Production Clean-up Approach

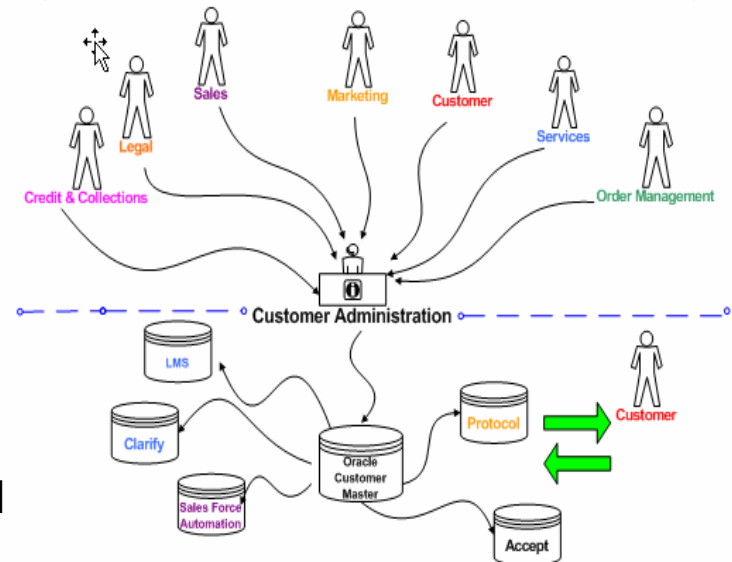
- ❑ **Step 1 a: Manual clean-up of the top 10-15 high-volume customers**
  - Related customers to be cleaned up along with the top 10 customers
  - Inactivate the duplicate and erroneous address
  - Create a new customer to replace the old customer
  - Use of Customer Master Merge functionality to merge valid addresses to the new customer
  
- ❑ **Step 1 b: Automated data clean-up for the remaining customers**
  - Data clean-up tool will need to capture and eliminate duplicate customer and address records
  - Business rules will need to be defined for the software requirements
  
- ❑ **Step 2: Final clean-up and updates to the customer profiles and relationships**
  
- ❑ **Step 3: Validation of new customer structure and associated data including addresses, contacts, etc.**





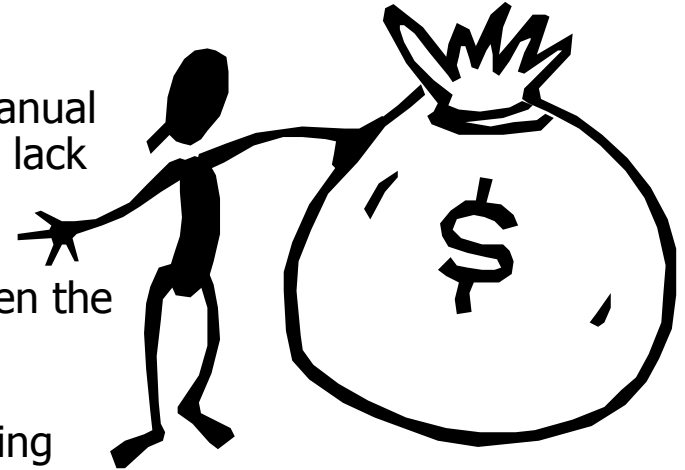
# Customer Roadmap – Data Quality Council

- ❑ Govern policy, protocols and data models
- ❑ Act as agents and advocates for the strategic vision of the Customer Master
- ❑ Be the stewards to data quality and integrity across the enterprise
- ❑ Review and approve any architectural changes to the core data models
- ❑ Oversee communication and education and ensure the alignment to the Customer Master roadmap



## Sample Benefits from CDI

- ❑ Provides superior customer satisfaction
- ❑ Increases operational efficiency by reducing manual processes and workarounds to compensate for lack of data quality
- ❑ Enables seamless customer interactions between the various business groups and systems
- ❑ Provides accurate information on customer facing documents and allows for increased levels in revenue collection with the streamlining of customer relationships
- ❑ Allows flexibility to mobilize business and systems for future growth
- ❑ Enables strategic reporting and analysis in order to provide insight to Sales & Marketing



## Lessons Learned

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1. Customer data quality is more about enterprise wide consensus and processes than technology. Everyone in your organization is a steward of customer data.
2. Without data governance, data quality decreases over time. And, when two or more sources are joined, the combined total of poor data is greater than the sum, further lowering the value to an organization.
3. Customer data quality is a catalyst for unlocking the full value in ERP and CRM investments.
4. Customer data integration is a journey, not a destination – don't wait until you feel 100% comfortable to take the first step – start small, align with strategic goals, and build upon success.
5. Don't try to do this yourself – leverage a third party to get fresh, objective perspectives around best practices, process alignment, and data governance.

## Here's how we can help ...

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### ❑ **SPG's Rapid Data Quality Assessment**

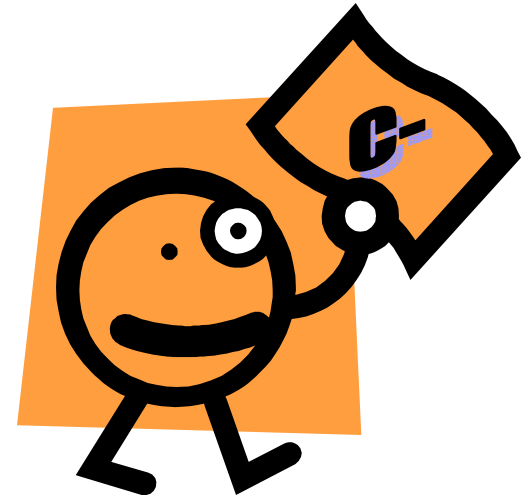
- 1 to 2 day Survey
- Functional and Technical Review

### ❑ **Focused on:**

- Customer Master (or Master Data Elements – Items, Suppliers, Employees, etc.)
- Single or multiple systems – Oracle and non-Oracle data sources

### ❑ **Deliverable**

- Customer Master Assessment Report
- Recommendations for Improvement



## Question & Answers

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# What's in your Customer Master?

## Readiness Assessment Tool – Sample Questions

<b>Data Models</b>	How many varieties of data models exist within your Customer Master?
<b>Duplication</b>	Do you have duplicate records of customers within your Customer Master?
<b>Duplication</b>	Do you have duplicate records of addresses / contacts in your customer base?
<b>Naming Convention</b>	Do you have a standard naming convention for customer and address naming?
<b>Relationships</b>	Do you maintain customer relationships in your Customer Master to control payment between customers?
<b>Relationships</b>	Do you maintain party relationships in your Customer Master to visualize the hierarchy of customers and their relationships?
<b>System Architecture</b>	Does your Customer Master interface with other application or legacy systems?
<b>Maintenance</b>	Do you have processes and personnel in place to maintain and monitor the existing customer and address records?
<b>Ownership</b>	How many business groups in your company own the Customer Master?
<b>Ownership</b>	How many business groups in your company interact with the Customer Master data?
<b>Training</b>	Do your business users have training and educational materials for entering and maintaining Customer Master data?
<b>Merge</b>	Does the Customer Master Administrator use the Merge functionality within the system as mergers and acquisitions between customers take place?

## Speaker Bios

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### **Mark West**

#### Vice President

Mark currently leads the firm's Customer Data Quality Initiative. With over 20 years of experience helping companies grow and build strong relationships with their customers and business partners, Mark has a proven record of accomplishment of helping companies attain their business goals. Prior to joining the Southern Pacific Group, Mark was a Director for a Big-5 management consulting firm where he developed and launched a rapid time to benefit methodology, launched a new multi-channel e-commerce venture for the firm, and was the 2000 recipient for the firm's International Council on Innovation and Ventures. Mark has built strong industry partnerships, participated in several strategic ventures and frequently presents at national and regional conferences.

Client served include; Aspect, Bechtel, Business Objects, Cisco, e\*Trade, SUN, and Nokia.

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### **Preetish R. Pandit**

#### Manager, Consulting Services

Preetish has ten years of progressive work experience in management, technology and strategic consulting. He has experience designing, developing and delivering complete process and technology solutions for clients in the manufacturing, consumer business, health-care, high-tech and financial services industries. He has deep functional and technical experience with Customer / Product Master Data Quality Initiatives, Supply Chain, Financial and Order Management processes and systems. Preetish has lead projects in analyzing and streamlining business processes and technical solutions to maximize the benefits of implementing and integrating ERP solutions. Prior to joining Southern Pacific Group, Preetish spent 6 years working with Deloitte Consulting, mainly on Oracle ERP implementations.

Client served include; ACCO / Kensington, Agilent, Aspect, Business Objects, Hyperion, and Lucent.

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