

Integrating people, processes, and technology!™



Assessing BI Readiness

Faun deHenry
FMT Systems Inc.



Agenda

- ❑ **Introduction**
- ❑ What is BI
- ❑ The organization
- ❑ Successful implementations
- ❑ BI assessment
- ❑ The assessment process
- ❑ Q & A

About the Speaker

Faun deHenry

- ❑ President and CEO of FMT Systems Inc.
- ❑ Work during last 20 years involved operating regional consulting organizations
- ❑ Officer in Oracle Business Intelligence Special Interest Group
- ❑ Recognized speaker and trainer on topics including *Managing and Sustaining Virtual Teams*, *Best Practices for Virtual Organizations*, *Oracle's e-Business Suite*, and *business intelligence*

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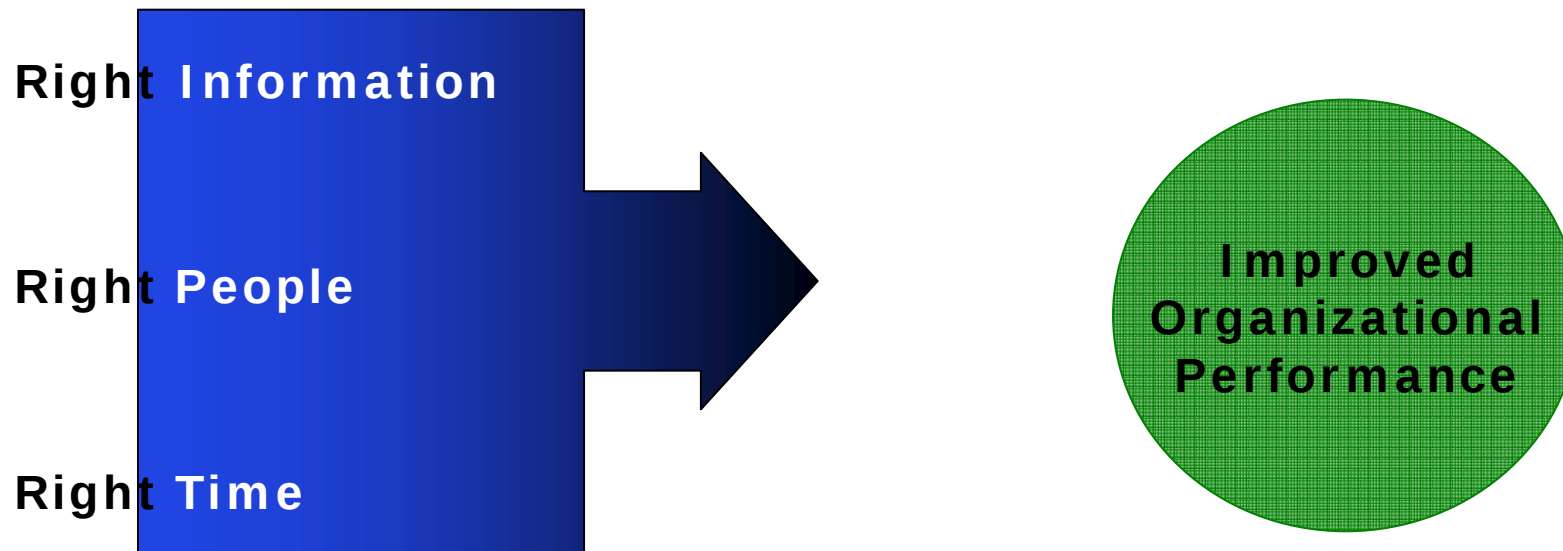
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Business Intelligence Definition



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BI Definition — Technical View

Employing applications and technologies in the process of gathering, storing, analyzing, and providing access to data to assist in **better business decision making.**

Why BI? — Management perspective

“Would you run your business looking at your rear view mirror through a telescope?”



Why BI? — End User Perspective

- ❑ Multiple versions of “the truth” in meetings—no single set of business rules nor definitions
- ❑ Empowers end-users to do own analysis
- ❑ Eases task of data selection
- ❑ Drill-down
- ❑ Limited knowledge of SQL or tables required

Why Consider BI? — IT Perspective

- ❑ Standard reports don't meet business requirements
- ❑ Custom reports take too long to produce
 - Many resources tied up in reporting
 - Need daily production reports and exception reporting in dashboards, scorecards, alerts
- ❑ Inability to drill down from summary data to consistent details for clean, accurate, and timely data

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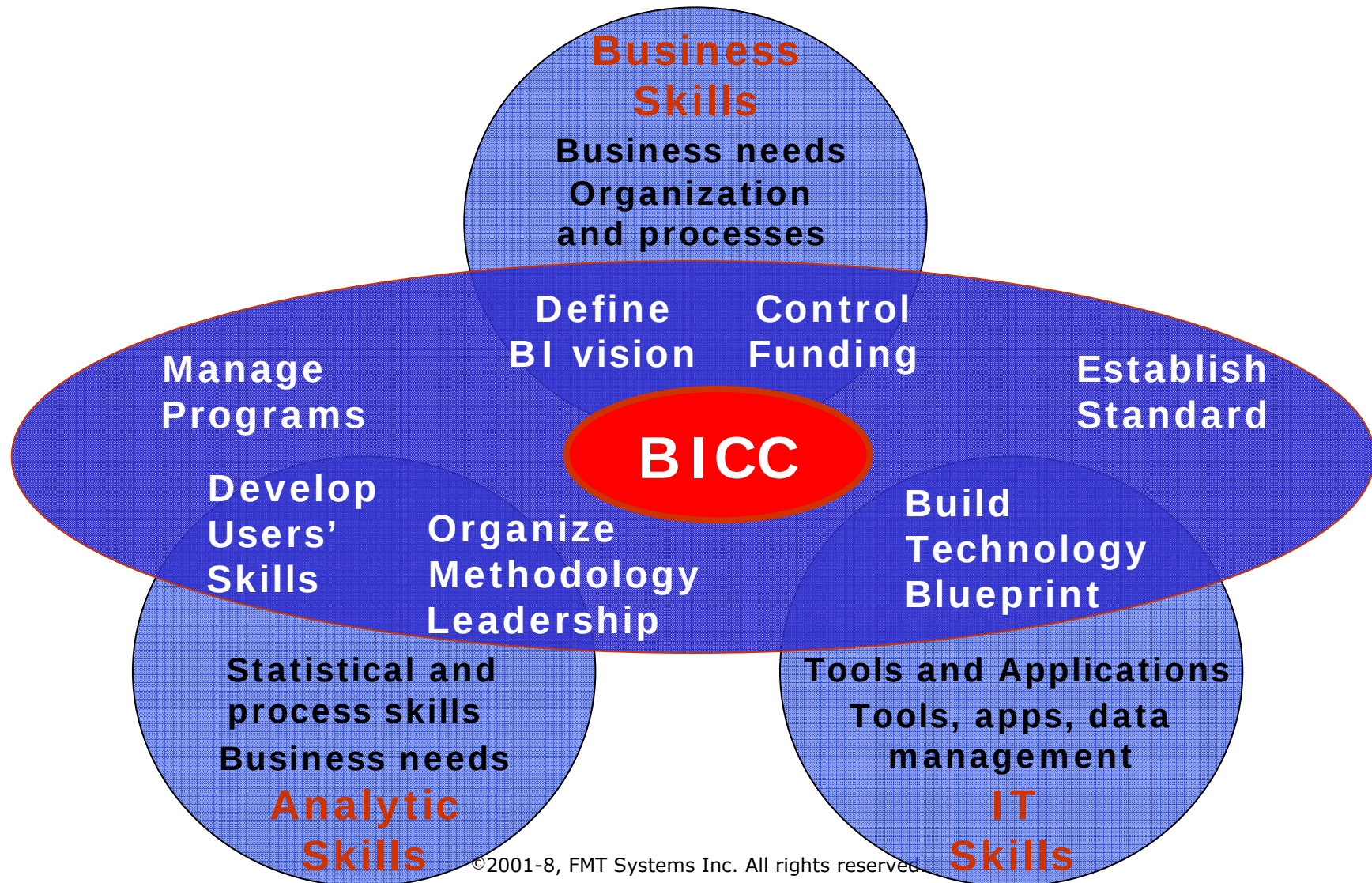
Why Consider BI? — IT Perspective (cont'd)

- ❑ Data manipulation is required, extensive use of Excel (can be problematic – Sarbanes Oxley) “Spreadsheets are the duct tape of BI”
- ❑ No tools or time to do detailed analysis
- ❑ Multiple data sources, complex table structures—no central repository for business and technical information

OLTP versus DW/BI—Different skills

- ❑ OLAP/BI is iterative in modeling, design, and implementation
- ❑ Frequent exposure of unknown data quality problems
- ❑ Multiple source systems (OLTP) converge into one or more target (DW/OLAP/BI) systems
- ❑ Multiple lines of business use different business rules, assumptions, terminology
- ❑ Quantity of data that will reside in DW/OLAP/BI is typically unknown
- ❑ Difficulties in loading and aggregating data
- ❑ Different challenges in performance tuning

Gartner View of BICC (Business Intelligence Competency Center)



BI Trends

- ❑ CIO priorities
- ❑ Maintenance
- ❑ IT driving BI to BI driving business transformation

Changing CIO Priorities -1

To what extent will your investment in each of the following technologies change in 2006?

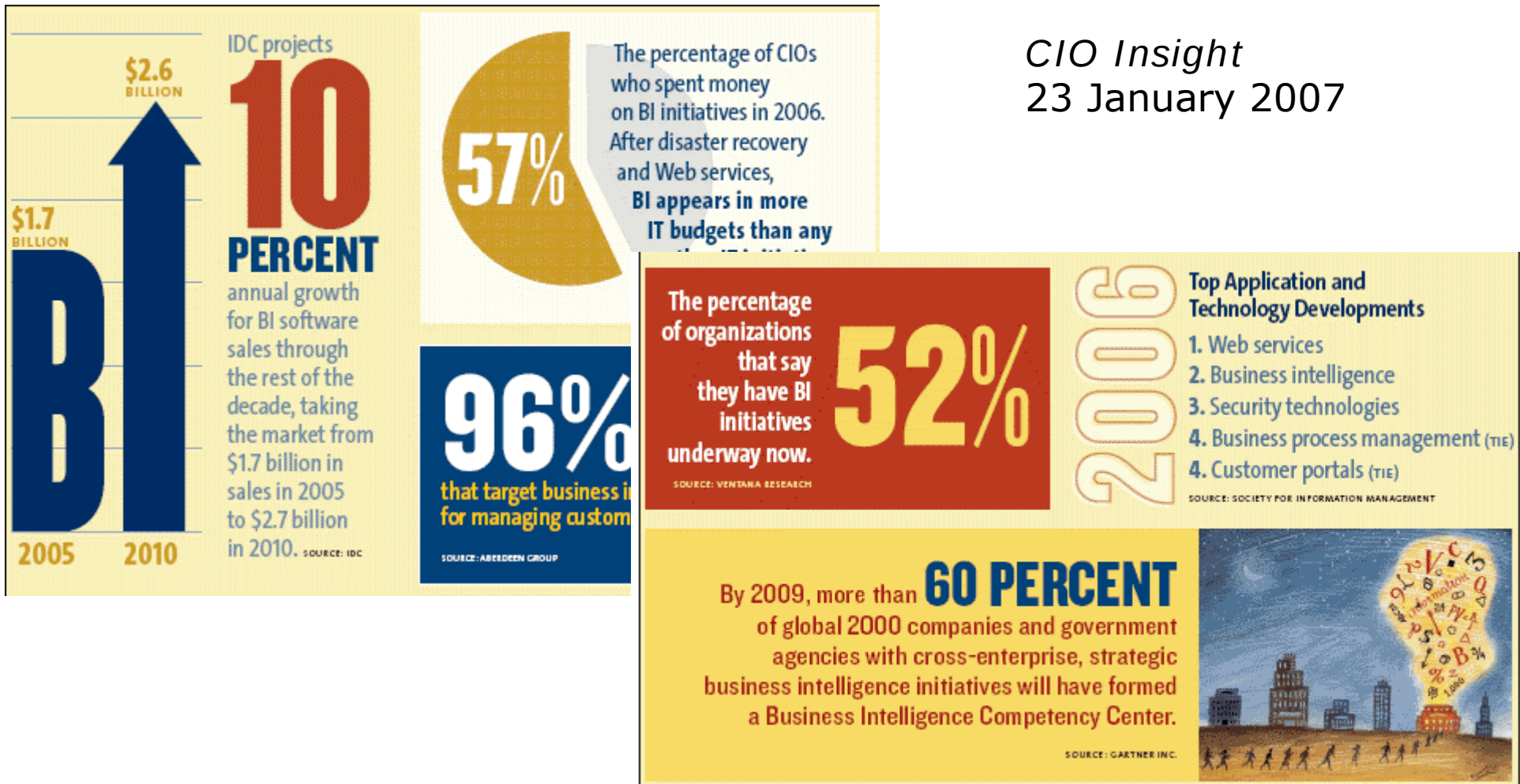
	Ranking		Spending Increase
	2006	2005	
Business Intelligence	1	2	+ 4.8 %
	2	1	
Mobile Workforce Applications	3	3	+ 3.9 %
Customer Sales and Service Technologies	5	8	+ 3.4 %

* New question for 2006

Source: Gartner EXP 2006 CIO Survey of 1400 CIO's across 30 countries

Changing CIO Priorities -2

CIO Insight
23 January 2007



Changing CIO Priorities — 3

IT's BI Challenge

- ▶ The top BI deployment challenge for IT is data quality (**50%**), followed by data integration from operational systems (**37%**) and integrating the BI software with existing IT infrastructure (**33%**).

How BI Is Used

- ▶ Predictive analytics is a big use of BI, with **62%** of respondents using it this way or planning to within a year. Sales (**56%**), finance (**54%**), marketing (**54%**), logistics/materials management (**35%**), and customer service/call center (**35%**) departments use predictive analysis the most.
- ▶ The most important BI capabilities are drill-down and drill-through (**67%**), sorting and filtering (**60%**), and decision evaluation and optimization (**45%**).
- ▶ **36%** of respondents are extremely or very confident in the relevance and accuracy of reports and dashboards. **10%** have no confidence in them.
- ▶ **54%** of respondents would consider replacing BI-generated reports with search technology that lets users get their own results. But **43%** of those respondents say their companies don't have the internal expertise to do so.

Business Drives BI

- ▶ At **74%** of companies, management is driving BI as a key priority. Of these, **48%** are driven by the executive level and **30%** by line-of-business management.
- ▶ **74%** of companies see BI as having high or critical priority in three to five years — and **66%** in the coming year.
- ▶ **61%** of respondents say business analysts are playing a more strategic role in their organizations. **39%** of these plan to hire more business analysts in the next year.

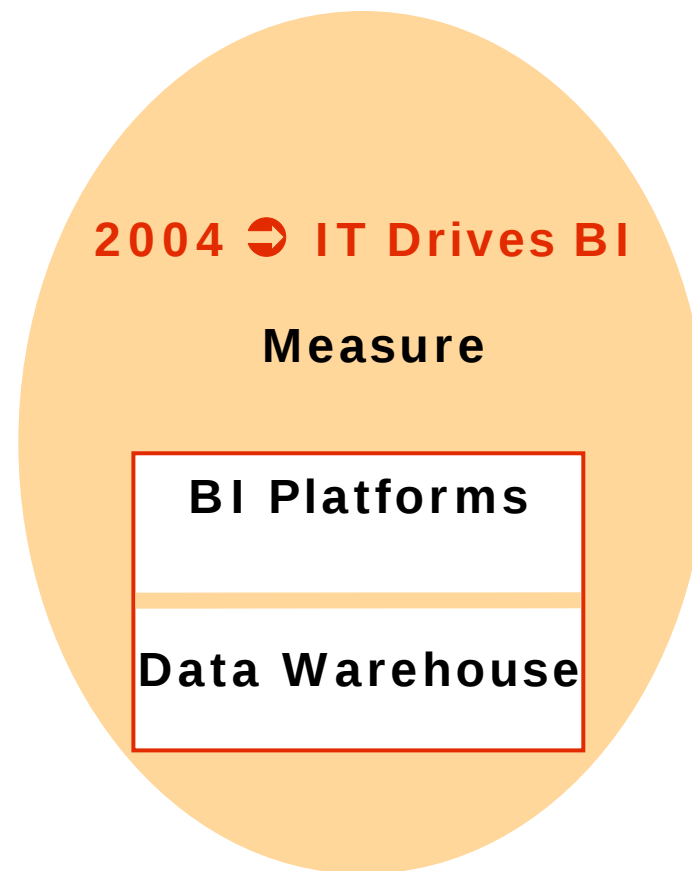
Looking at 2008

- ❑ Further consolidation
- ❑ Greater acceptance of DW appliances
- ❑ Easier deployment for operational BI
- ❑ Increased use of data mining

Maintenance

- ❑ Business intelligence is a program – not a project
 - It is ongoing
 - Needs of the organization are constantly changing
 - Underlying applications change

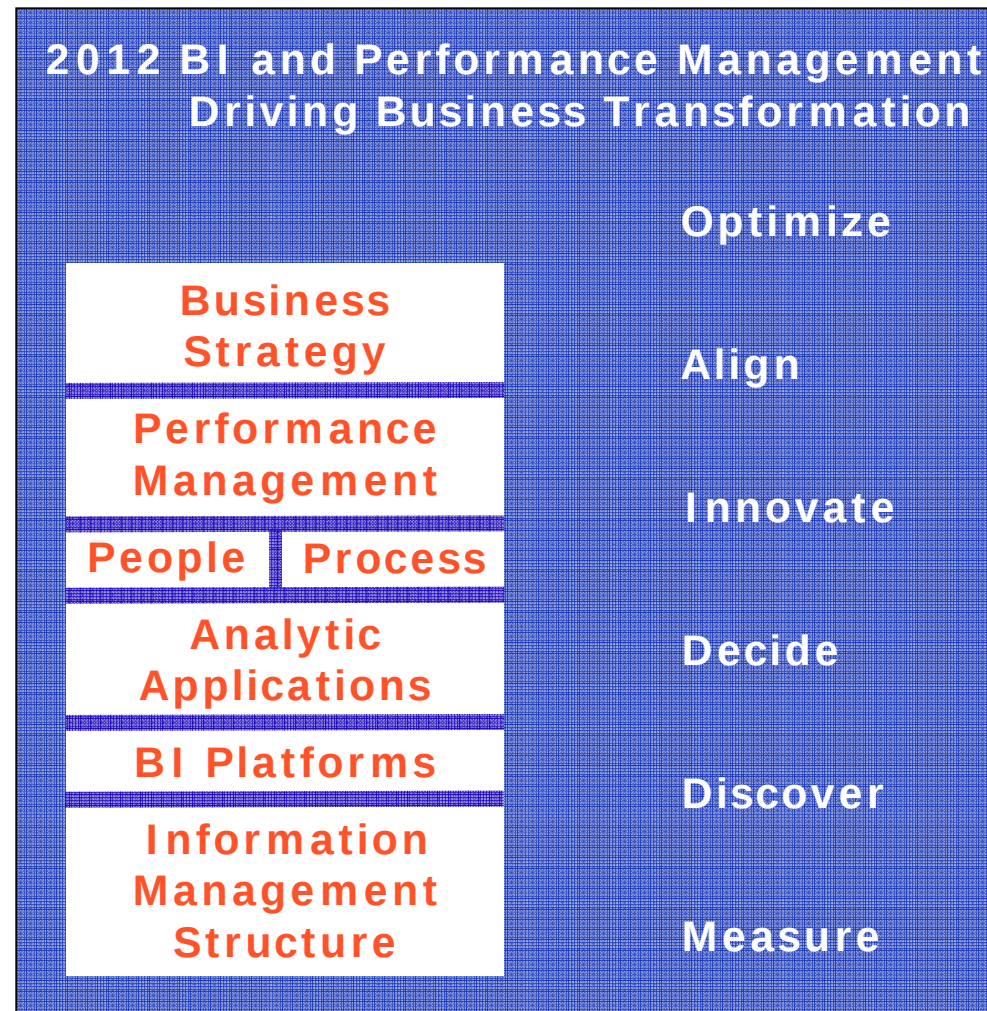
IT Traditionally Drives BI



Shift to Business Driving BI

“You need to be **business-driven**, **not IT-driven**. Otherwise, you get a tool that no one uses.” Dan Thorpe, Sr. VP, Statistics and Modeling , Wachovia Bank

BI Driving Business Transformation



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Users of BI

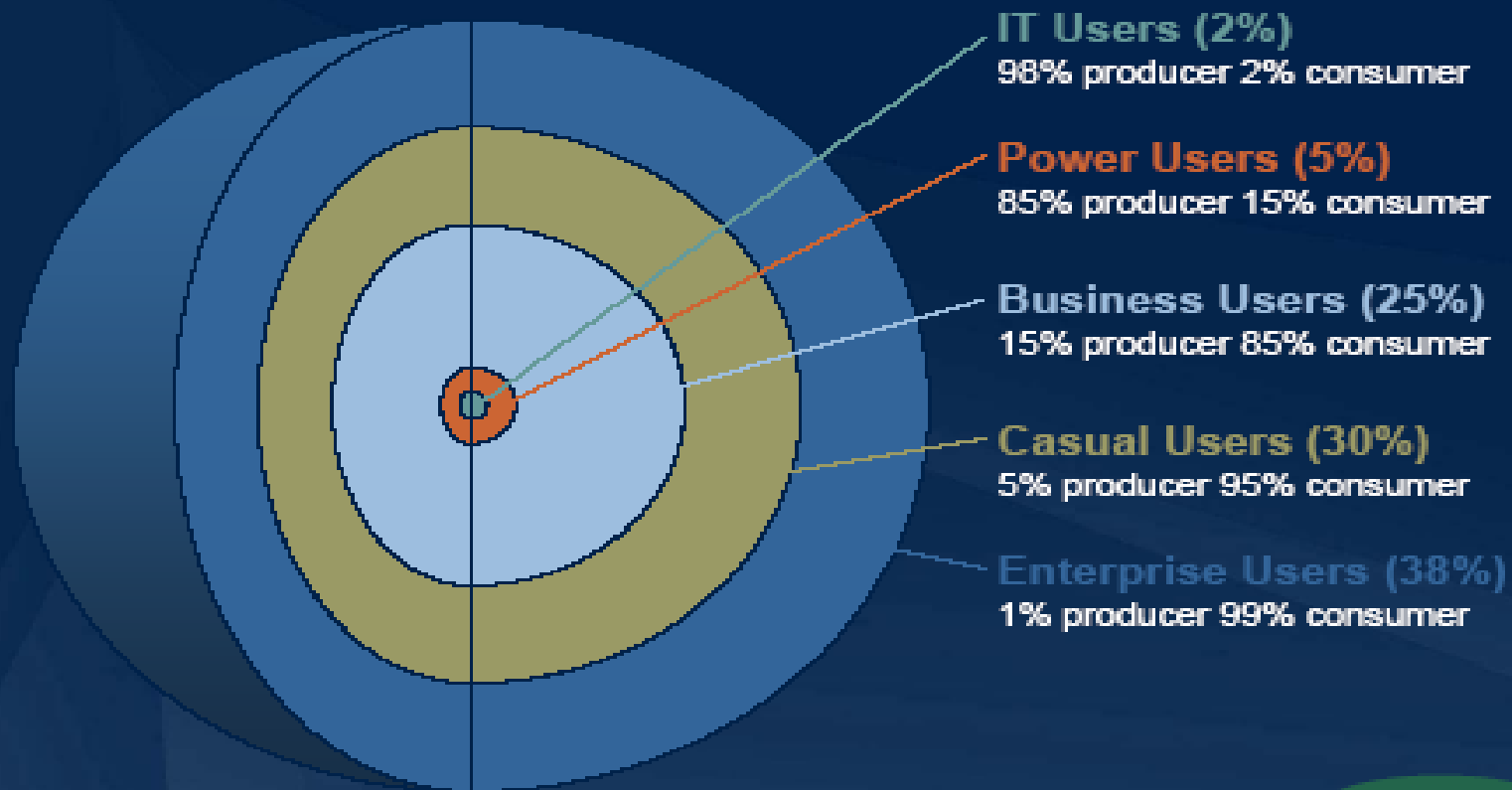
- ❑ Typical users are categorized as
 - Executives
 - Power Users
 - Internal users
 - Partners

Users and Reports

- ❑ Executive —————→ Strategic reporting
- ❑ Middle Management —————→ Tactical/some strategic reporting
- ❑ Power User —————→ Tactical/Some Operational reporting
- ❑ Internal Users —————→ Operational reporting

End Users - Producer or Consumer

The Strata of Analytic End-users



FORRESTER*

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End User Tool Categories – IT Perspective

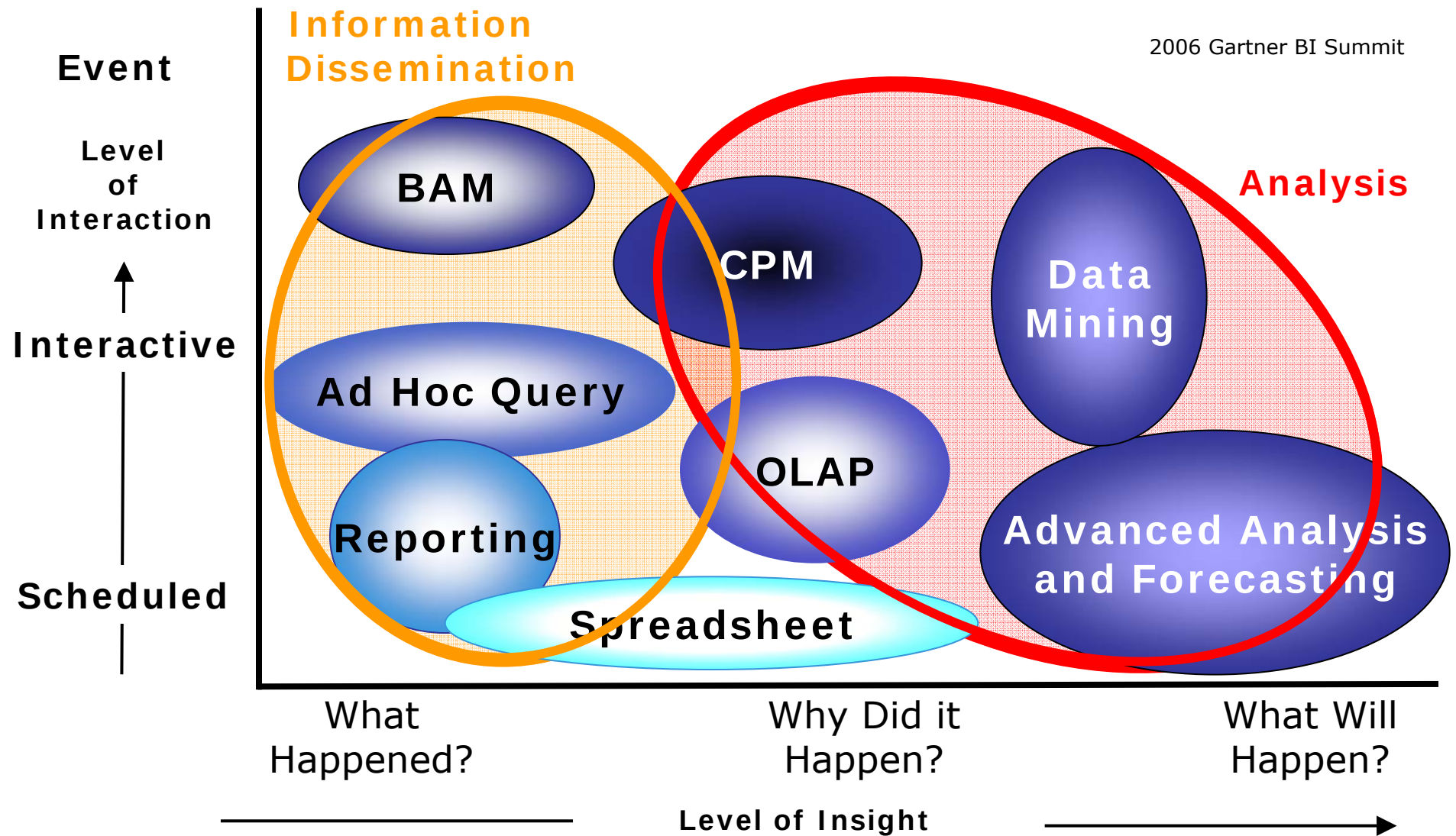
Organizes end-user tools into four categories.

- **Relational reporting** – simple two-dimensional non-interactive reports, typically with rich formatting and low cost deployment
- **Desktop reporting** – more end-user friendly, transaction data oriented, limited data capacity, limited functionality, with limited customization supported reporting
- **Analytic reporting** – distinguished by access to large volumes of data (terabytes), read-only SQL based access, cube or multi-dimensional presentation layer, and more advanced financial calculations, such as formulas using solves (IRR)
- **Analytic reporting with "write-back" capability** – have a data write-back capability (such as for forecasts or activity based budgets), deal with summarized or aggregate levels of data (gigabytes), fast query performance due to proprietary languages, and higher cost to go along with higher functionality

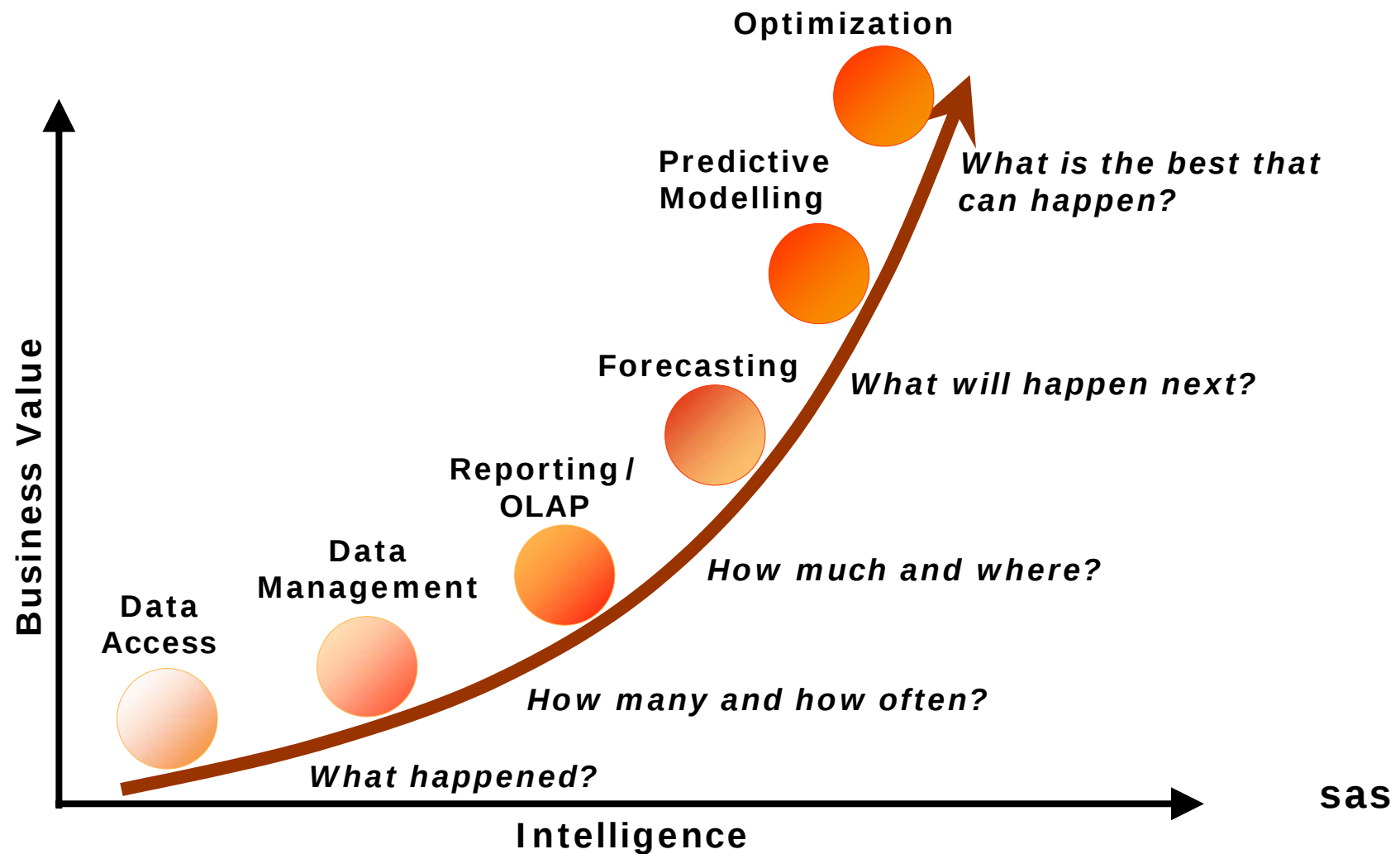
Typical Environments and Reporting Tools

Function	RDBMS OLTP	Warehouse	MDBMS OLAP
Analytical Requirements	Low	Medium	High
Data Level	Detail	Detail and summary	Summary and Derived
Age of data	Current	Historical and current	Historical, current and projected
Business Events	React	Anticipate	Predict
Typical Tools In Use	FSG, Reports, BIS, DBI, Noetix, Crystal Reports	Discoverer, PowerPlay, MicroStrategy, Business Objects	OFA, EPB, Hyperion, SPSS

BI Capabilities Portfolio



BI Capabilities Portfolio — Another View



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BI Strategic Maturity: Where Are You? (2003)

	Opportunistic	Tactical	Strategic
Business	Focused: Increase operational efficiency Scope: Department	Operational: Improve business effectiveness Scope: Multi-department	Strategic: Integrated business execution and management
Organization	Single user type – Limited skills required Managed and funded by IT	2 or 3 user types - Higher skills level BICC Managed and funded by IT or business unit	All user types BICC Funded at executive level
Infrastructure Functionality	1 or 2 sources Reporting-centric Limited data quality	2 or more sources 2 or 3 tool types Data quality is important Data mart, data warehouse, OLAP	Multiple sources Multiple data warehouses Standards Multiple tool types
	Scalability	Skills	Cultural
	Accuracy and quality	Politics, funding	Complexity, integration
	Consistency	Data access	Sponsorship and priority
	Inflexibility	Timeliness	Politics
	Expectations	Ability to evolve	Mission critical

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BI Maturity Model — TDWI (2005)

Stage / Focus	Prenatal	Infant	Child	Teens	Adult	Sage
Architecture and Scope	Management Reporting/ System	Spreadsheets/ Individual	Data Marts/ Department	Data Warehouse/ Division	Enterprise Data Warehouse/ Enterprise	Analytical Services/ Inter-enterprise
Type of System and Analytics	Financial/ Paper Reports	Executive/ Briefing Book	Analytical/ Interactive Report	Monitoring/ Dashboard	Strategic/ Cascading Scorecards	Business Service/ Embedded BI
User and BI Focus	All/ What happened?	Analyst/ What will happen?	Knowledge Worker/ Why did it happen?	Manager/ What is happening?	Executive/ What should we do?	Customer/ What can we offer?
Executive Perception about the role of BI	Cost Center	Inform Executives	Empower Workers	Monitor Processes	Drive the Business	Drive the Market
Business Value and ROI	Costs high/Value low	Costs and value approaching breakeven	Costs decreasing/ Value increasing	Costs continue to decrease/ Value continues to increase	The Cost/ Value gap widens	Achieve ROI

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Fatal Flaws of BI Implementations

- ❑ “Give me a dashboard”
- ❑ “Darwin was wrong: BI doesn’t evolve.”
- ❑ “Our enterprise application vendor will do it all.”
- ❑ “If you build it, they will come.”
- ❑ “We can outsource this whole darn BI thing!”
- ❑ “Managers need to ‘dance with the numbers’!”
- ❑ “Data quality problem? We don’t have one.”

Bill Hostmann

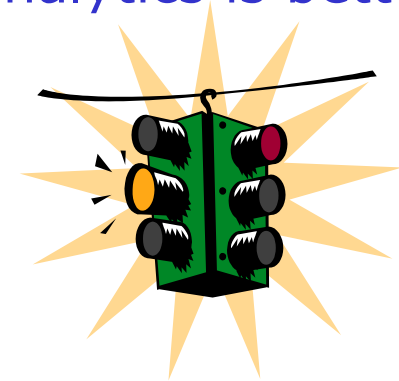
Research Vice-President, Gartner Research

19 July 2006/**ComputerWorld IT Management Summit:**

Unlocking the Value of Business Intelligence

Success Factors

- ❑ Strong Business Management Sponsor
"Our CEO is a real data dog!" Sara Lee executive
- ❑ Strong Business Motivation
Boston Red Sox determine that money+analytics is better than money only.
- ❑ Feasibility
- ❑ IT/Business Partnership
- ❑ Current Analytic Culture
"Do we think or do we know?" Gary Loveman, Harrah's



Ralph Kimball, The Data Warehouse Toolkit,
2nd Edition, 2002

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BI — Result of Corporate Strategy



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Business Management Sponsor

The most critical factor

□ Attributes:

- Vision of the potential impact on organization
- Passion and personal conviction regarding program's value
- Track record of success with other internal initiatives
- Astute politically and can work well with their peers in persuading them to lend their assistance and support

Strong Business Motivation

- ❑ Must solve a need
 - Sense of urgency
 - External forces (competitive or regulatory)
 - Internal factors (inability to analyze cross-module or cross-organization performance)
- ❑ Take care that you control the project scope and focus on the low hanging fruit first

Feasibility

❑ Data - Issues

- Available and it is being collected today? or
- Can it be derived from the source data?
- What is the cleanliness, the consistency, the granularity, and the referential integrity of the data?

❑ Technical

❑ Resource

Data Modelling

- ❑ Create a common language between BI users and BI developers
- ❑ Identify needs
- ❑ Creates a development artefact

Types of Models

- ❑ Conceptual
 - Defines the requirements
 - What needs to be built to address the business needs?
- ❑ Logical
 - Design view of the targets
 - Defines the parts
- ❑ Physical
 - Specification views of each target
 - How do the parts fit together?

The Process: Essential to BI Success

- ❑ Everyone needs to be part of process – End-users, IS/IT, and executive management
- ❑ Identify the business process that needs to have questions answered
- ❑ Establish separate evaluation and review teams
 - Two Primary Teams - Decision Team and Management Review Committee
- ❑ Remove politics
- ❑ Identify a selection methodology
- ❑ Design the solution

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Putting it All Together – Keys to Success

- ❑ Executive sponsorship
- ❑ Realistic expectations
- ❑ * methodology
- ❑ * team
- ❑ * Proper technical architecture and tools
- ❑ * Quality data
- ❑ Limited scope changes
- ❑ Fast payback projects

***Note: Key areas where DW/ETL tools and OLAP/BI consultants can add value.**

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Purpose of an Assessment

- ❑ Clarify the goals
- ❑ Develop a consistent methodology
- ❑ Identify team skills and deficiencies
- ❑ Identify and develop needed processes
- ❑ Research technical architecture and tools
- ❑ Identify potential data quality issues

Assessment Process

□ Clarify Goals

- Developing or working with the core team
- Meeting with each level of an organization to learn their expectations and issues

Assessment Process

- Develop a consistent methodology
 - Creation of a set of requirements that solutions must meet
 - Development of a common language among users and producers of BI

Assessment Process

- ❑ Identify team skills and deficiencies
 - Interviews
 - Surveys
 - Goals
 - Expectations
 - Skills

Assessment Process

- Identify and develop needed processes
 - Iterative activity

Assessment Process

- Research technical architecture and tools
 - Map architecture
 - Categorize tools

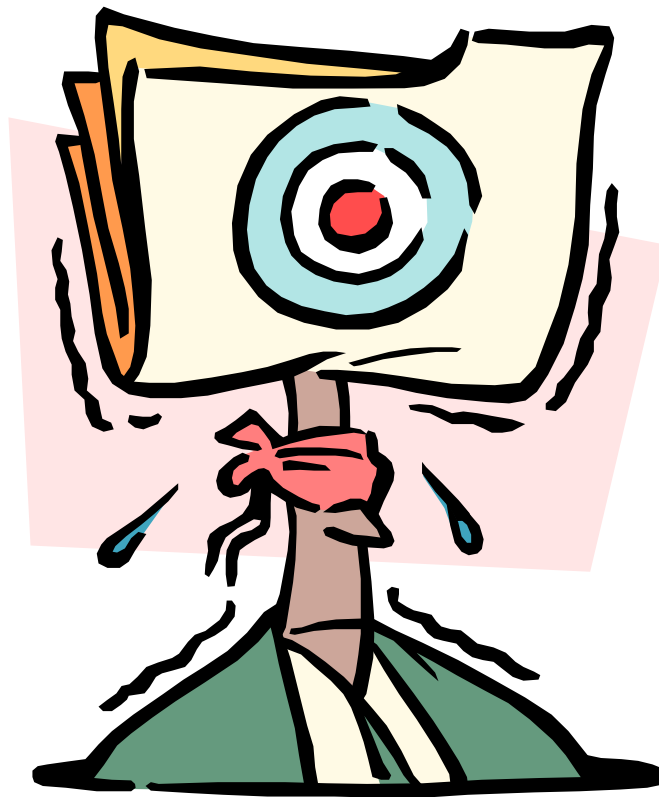
Assessment Process

- ❑ Identify potential data quality issues
 - Everyone has them
 - Start now

Deliverables of an Assessment

- ❑ High level implementation plan
- ❑ Draft RFP that creates a level playing field for vendors
- ❑ High level roadmap for transitioning the initial BI implementation to an ongoing BI program
- ❑ Skills gap analysis
- ❑ Learning and hiring plan

Questions and Answers

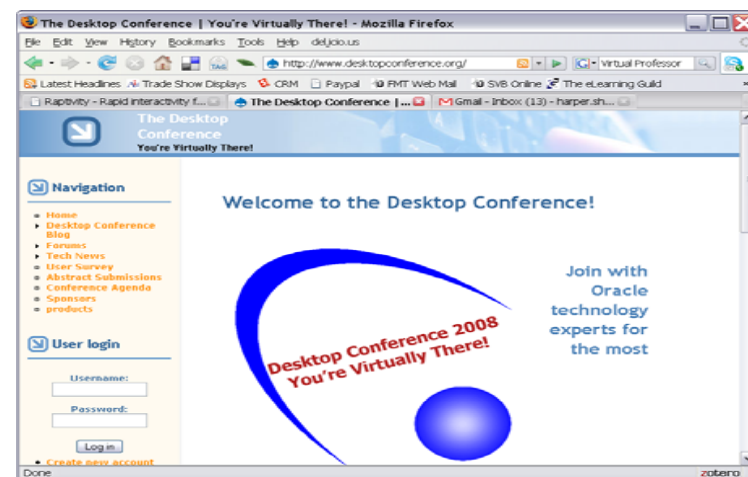
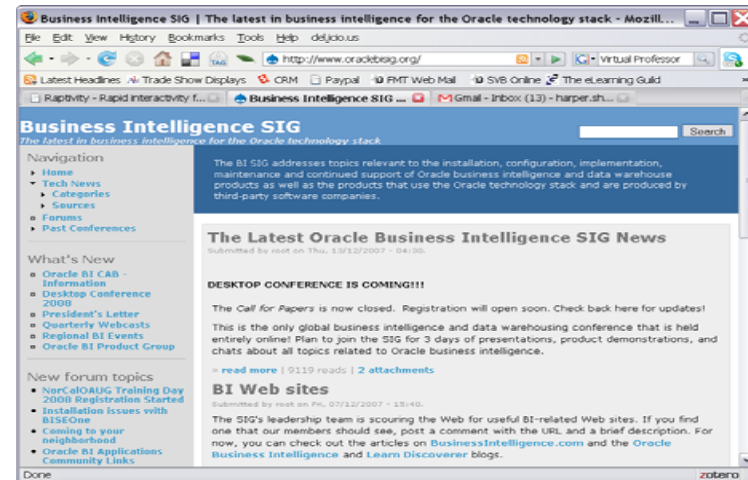


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Resources

- The **Oracle BI** product roadmap
<http://www.oraclebisig.org>
- The **TDWI World Conference** –
17 – 22 February 2008
<http://www.tdwi.org/education/conferences/lasvegas2008/index.aspx>
- **Business Intelligence Network** – Events Calendar
<http://www.b-eye-network.com/events/index.php>
- **Desktop Conference** – Coming late spring
<http://www.desktopconference.org>



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Thank you!

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