Assessing BI Readiness

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Agenda

- **Introduction**
- What is BI
- Organizational considerations
- Successful implementations
- BI assessment defined and assessment process
- Q & A

About the Speaker

Faun deHenry

- CEO of FMT Systems Inc.
- Officer in Oracle Business Intelligence SIG
- BI Track Chair – Collaborate 07, 08, 09
- 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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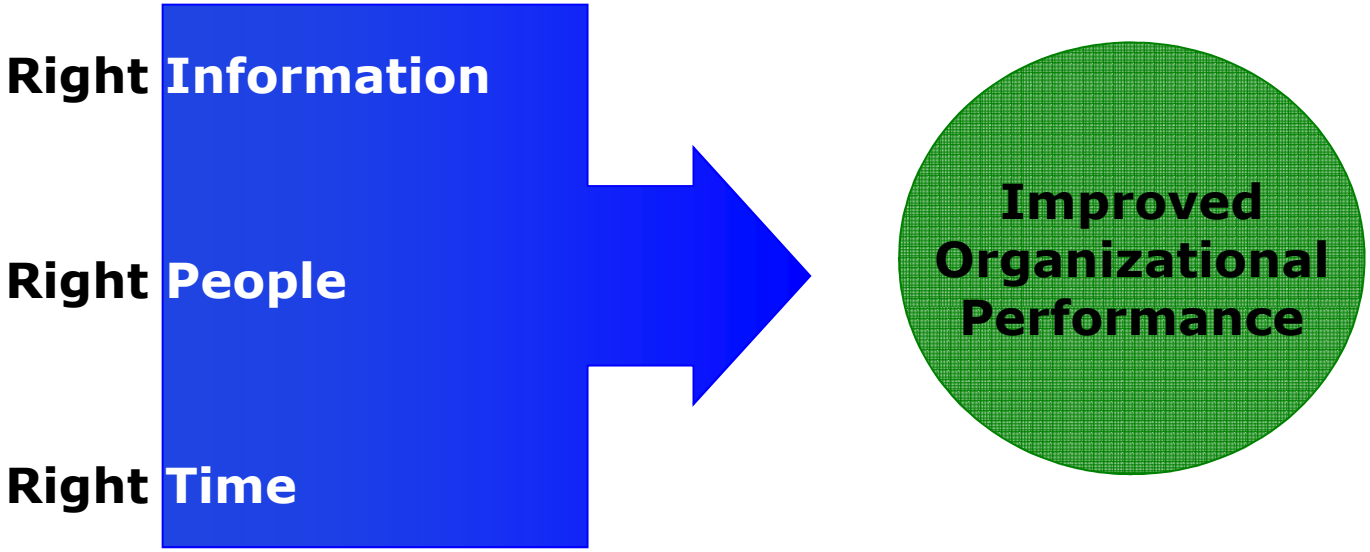
Business Intelligence Definition



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

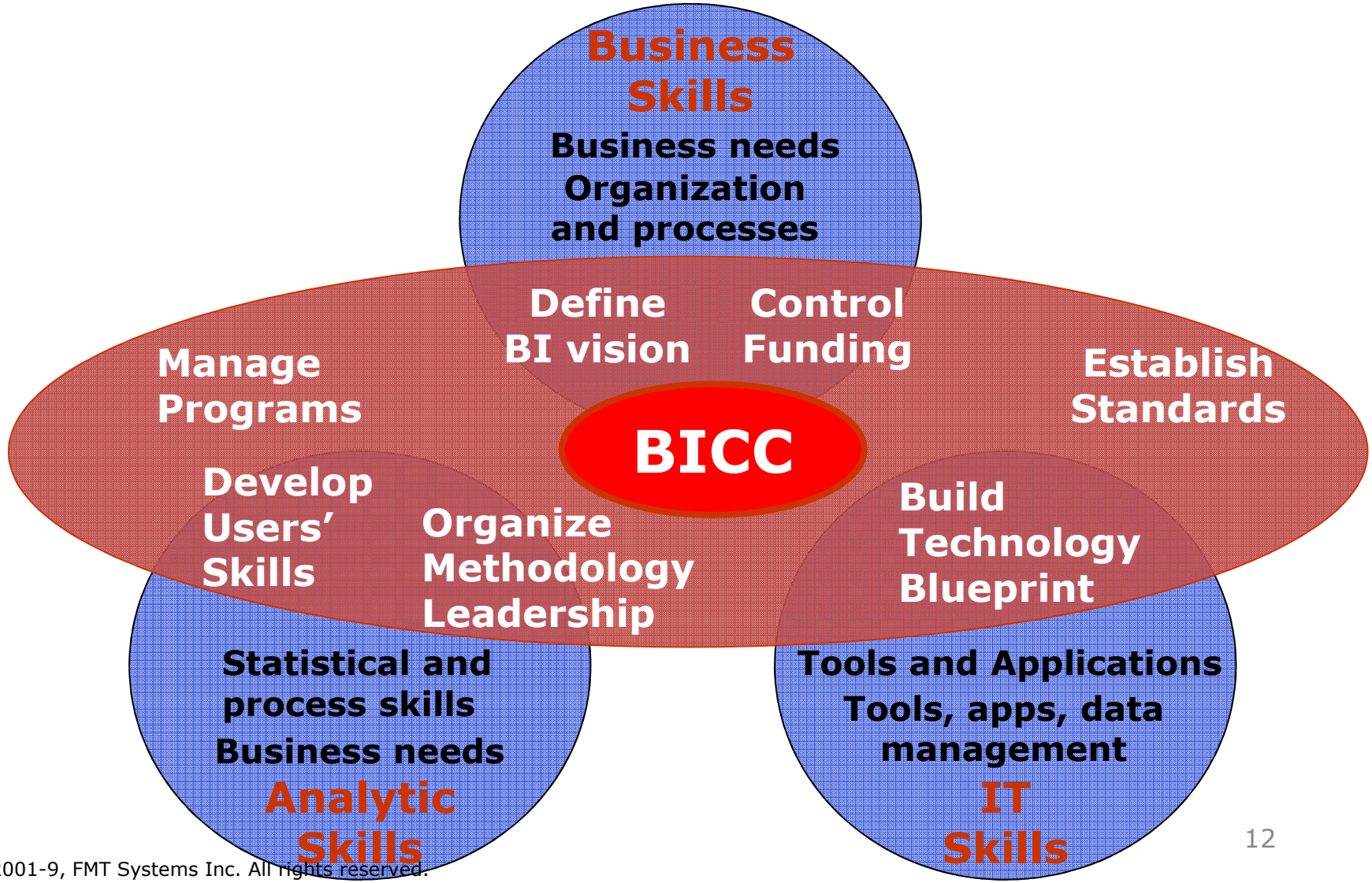
Why Consider BI? — IT Perspective (continued)

- 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

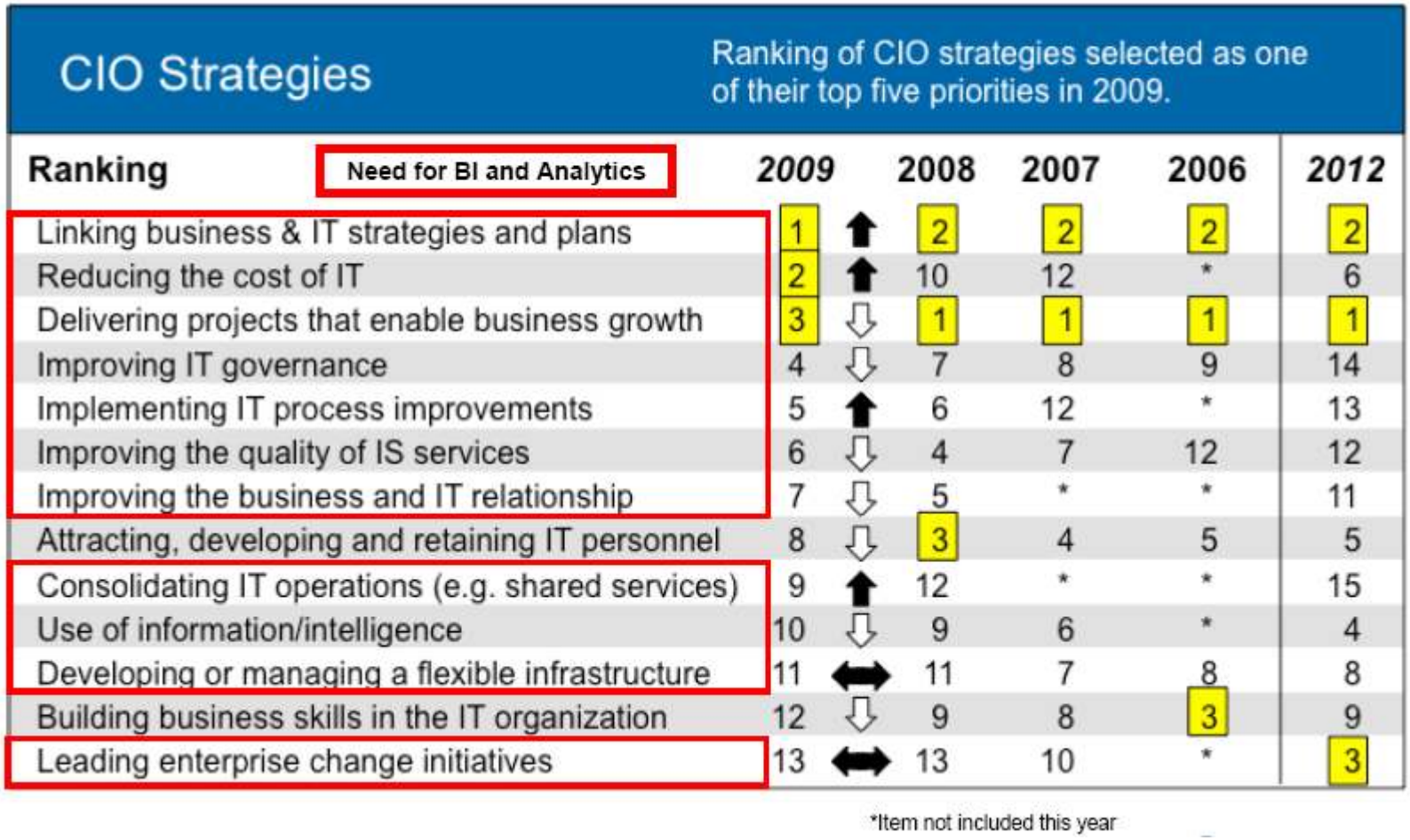
Gartner View of BICC (Business Intelligence Competency Center)



BI Trends

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

CIO Priorities



CIO Strategies

Ranking of CIO strategies selected as one of their top five priorities in 2009.

Ranking	Need for BI and Analytics	2009		2008	2007	2006	2012
Linking business & IT strategies and plans		1	↑	2	2	2	2
Reducing the cost of IT		2	↑	10	12	*	6
Delivering projects that enable business growth		3	↓	1	1	1	1
Improving IT governance		4	↓	7	8	9	14
Implementing IT process improvements		5	↑	6	12	*	13
Improving the quality of IS services		6	↓	4	7	12	12
Improving the business and IT relationship		7	↓	5	*	*	11
Attracting, developing and retaining IT personnel		8	↓	3	4	5	5
Consolidating IT operations (e.g. shared services)		9	↑	12	*	*	15
Use of information/intelligence		10	↓	9	6	*	4
Developing or managing a flexible infrastructure		11	↔	11	7	8	8
Building business skills in the IT organization		12	↓	9	8	3	9
Leading enterprise change initiatives		13	↔	13	10	*	3

*Item not included this year

Source: 2009 Gartner Executive Programs CIO Survey, January 2009

Looking Forward (Gartner Predictions)

- More than 35% of the largest 5,000 companies will fail to use BI well
- Business users will control at least 40% of the total budget for BI
- Approximately 20% of companies will begin using an SaaS analytic application
- Social software will meld with BI platforms for more collaborative decision making
- Approximately 30% of analytic applications applied to business processes will be through coarse-grained mashups.

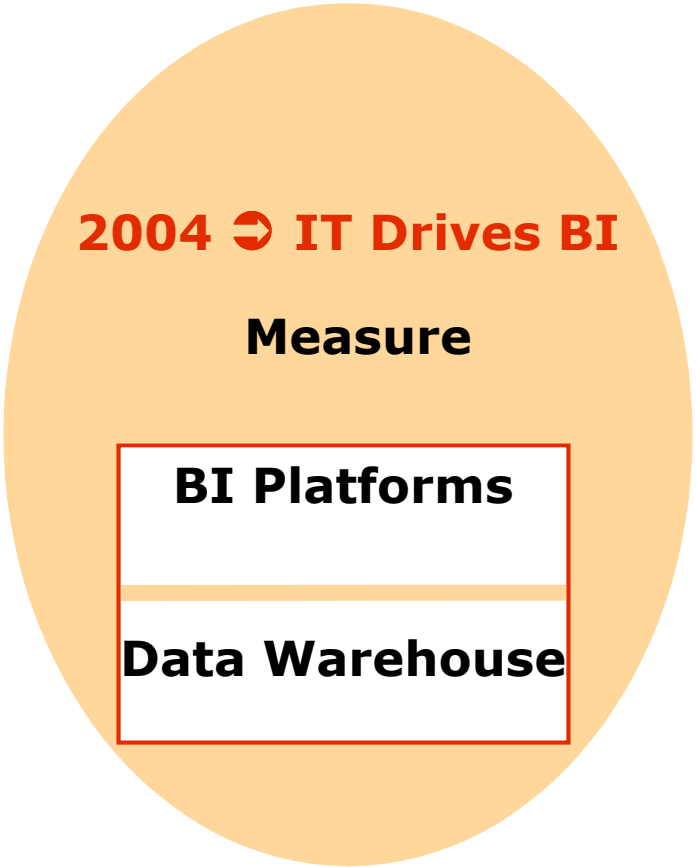
Trends for 2010

- Business Intelligence
- Green IT
- Workflow as a service
- More government involvement
- Business process optimization (process intelligence)

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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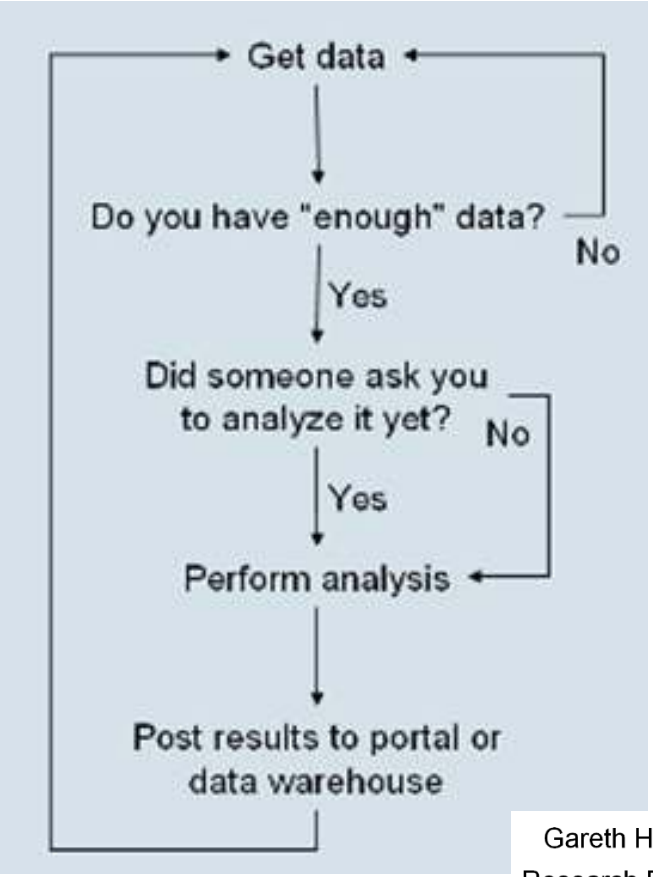
Users of BI

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

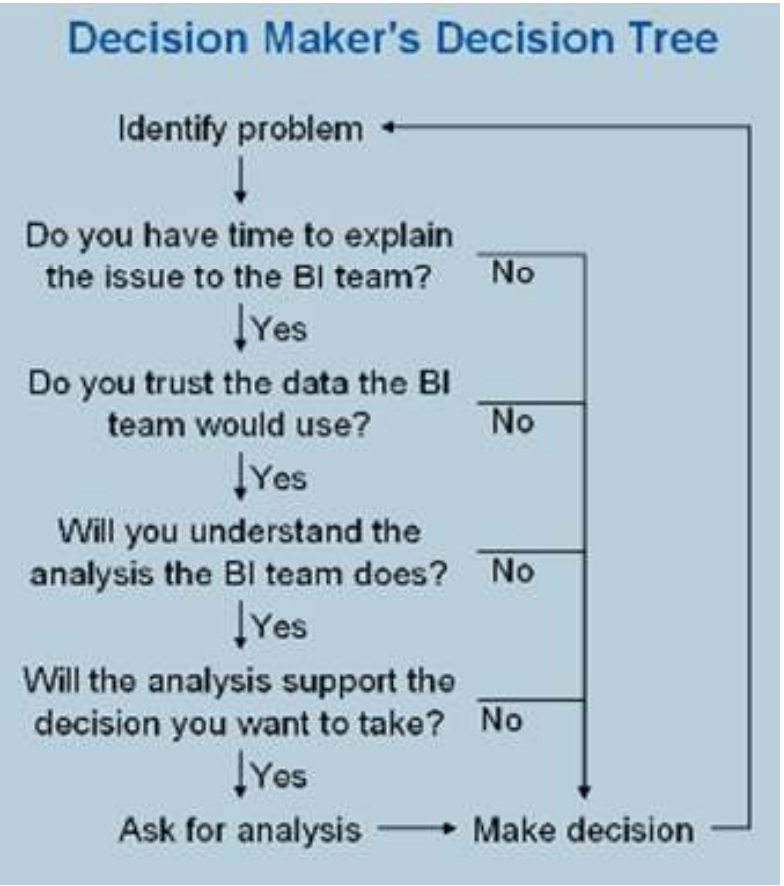
Role of Analysis in Decisions

Analyst's Decision Tree



Gareth Herschel
Research Director
Gartner

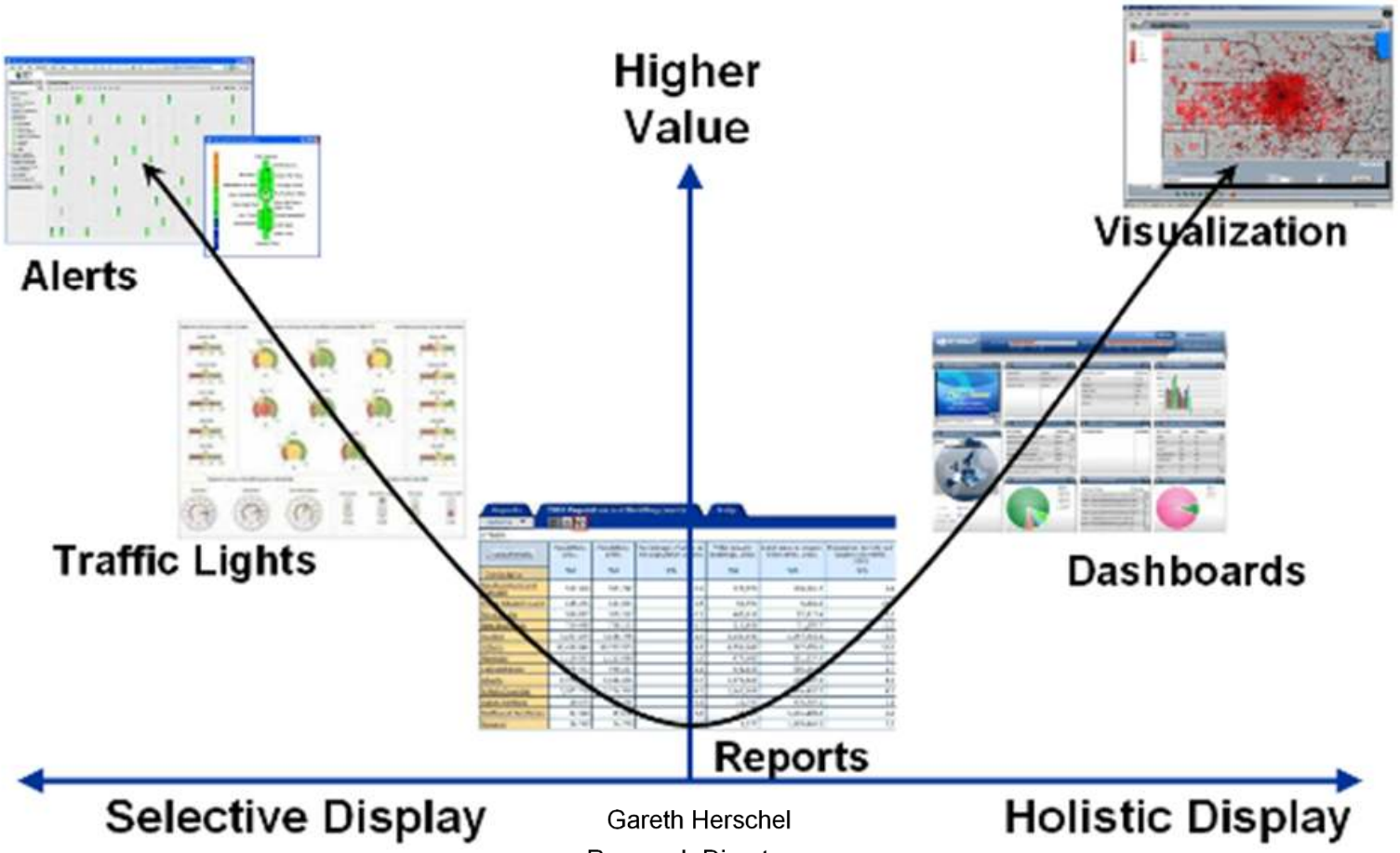
Decision Maker's Decision Tree



Users and Reports

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

Data Display and Value



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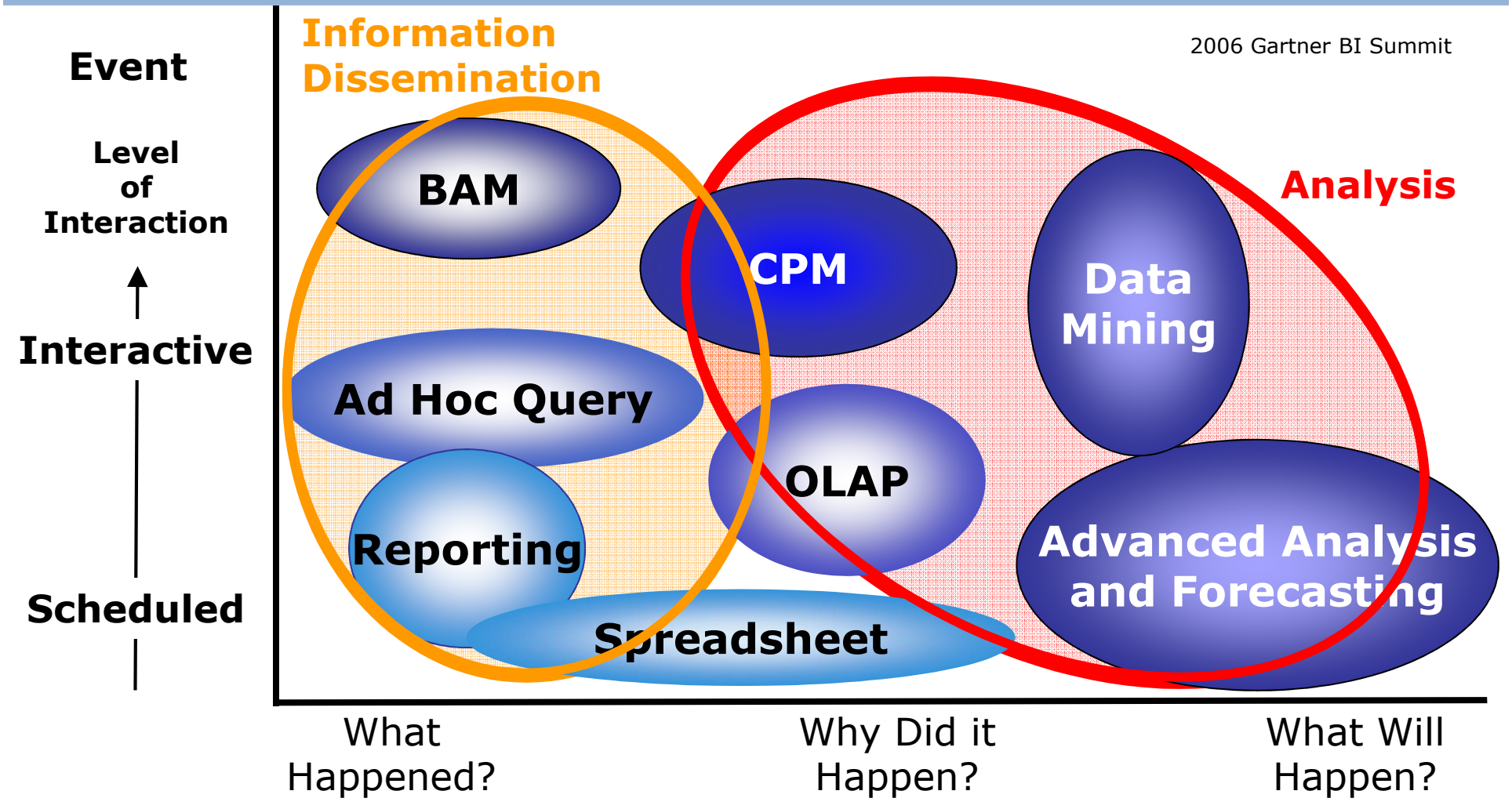
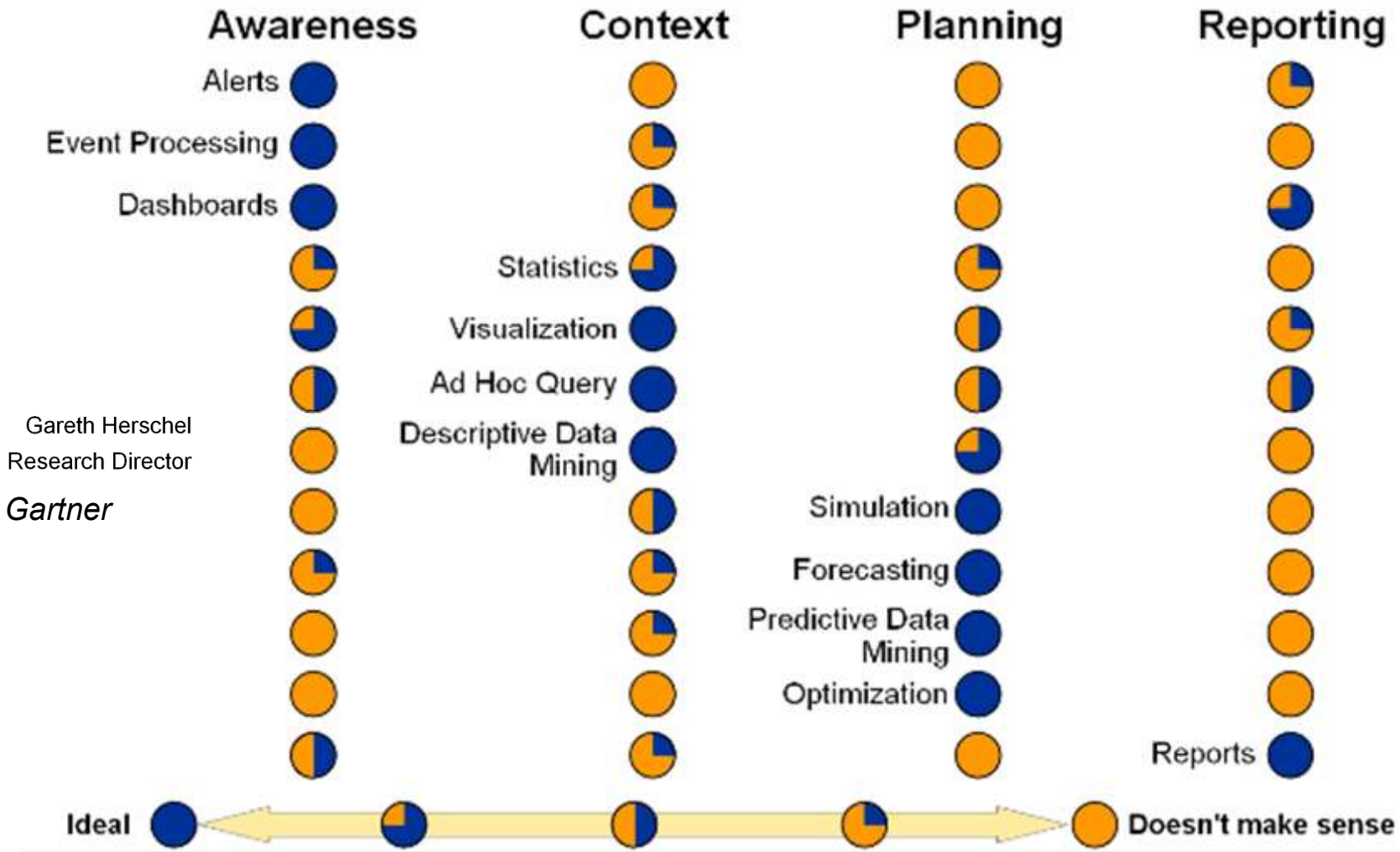
BI Capabilities Portfolio



BI Capabilities Portfolio



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Research Director
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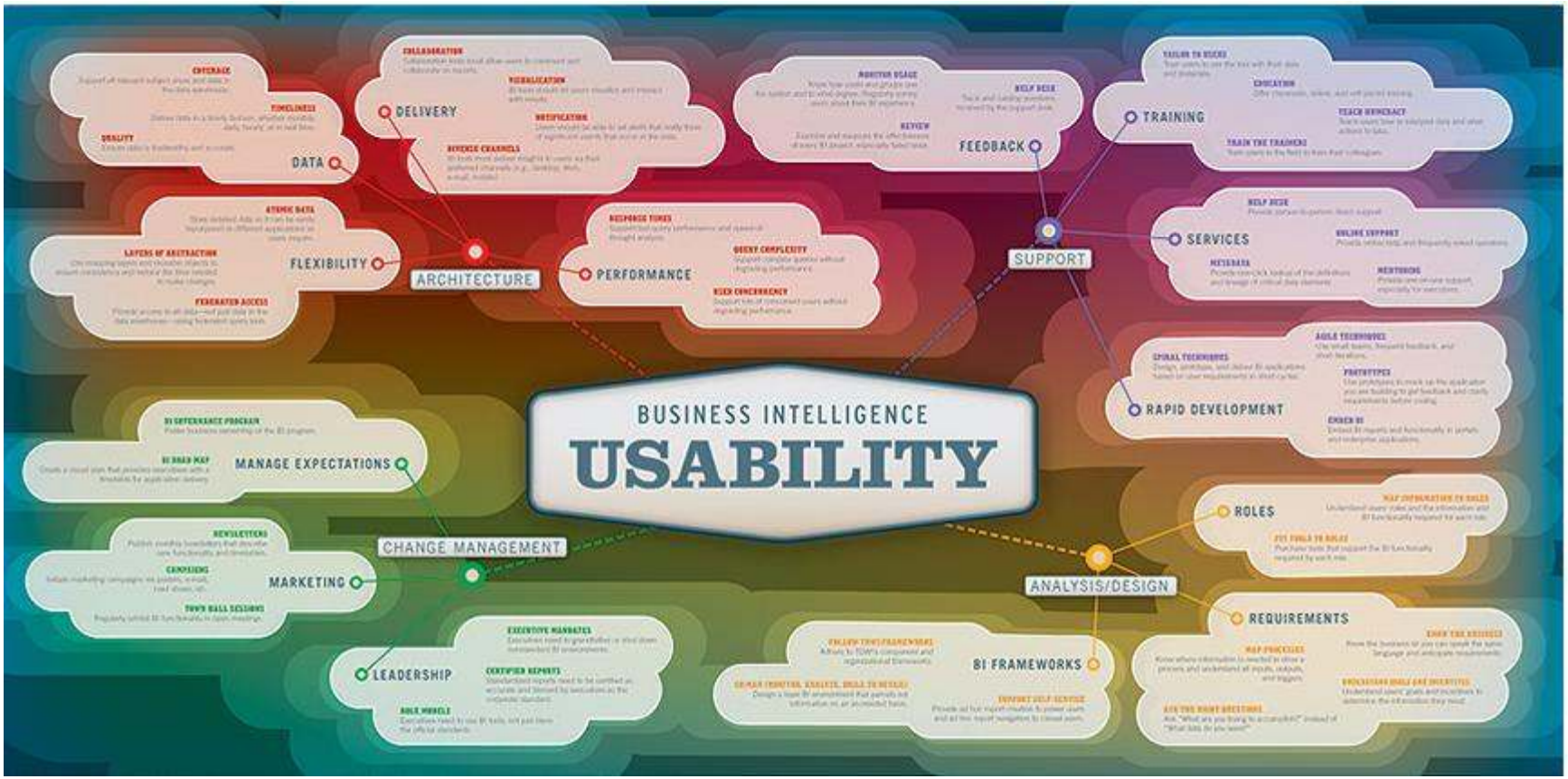
BI Strategic Maturity: Where Are You? (2003)

	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
Failure Modes	Scalability Accuracy and quality Consistency Inflexibility Expectations	Skills Politics, funding Data access Timeliness Ability to evolve	Cultural Complexity, integration Sponsorship and priority Politics Mission critical

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

TDWI View – BI Usability



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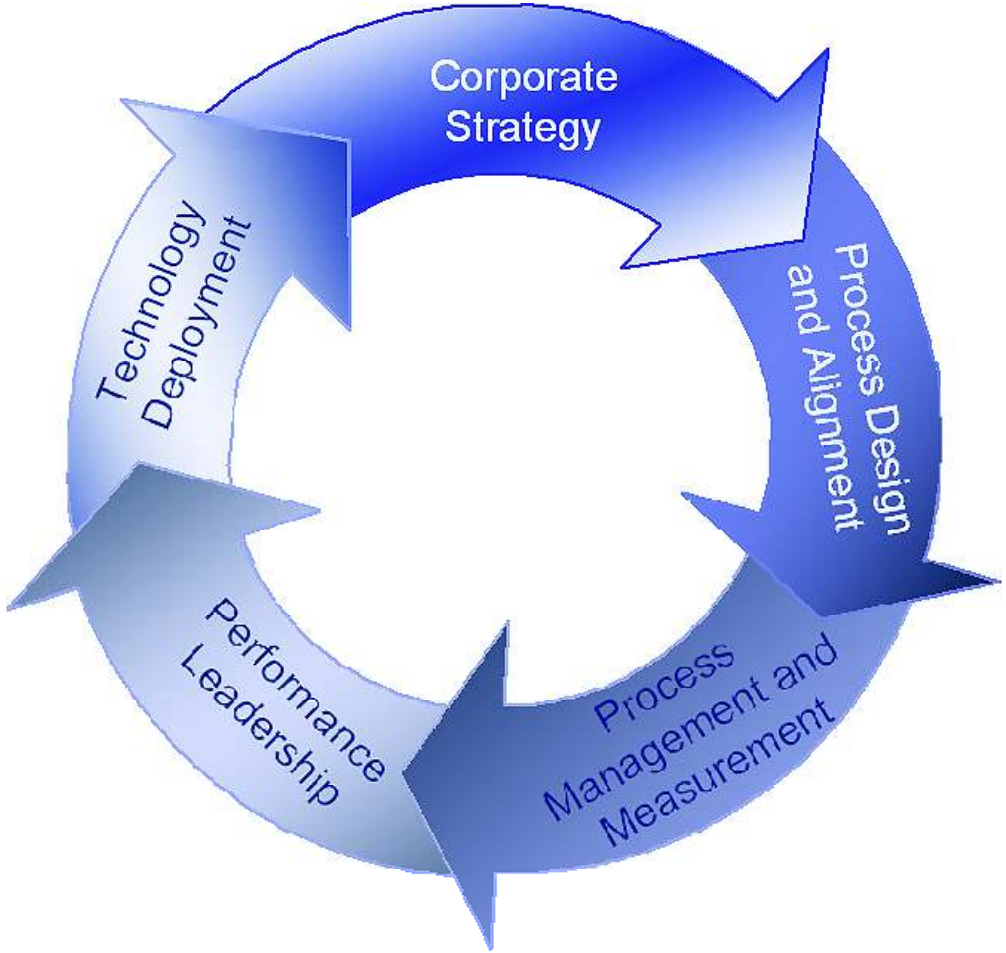
Fatal Flaws of BI Implementations

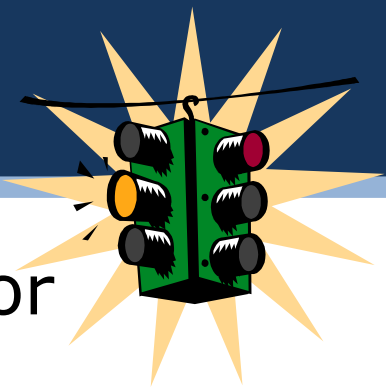
- "Give me a dashboard"
- "Darwin was wrong: BI doesn't evolve."
- "Our enterprise application vendor will do it all."
- "If you build it, they will come."
- "We can outsource this whole darn BI thing!"
- "Managers need to 'dance with the numbers'!"
- "Data quality problem? We don't have one."

Bill Hostmann
Research Vice-President, Gartner Research
19 July 2006/**ComputerWorld IT Management Summit:**
Unlocking the Value of Business Intelligence

BI — Result of Corporate Strategy



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 just money.

- 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

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 processes that enable questions
- Establish separate evaluation and review teams
  - Two Primary Teams - Decision Team and Management Review Committee
- Remove politics
- Identify a selection methodology
- Design the solution

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 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

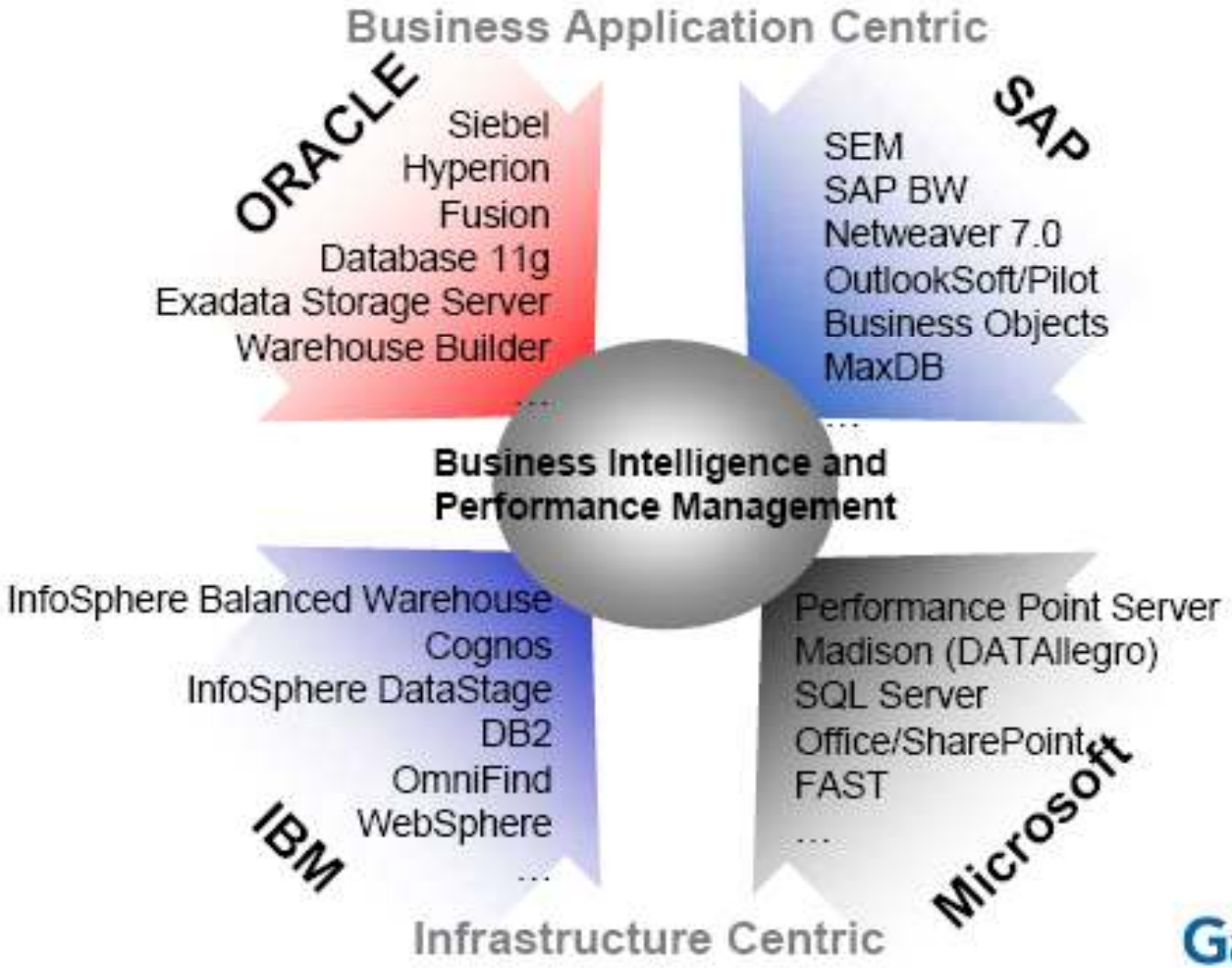
Assessment Process

- Identify and develop needed processes
  - Iterative activity

Assessment Process

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

Assessment Process



Gartner

Assessment Process

	IBM	MSFT	ORCL	SAP
BI/PM and IM Capabilities:				
• BI Platforms,	Positive	Positive	Positive	Positive
• CPM Suites,	Positive	Promising	Positive	Promising
• Packaged Analytic Apps.	Promising	NA	Positive	Positive
• Data Integration	Strong Positive	Promising	Promising	Promising
• Database	Positive	Positive	Strong Positive	NA
• Content Management	Positive	Positive	Positive	Promising
• Modeling /Meta Data/MDM	Positive	Positive	Promising	Promising
• BAM	Positive	Promising	Promising	Caution
• Content Analytics	Promising	Positive	Promising	Caution
Related Capabilities/Products				
• Application Server	Strong Positive	Positive	Positive	Promising
• Portal	Strong Positive	Strong Positive	Promising	Strong Positive
• Search	Positive	Promising*	Promising	Caution
• Business Applications	N/A	Promising	Positive	Strong Positive
• Collaboration	Positive	Strong Positive	Strong Negative	Caution
• BPM	Positive	Promising	Promising	Positive
BI/PM Interoperability (e.g., UI's, API's, security, admin, architecture)	Positive	Positive	Promising	Promising
Strategy	Positive	Positive	Positive	Positive
Partners/Channel	Positive	Positive	Positive	Positive

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

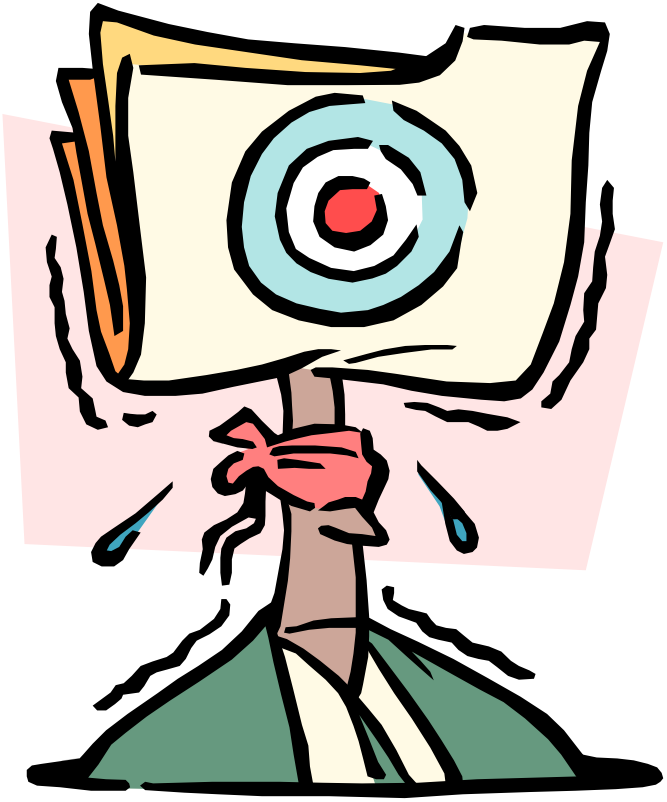
Summary

- BI = information, people, timeliness
- Different skills are needed for BI.
- It is a program.
- Must have a sponsor and a sense of urgency.
- Deal with your data quality issues now!
- Remember your assessment deliverables and make certain that you get all of them.

Resources

- **Business Intelligence Network** — Events Calendar
  http://www.b-eye-network.com/events/index.php
- **TDWI World Conference**: usually held twice a year
  http://www.tdwi.org/display.aspx?id=9283
- **Desktop Conference for BI** — Late fall 2010
  http://www.desktopconference.org
- **Oracle BI product roadmap**
  http://www.oraclebisig.org

Questions and Answers



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