

Business Intelligence 2009: The New IT Frontier



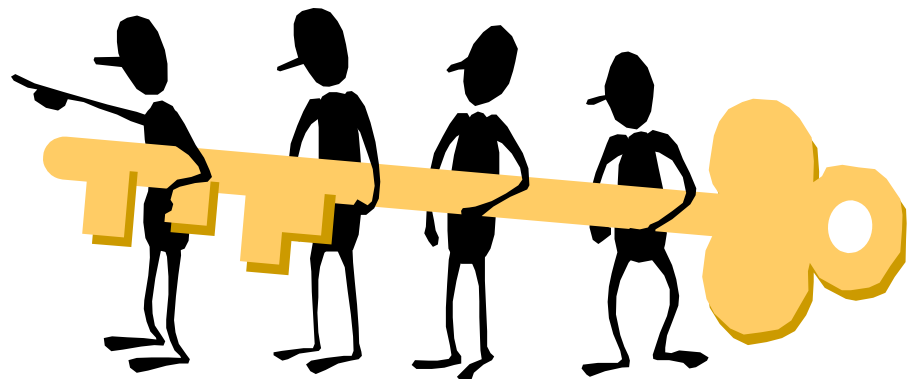
CREATIVE TECHNOLOGY
& TRAINING SOLUTIONS

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Agenda

- ◇ Evolution of Business Intelligence
- ◇ Definition of Business Intelligence
- ◇ Goals/Objectives of Business Intelligence
- ◇ Issues/Concerns
- ◇ Keys to Successful Implementation
- ◇ Business Intelligence Infrastructure
- ◇ Categories of Reporting
- ◇ Products
- ◇ Future Trends





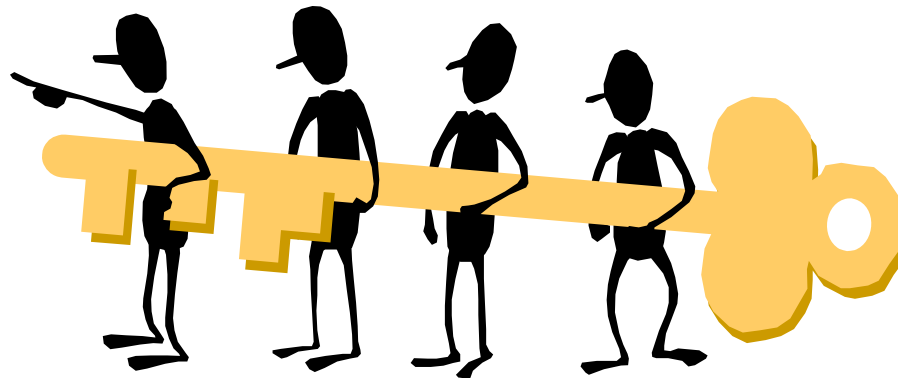
Sources

- ◇ White Papers
- ◇ TDWI Publications
- ◇ DM Publications
- ◇ BI Magazine Publications
- ◇ BI Review
- ◇ Conferences/Seminars
- ◇ e-Business Intelligence by B. Liautaud



Definition

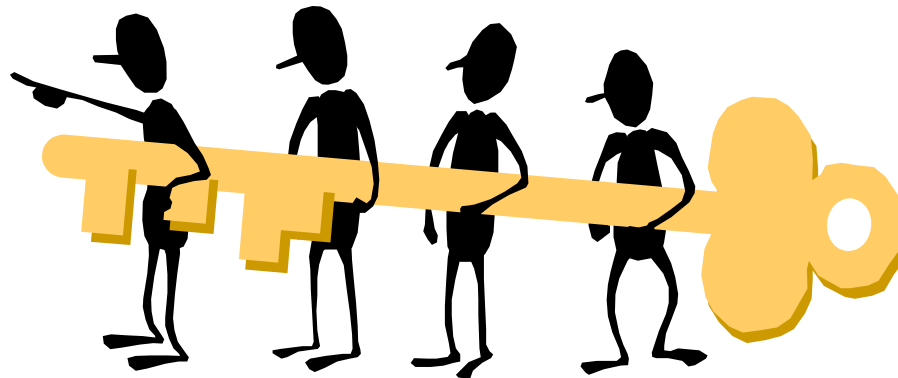
Business Intelligence is the term used to describe the use of an organizations operational data to provide meaningful information and analysis to its employees, suppliers, and partners for more effective decision making.





Definition

Give businesses the business intelligence tools they need so they can manage themselves!





Business Intelligence

Brief History

- ◆ Data
- ◆ Decision Support Systems (DSS)
 - ◇ Peter Keen
- ◆ Information Center
- ◆ Center of Excellence
- ◆ Business Intelligence
- ◆ Business Process Management



Business Intelligence

- ◆ Use corporate data to:
 - ◇ Increase ROI
 - ◇ Increase Revenue
 - ◇ Decrease Expenses
 - ◇ Improve Customer Satisfaction
 - ◇ Create Profit Center vs. Cost Center



Business Intelligence

- ◆ Any Product That:
 - ◇ Helps Users Store Data
 - ◇ Find Data (Access)
 - ◇ Analyze Data
 - ◇ Report/Distribute



Ultimate Goal?

ONE Version Of The Truth!



What Are The Issues?

- ◇ Too many Spreadsheets
- ◇ Each User Has Own Copy/Version
- ◇ Dynamic Data
 - ◆ Moving Target
- ◇ Information Is Distributed To The “World”
- ◇ Inability to Perform Detailed Analysis
- ◇ Lack of Timeliness
- ◇ Data to Difficult to Integrate

Business Intelligence Solves These Problems!



3 Primary Goals of BI?

- ◆ Access
- ◆ Analyze
- ◆ Report/Distribute
- ◆ Predictive Analysis



Business Intelligence Types:

- ◆ Strategic BI
- ◆ Tactical BI
- ◆ Operational BI
- ◆ Application BI



Strategic/Tactical BI

- ◆ Data Centric
- ◆ Actual Performance Data tied to Planned Performance Data
- ◆ No Formal Link to Operational Data
- ◆ Flexible But Friendly



Operational BI

- ◆ Process Centric
- ◆ Embedded Into Business Transaction Workflows
- ◆ Analyzes Events As They Occur in Business Process
- ◆ Grown In Popularity
- ◆ Ties To Business Process Management
- ◆ Flexible But Friendly

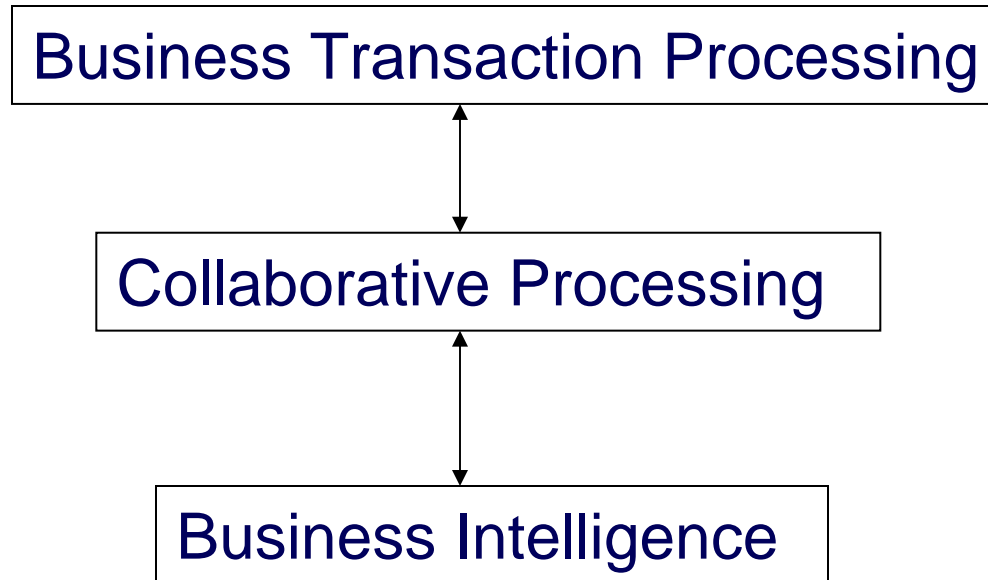


Application BI

- ◆ Pre-Defined Report Templates
- ◆ Pre-Defined Schema Definitions
- ◆ Report Creation: Integrated/Automated For Speed
- ◆ BI Metadata Layer
- ◆ Pre-defined Queries and Views
- ◆ ERP/SCM/HR/CRM/Others Included
- ◆ Goal: Leverage What You Already Have
 - ◇ Hardware
 - ◇ Software
 - ◇ Resources



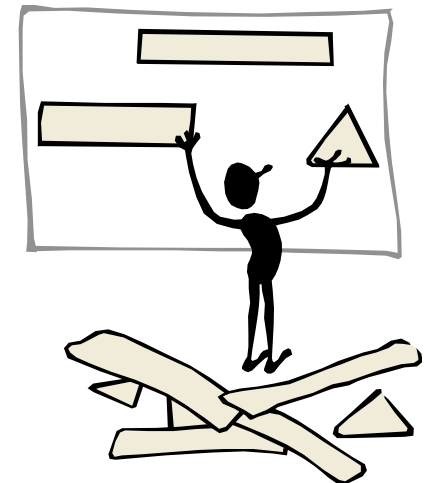
Process Flow Chart





◆ Keys To Successful Implementation:

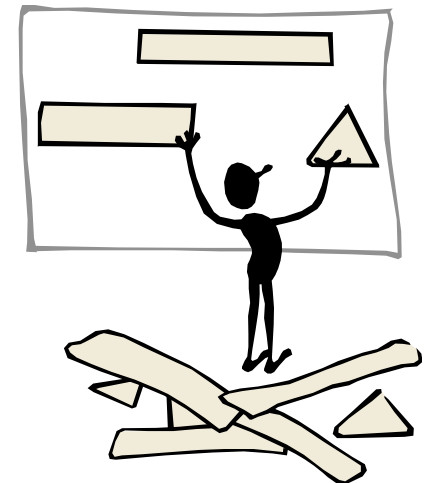
- ◇ Understanding Target Audience Needs
 - ◆ Current & Future
- ◇ Getting Audience Involved Early
 - ◆ Feeling of Ownership
 - ◆ Reverse Engineering
- ◇ Understanding Available Data
- ◇ Managing of Expectations
 - ◆ Level Set PRIOR to Deployment
- ◇ “Build it and they will come?” NO!!!!





◆ Who Is Our General BI Audience?

- ◆ Executives
- ◆ Business Managers
- ◆ BI Users/Consumers
- ◆ Power Users
- ◆ IT Administration





What Should BI Solution Include?

- ◆ Data Integration (DI)
- ◆ Data Warehouse/Data Mart/ODS
- ◆ OLAP
- ◆ Data Mining
- ◆ Executive Dashboards/Scorecards
- ◆ KPI/Metrics
- ◆ Performance/Enterprise Management
- ◆ Predictive Analysis
- ◆ Data Visualization



Ultimate Goal?

Reporting!



Two Categories of Reporting:

- ◆ Analytic Reporting
- ◆ Enterprise Reporting



Analytic Reporting:

◆ Power Users

- ◆ Extensive Reporting/Charting
- ◆ Drilling/OLAP
- ◆ Ad Hoc
- ◆ Dashboards



Analytic Reporting:

Power Users: Requirements

- ◇ Query From Data Sources
- ◇ Analyze Using BI Tool
- ◇ Complex Formatting
- ◇ Distribution Capability



Enterprise Reporting:

- ◆ Canned Reports
- ◆ Dashboards
 - ◇ Connect To Canned Reports
 - ◇ More Than Pictures/Gadgets
 - ◇ Ability To Drill Into Data
- ◆ Parameter-Driven Reports
 - ◇ FAQ
- ◆ Ad Hoc Reports
 - ◇ Simple User Requests



Reporting Formats:

- ◆ PDF
- ◆ Excel
- ◆ HTML
- ◆ XML
- ◆ Text
- ◆ Specific Reporting Tools
- ◆ Live-Office Integration



Reporting Audience

- ◆ Local Power Users
- ◆ Local Department/Area
- ◆ Intra/Inter Company
 - ◇ Report “Consumers”
- ◆ Extranet

➤ **Major Concern? SECURITY**



BI Infrastructure

- ◆ Security
- ◆ User Friendly Interface
 - ◇ Reporting
 - ◇ Ad Hoc
 - ◇ Dashboards
- ◆ Scalability
- ◆ Monitoring/Administration Tools
 - ◇ Usage
 - ◇ Access
 - ◇ Control



BI Infrastructure: Security

- ◆ Tool Specific
- ◆ O/S
 - ◇ Windows NT
 - ◇ Windows AD
- ◆ LDAP
- ◆ 3rd Party Security



Building The BI Reporting Infrastructure



- ◆ Data Migration
 - ◇ ETL (Extract, Transform, Load)
- ◆ Reporting
 - ◇ Report Creation
 - ◇ Dashboard Creation
 - ◇ Ad Hoc Interface Creation
- ◆ Data Visualization
- ◆ Distribution



Building The BI Reporting Infrastructure



Data Migration

Data Destination?

- ◆ Data Warehouse/Data Mart
- ◆ OLAP



Building The BI Reporting Infrastructure



Data Migration

Data Source?

- ◆ Production Applications
- ◆ OLTP/ODS
- ◆ Disparate Data Source
- ◆ Other Enterprise Applications
 - ◇ Enterprise Resource Planning (ERP)
 - ◇ Customer Relationship Management (CRM)
 - ◇ Supply Chain Management (SCM)

Building The BI Reporting Infrastructure



Data Migration

Alternate Data Sources?

- ◆ Excel
- ◆ XML
- ◆ DB2
- ◆ Oracle
- ◆ SQL/Server
- ◆ SAP
- ◆ PeopleSoft
- ◆ JD Edwards
- ◆ Informix
- ◆ Lawson



Building The BI Reporting Infrastructure



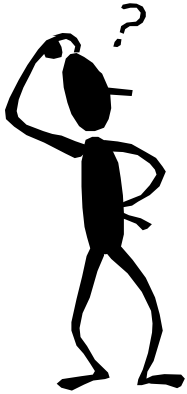
Data Migration

Other Data Issues:

- ◆ Getting Good Data
- ◆ Data Cleansing
 - ◇ Process To “Clean Up” Bad Data
- ◆ Timely Loads
 - ◇ To Fit Users Needs
 - ◇ Daily/Weekly/Monthly/Quarterly
- ◆ “Efficient” Loads
 - ◇ Update vs. Reload
- ◆ Live vs. Static
- ◆ Efficiencies
 - ◇ Aggregation
 - ◇ Indexing



Building The BI Reporting Infrastructure



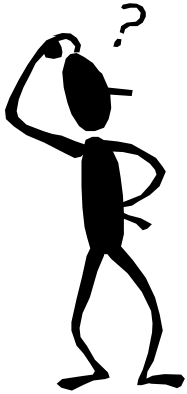
Data Migration

Tools:

- ◆ Custom Written In House SQL Scripts
- ◆ IBM/Ascential
- ◆ Informatica
- ◆ Data Integrator(SAP)
- ◆ Iway/Data Migrator



Creating Reporting Interface:



Reporting

- ◆ Canned Reports/Parameter Driven
- ◆ Ad Hoc Reports
- ◆ Formal Reports
- ◆ Charts



Creating Reporting Interface:



- ◆ Data Migration
- ◆ Interface Creation
- ◆ Reporting/Dashboard Creation



Creating Reporting Interface:

Reporting

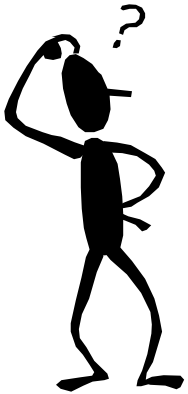


Additional Requirements:

- ◇ OLAP Capability
- ◇ Canned Reports
- ◇ Parameter Driven Reports
- ◇ Ad Hoc Reports
- ◇ Drill Down
- ◇ Slice and Dice
- ◇ Charting
- ◇ Live-Office Integration



Creating Reporting Interface:

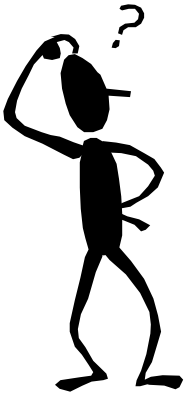


Visualization Of Data

- ◆ Dashboards/Scorecards
- ◆ KPI/Metrics
- ◆ Predictive Analysis
- ◆ Linked Automatically To Excel/Powerpoint



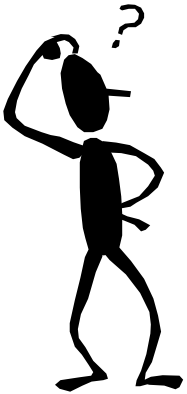
Reporting Products:



- ◆ Cognos (IBM)
 - ◇ ReportNet
- ◆ WebFOCUS (Information Builders)
- ◆ BusinessObjects (SAP)
 - ◇ WebIntelligence
 - ◇ Desktop Intelligence
 - ◇ Crystal Reports
- ◆ Hyperion (Oracle)
- ◆ Actuate
- ◆ Microsoft
 - ◇ Reporting Services
- ◆ Microstrategy
- ◆ SAS



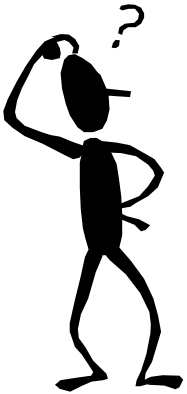
BI Vendor Questions:



- ◆ BI + Report Platforms Connected
- ◆ User Based vs Server Based Pricing
- ◆ Database Neutral Products
- ◆ Hidden Costs:
 - ◇ Outside Services
 - ◇ Upgrading
- ◆ BI Vendors “Real” Business
- ◆ Vendor Performance Trends
- ◆ Try It Before You Buy
- ◆ References
- ◆ User Group Forums
- ◆ Web-Based Only



Building The BI Infrastructure



- ◆ Scheduling
 - ◇ Flexible Interface
 - ◇ Custom Calendar

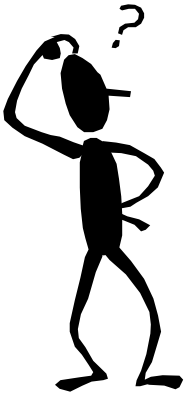
- ◆ Distribution
 - ◇ Web Servers
 - ◇ File Servers
 - ◇ Email
 - ◇ Portal Integration

- ◆ Standard Desktop Formats
 - ◇ Excel/CSV
 - ◇ Text
 - ◇ HTML
 - ◇ XML



Business Intelligence

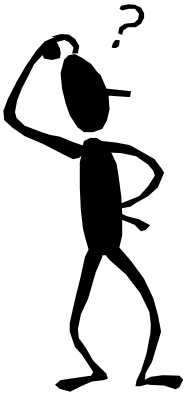
Future Trends



- ◆ Business Process Management
- ◆ Business Intelligence Competency Center
- ◆ Moving to Google and Other Search Technologies



Business Intelligence

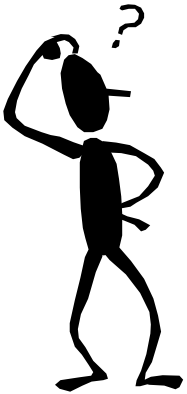


Business Intelligence Competency Center

- ◆ Business Intelligence Project Management
- ◆ Enforce Standardization
- ◆ Provide Proper Education and Training
- ◆ Empower Users (Consumers)
- ◆ Best Practices
- ◆ Manage Vendor Support
- ◆ Manage Upgrade Process



Questions?



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