



Sun Microsystem's OBIEE Implementation

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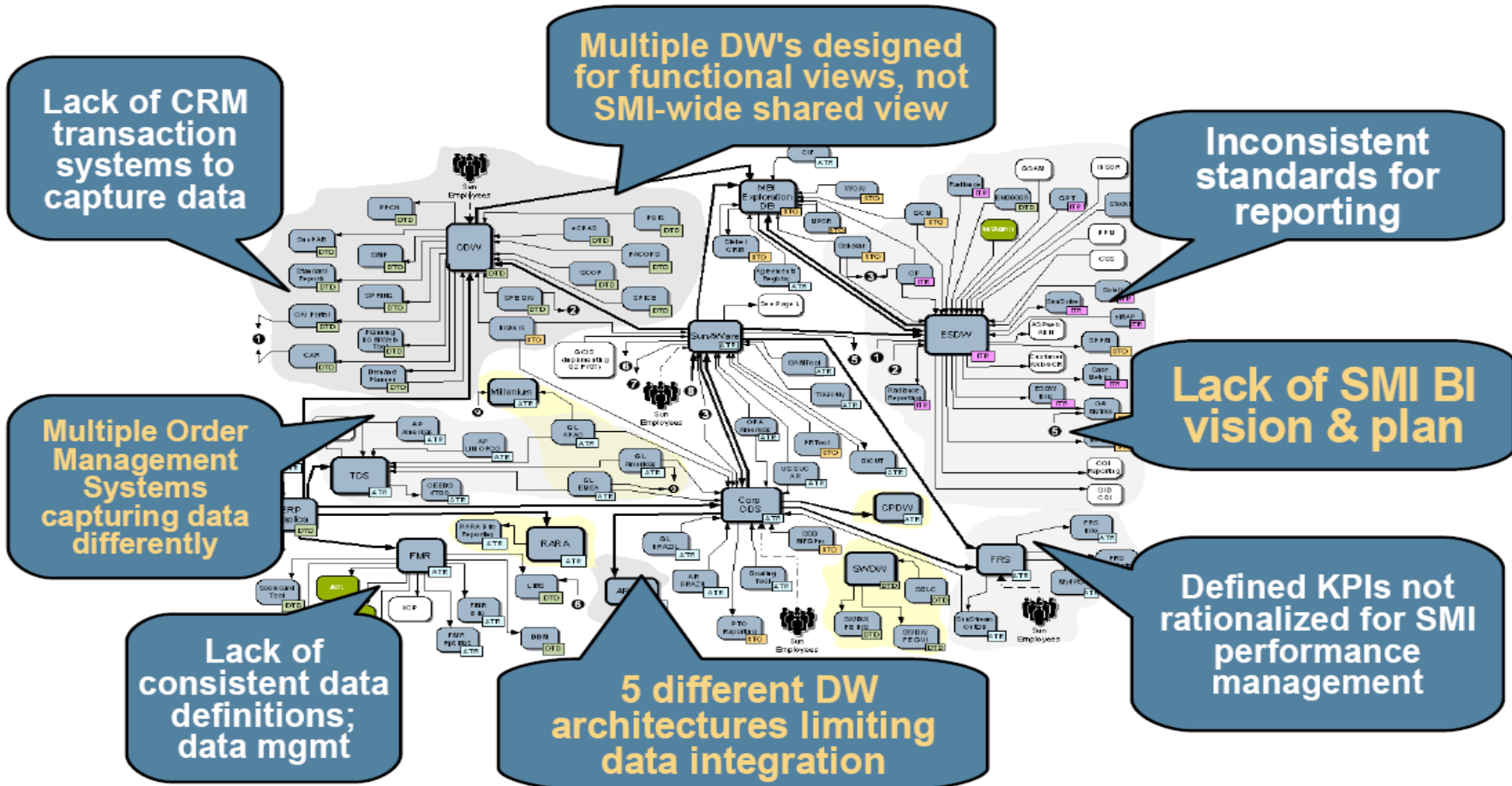


Sun's BI Implementation Overview

- Implementing Oracle 11i and OBIEE in Parallel
 - > The Necessity
 - > The Good *and* The Bad
- Business Transition Strategies Deployed
 - > Maintaining Business Continuity
- User Adoption
 - > Business Engagement
 - > Business Alignment
 - > Business Visibility

The Problem: Legacy DW Environment

- 14 unique DW's; lots of data but not enough performance visibility
- No enterprise level business accountability or oversight
- Data flows from systems to DW's, and DW's to DW's

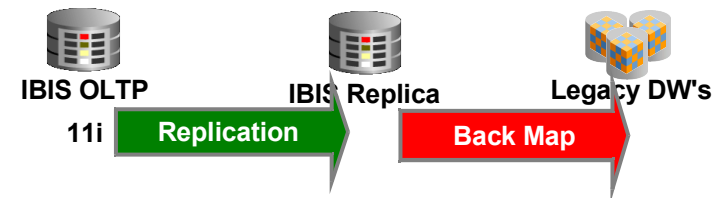


Oracle 11i – The Good & Bad for BI

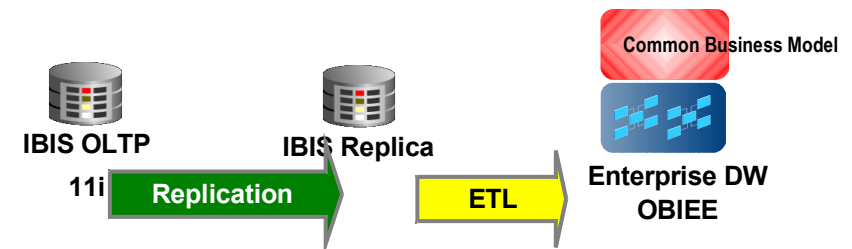
- + Standardization and integration of core business processes on common transaction application (*1 ERP!*)
- + Data Ownership and Data Management (*master data!*)
- + Strategic BI & Reporting Architecture & Tool Standards (*huge opportunity!*)
- + 11i and OBIEE Integration (*one vendor product suite*)
- 11i and OBIEE Integration (*for CRM*)
- Parallel 11i / BI Implementation (*new process familiarity*)
- Parallel 11i / BI Implementation (*data familiarity*)
- Parallel 11i / BI Implementation (*ERP time line*)
- Phased implementation did not support BI continuity

BI Transition Strategy and Approach

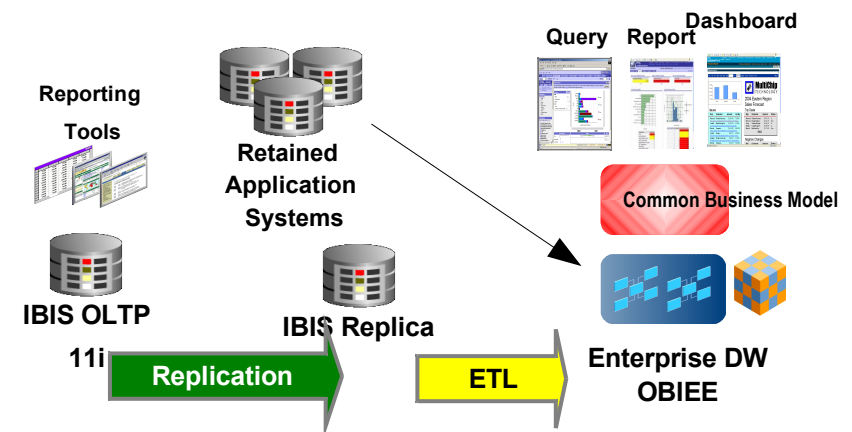
- Back Map 11i data to legacy DW's to maintain business continuity throughout 11i deployments



- Build out new enterprise data warehouse (OBIEE) aligned with 11i process scope, deploying standard and priority custom analytics



- Define Sun's future state BI Architecture based on business requirements and an understanding of Oracle's BI product strategy and road map (including Siebel Analytics and Hyperion product integration)
- Transition Users onto OBIEE and End of Life legacy DW's per the 11i EOL schedule



User Adoption

- **Business Engagement - Prototyping, Validating, Readiness**
 - > Learn the source data; Learn the OBIEE data model
 - > Understand standards and governance guidelines
 - > Participate in dashboard and report design
 - > Validate design with 11i test data
 - > Prepare the business community; 3-tier support model
- **Business Alignment - Sun Metrics Architecture**
 - > Linking Corporate Priorities to KPI's and Metrics, across functions
 - > Metric Coverage Model – linking metrics to BI project delivery and ROI
- **Business Visibility - Metadata Repository**
 - > Allow users to “look inside” OBIEE
 - > Bring it all together – a true BI Information source

TCA Customer Dimension Enables 360° View

The screenshot shows a BI dashboard with a filter interface at the top. A green oval highlights the filter section, which includes dropdown menus for 'Global Parent Name', 'Party Name', 'ECP', 'CDM-A', 'CDM-B', 'CDM-C', 'CDM-D', 'Global T2000', 'International Account', 'Top Level Account', 'CDM', and 'KKR Elite'. Below these are date pickers for 'Start Date Fiscal Quarter', 'End Date Fiscal Quarter', 'Booked Fiscal Quarter', and 'Renewed Fiscal Quarter', each with 'Between' and 'and' options. A 'Service Contract Type' dropdown is set to 'Service Agreement', and a 'Status' dropdown is set to 'Active'. A 'Go' button is located at the bottom right of the filter section.

Below the filter is a table titled 'ECP customers with mission Critical IB'. The table has columns for 'Global Parent Name', 'ECP', 'Service Contract Type', 'Mission Critical', 'Status', and 'Initial Number'. The 'Global Parent Name' column is redacted with a grey box. The table contains 25 rows of data, all with 'Service Agreement' as the contract type and 'y' for mission critical. The 'Initial Number' column shows various values ranging from 1 to 88.

Filter results by customer information to constrain or investigate the data

Global Parent Name	ECP	Service Contract Type	Mission Critical	Status	Initial Number
[Redacted]	ECP	Service Agreement	y		1
[Redacted]	ECP	Service Agreement	y		5
[Redacted]	ECP	Service Agreement	y		1
[Redacted]	ECP	Service Agreement	y		1
[Redacted]	ECP	Service Agreement	y		12
[Redacted]	ECP	Service Agreement	y		1
[Redacted]	ECP	Service Agreement	y		9
[Redacted]	ECP	Service Agreement	y		9
[Redacted]	ECP	Service Agreement	y		12
[Redacted]	ECP	Service Agreement	y		2
[Redacted]	ECP	Service Agreement	y		18
[Redacted]	ECP	Service Agreement	y		22
[Redacted]	ECP	Service Agreement	y		6
[Redacted]	ECP	Service Agreement	y		4
[Redacted]	ECP	Service Agreement	y		88
[Redacted]	ECP	Service Agreement	y		4
[Redacted]	ECP	Service Agreement	y		4
[Redacted]	ECP	Service Agreement	y		8
[Redacted]	ECP	Service Agreement	y		39
[Redacted]	ECP	Service Agreement	y		11
[Redacted]	ECP	Service Agreement	y		5
[Redacted]	ECP	Service Agreement	y		4
[Redacted]	ECP	Service Agreement	y		3
[Redacted]	ECP	Service Agreement	y		1
[Redacted]	ECP	Service Agreement	y		1

Engaging business users to determine Master Data use in downstream BI

OBIEE Dashboards for Data Quality Measurement

BI Interactive Dashboards
My Dashboard EDG

Quality Measurement
Welcome, CHERYL.LANDWEHR@SUN.COM! [Dashboards](#) -- [My Account](#) - [EBS Home](#)

Quality Measurement
Measurement Summary
Page Options

KDE Violation Analysis

DQ Measurement Counts by threshold Levels

KDE	Upto 25%	Upto 75%	Upto 100%
Customer	4	0	0
Employee	1	0	0
Install Base	7	1	1
Pricing	6	0	0
Service Contracts	3	0	0
Supplier Invoices	5	1	0

DQ Measurement

Customer: 4 (Upto 25%)
 Employee: 1 (Upto 25%)
 Install Base: 7 (Upto 25%), 1 (Upto 75%), 1 (Upto 100%)
 Pricing: 6 (Upto 25%)
 Service Contracts: 3 (Upto 25%)
 Supplier Invoices: 5 (Upto 25%), 1 (Upto 75%)

Legend: Upto 100% (Red), Upto 75% (Yellow), Upto 25% (Green)

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Key Data Entity Prompt

Supplier Invoices

DQ Measurement Analysis By KDE

DQ_ID	DQ Measurement	Record Count	Triggers	% Triggers
DQ034	Supplier Bank Names with lower case	34995	17080	49%
DQ035	Supplier Bank Branch Names with lower case	34995	421	1%
DQ039	Supplier Site Names in lower case	72272	676	1%
DQ033	Identify all invoices with invoice numbers in lower case and spaces	326683	630	0%
DQ037	Supplier Hold Unmatch Invoices Box Check	72272	0	0%
DQ036	Payment Terms which don't start with NET or IMMEDIATE	1445200	0	0%

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Data Quality Score

Dimension	Score
UNKNOWN	77.4
Validity	91.5
Accuracy	94.8
Completeness	97.7
Consistency	97.9
Usability	99.4

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Data Quality Score by KDE

KDE	Dimension	Score
Customer	Accuracy	100.0
Customer	Completeness	100.0
Customer	Usability	100.0
Employee	Accuracy	96.1
Install Base	Accuracy	78.0
Install Base	Consistency	95.7
Install Base	UNKNOWN	77.4
Install Base	Usability	98.2
Pricing	Accuracy	100.0
Pricing	Completeness	98.8

Records 1 - 10

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Leveraging OBIEE to measure business performance and 11i data quality

Key Data Entity Metrics & Commentary

BI Interactive Dashboards
My Dashboard EDG

KDE
Welcome, CHERYL.LANDWEHR@SUN.COM! [Dashboards](#) -- [My Account](#) - [EBS Home](#)

Customer
Install Base
Item Master
Pricing
Service Contracts
Supplier
Supplier Invoices
Discussions Approvals
Employee
Page Options ▾

Lead Data Steward: **Sander Rijlaarsdam**
Data Steward:

DQ Measurement Supplier Invoices

DQ Measurement	Record Count	Trigger	Trigger%
Bank names with lower case	34995	17080	49% ■
Bank branch names with lower case	34995	421	1% ■
Supplier Site Names in lower case	72272	676	1% ■
Supplier invoice numbers in lower case and spaces	326683	630	0% ■

Records 1 - 4
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DQ Measurement Prompt

Bank names with lower case

Measurement
Supplier Bank Names with lower case

Trigger Thresholds
Red - Greater than 75% and Less than equal to 100% , Yellow - Greater than 25% and less than equal to 75% , Green - Greater than equal to 0% and less than equal to 25%

Business Value of Measurement
It will pollute the bank details database as certain banks will be setup multiple times

Overall Analysis

Updated By	Comments	Update Date
Administrator	The number didn't increase, the business still have to take action to cleanup the database. But priority is first to close legacy systems	01/15/09
SANDER.RIJLAARSDAM@SUN.COM	Since this week, the team started the cleanup. They have started with the supplier sites and will continue with the banks and bank branches after the supplier site cleanup.	04/09/09
SANDER.RIJLAARSDAM@SUN.COM	Unfortunately due to several reasons the legacy systems were extended to use. So the business was still focussed on legacy and didn't have the time to update the errors for KDE's. The extension is until the end of March	03/16/09

DQ Measurement Trend Analysis

Records 1 - 8
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ID	DQ_ID	EXTRACT_DATE	Record Count	Trigger	Trigger%
680	DQ034	08/15/08	31608	16944	54% ■
707	DQ034	08/25/08	31615	16946	54% ■
747	DQ034	08/29/08	31635	16953	54% ■
786	DQ034	09/05/08	31686	16960	54% ■
830	DQ034	09/12/08	31980	16981	53% ■
864	DQ034	09/19/08	32319	16988	53% ■
881	DQ034	09/22/08	32361	16999	52% ■
917	DQ034	09/29/08	32534	17000	52% ■

Total Number of records is : 32
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Allowing write-back capability to capture commentary and action plans

Metrics Architecture

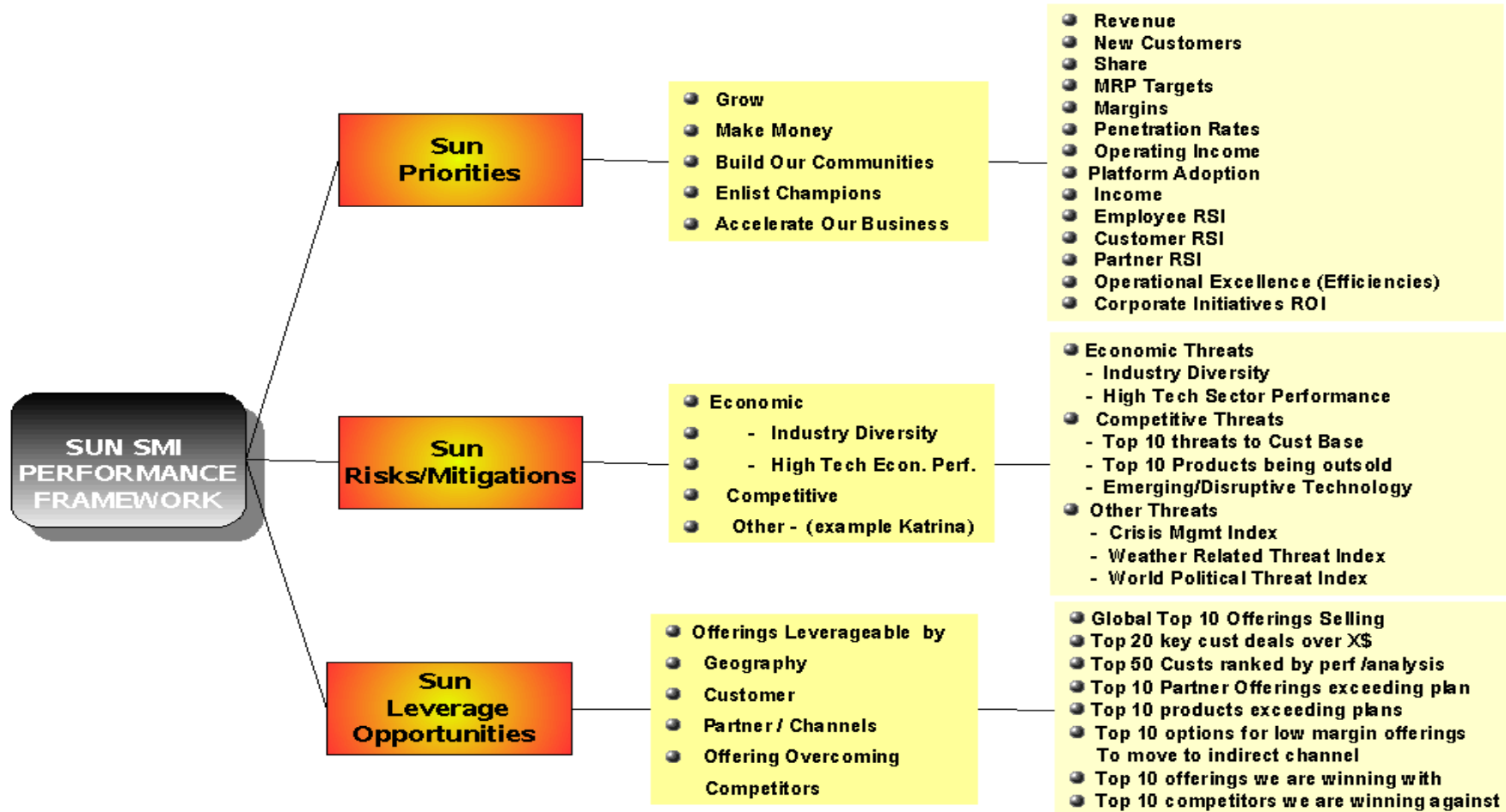
Sun Business Measurement System (Illustration Only)

SMI Priorities

Strategic Intents

KPI's / Measures

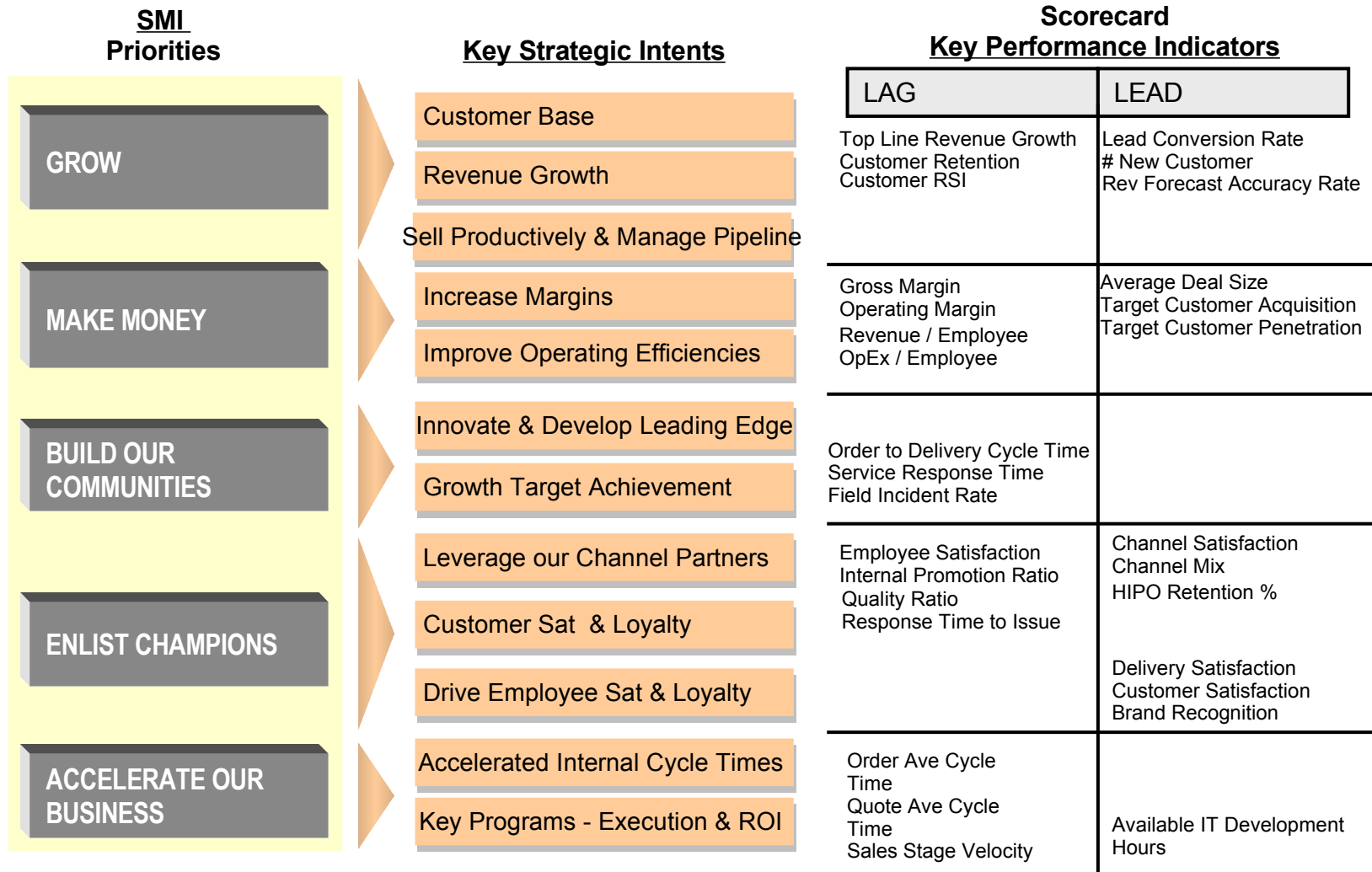
Metrics



Aligning business priorities to KPIs and Metrics at the highest level

Metrics Architecture

Summary Level for Executives and Management (Illustration Only)



Drilling down to determine Leading and Lagging Performance Indicators

Metrics Architecture

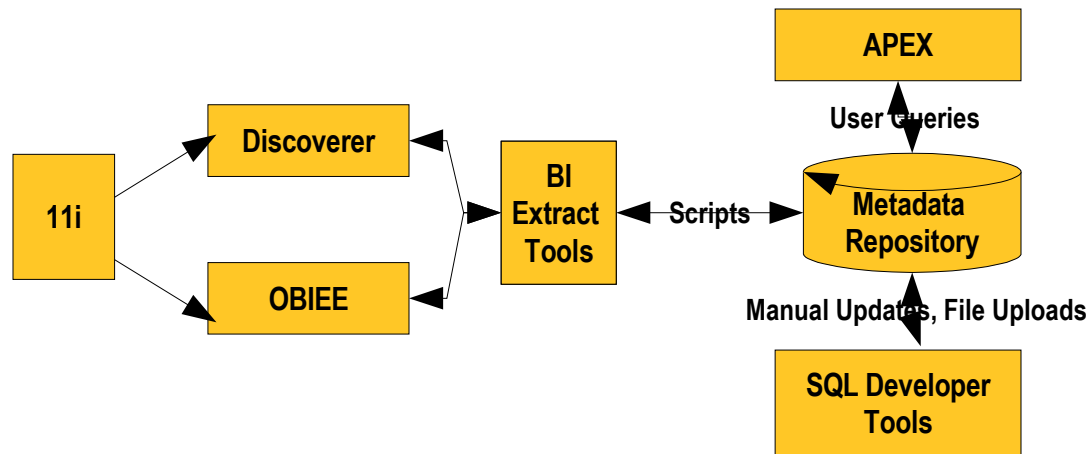
Coverage Model – Revenue Through Margin Project (Illustration Only)

Metric Tree Map	Data Element	WW-FRM	Hubs	Support Services	Professional Services	Learning Services	SW BU	Storage BU	System BU	Sales	WWOPS	Marketing
ASP Growth %	ASP (Average Selling Price)	X	X				X	X	X	X	X	X
Adjustments and Reserves	Support services reserves	X	X	X			X					
Backlog	Gross Backlog	X	X	X				X	X	X		X
Backlog	InQtr Backlog Std Margin%	X	X					X	X	X		
Backlog	Backlog \$	X						X	X	X		X
Backlog	Outstanding Deferred System Amounts	X							X	X		
Backlog	Deferred Revenue backlog \$	X						X	X	X		
Billing Units	Billings Units	X	X	X			X	X	X	X		X

Looking across business functions to identify metric and OBIEE investment priority

BI Metadata Repository: What is it?

- An integrated repository of information about the BI environment:



- A fully extensible environment running exclusively on Oracle tools:
 - > Oracle Application Express (APEX) (rapid web application development tool) running on top of an Oracle database

BI Metadata Repository: Benefits & Users

- Benefits

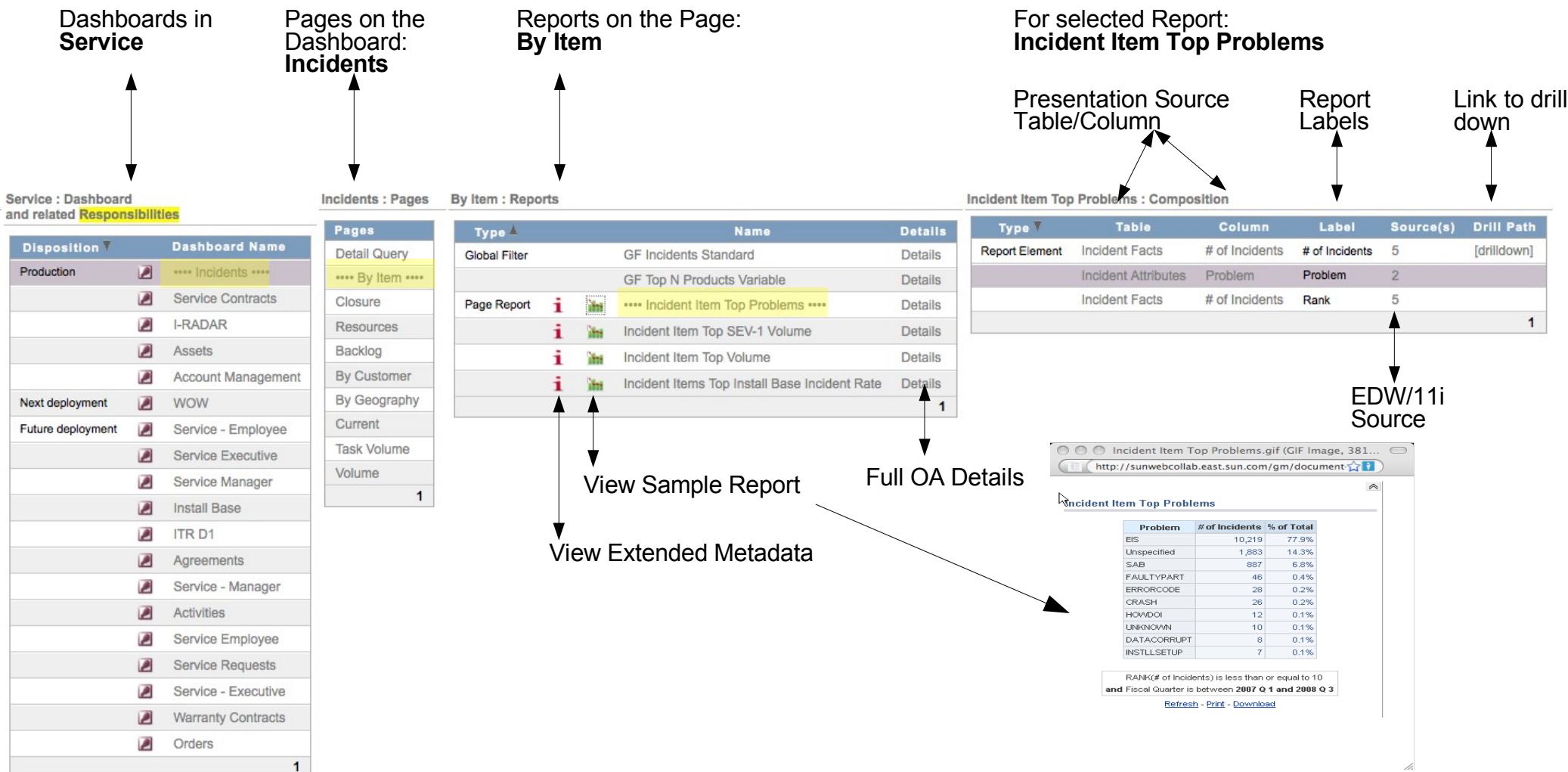
- > Provides business access to otherwise closed system
- > BI Information centralization, consolidation and integration
- > Scalable, extensive, rapid development environment
- > Data Governance

- Users

- > **Casual user**: self-service ability to browse catalog of available reports while insulated from security barriers
- > **Power User**: find similar reports to avoid redundant development
- > **Developer**: Full traceability back to 11i source data, where-used reports, impact analysis
- > **Data Governance**: Non-compliance query capability
- > **Enterprise Data Governance /Lead Data Stewards**: Consolidation point for all reportable fields in BI

BI Metadata Repository

- “Home page” for OBIEE reports showing location and composition of reports, navigating through dashboards and pages
- Includes presentation layer source, report labeling, and links to other details



BI Metadata Repository

- Ability to capture Sun-specific details not captured in OBIEE, e.g., description, release to production date, business function owner, etc.
- Link from full report opens details

Service : Dashboard and related **Responsibilities**

Disposition	Dashboard Name
Production	**** Incidents ****
	Service Contracts
	I-RADAR
	Assets
	Account Management
Next deployment	WOW
Future deployment	Service - Employee
	Service Executive
	Service Manager
	Install Base

Incidents : Pages

Pages
Detail Query
**** By Item ****
Closure
Resources
Backlog
By Customer
By Geography
Current
Task Volume
Volume

By Item : Reports

Type	Name	Details
Global Filter	GF Incidents Standard	Details
	GF Top N Products Variable	Details
Page Report	Incident Item Top Problems	Details
	Incident Item Top SEV-1 Volume	Details
	Incident Item Top Volume	Details
	Incident Items Top Install Base Incident Rate	Details

Clicking the “info” icon displays additional report details which are collected and maintained as additional metadata

Core Details

Report Number	329
Report Name	Incident Item Top Problems
Owner	Oracle Development
Report Tool	OA
Business Group	Service Delivery
Brief Description	Default displays current fiscal quarter and back one fiscal year of Top 10 Problem Code Incident Volume.
Notes	
Process Vertical	ITR
Report Owner For Security	Maria Reymann
Instance	EDW - delayed
Functional Area	Case Metrics
Location	Service -> Incidents -> By Item

Other Details

Version Release	1.0	Request No	ITR_REQ_91 ITR_REQ_116
Deployment	D1B	Release To Production	28-JAN-08
Source Module	Oracle 11i Reporting Replica	Frequency Of Use	On Demand
Sample URL	http://sunwebcollab.east.sun.com/gm/document-1.9.3333976/Incident%20Item%20Top%20Problems.gif	Supporting Documentation URL	http://sunwebcollab.east.sun.com/gm/document-1.26.622288/OA_ReleaseNotes_R1_Final.html#Inc_Detail_Rpt



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