Isn’t It Time to Get Smart about Business Intelligence?

Michael Bitterman
November 2009
Is the Need for Automated Intelligence There?

- Decisions continue to need to be made and
  - It has never been more important to be able to make those decisions quickly
- Decisions are getting made, even if not based on all the available facts
- Your business’s opportunities hinge on the ability to make the right decisions quickly
  - If you don’t your competition will
What’s the Thinking about Business Intelligence

- **CIO and CEO Research**
  - BI remains top priority for CIO’s 4th year in a row
  - There will be a 650% increase in unstructured data and data that is not in a database – next 5 years
  - CEOs continue to rank “access to information” as one of their top 5 priorities

- **Vendor Research**
  - BI market $8.5 B in 2008, $12B in 2014

- **BI Survey 8 (www.bi-survey.com)**
  - Customers want BI with faster performance, better support
  - Median deployment rate 8% vs. vendors 14%
What Has Been the BI Track Record?

- *BusinessWeek* on the use of BI for decision making
  - BI is implemented by <60% of organizations and utilized <50% of the time

- It all comes down to business value and expectations
  - The longer it takes and the harder it is, the less the perceived value will be
  - The greater the expectation for easy access and visualization, the wider the gap between what they want and what is delivered
To Fix the Problems We Need to Recognize Them — The Top Three

- Organizations try to implement BI without a concrete plan, strategy, or concrete value proposition
  - Vendors oversell — the tool is *not* the solution
  - Buyers want to believe — “...we have all this data so there must be information we can use...”
  - IT over promises — we can get it all done for you

- The initial implementation is too complex and takes too long

- Since the 1970s the world has changed, the users have changed, and expectations have changed — most BI tools have not!
What’s Happened among the Vendors?

Traditional BI

The Stack Vendors

The Innovators – BI 2.0
What Happens to the Business Value?

- Average implementation time¹:
  - **17 months in total**; 5 months to deploy the first usable analytic application

- Mean annual expenditure on BI software²:
  - **$1.1 million** for companies with >1,000 employees

- Project success rate¹:
  - 31% success rate, at best

- Meeting needs - right data to right person²:
  - Only 36% are confident that reports and dashboards deliver the right data, to the right person, at the right time

  - IDC study

![Implementation Time for BI Initiative](chart)
Why Does the Value Diminish?

- It takes too long to build
- It costs more than was anticipated or budgeted
- It is too rigid in an environment that wants endless flexibility
- It is addressing questions that were planned for as long as a year before and has to be “reprogrammed” to address the questions that are being asked today

Let me show you how and why this happens
We start with the data we have

1. Define Data Source(s)
2. Cleansing & Mapping (ETL)
We try to find out what questions are going to need to be answered

1. Define Data Source(s)

2. Cleansing & Mapping (ETL)

3. Cube Definitions, Building and Deployment

DATA SOURCES

DATA MARTS

DATA WAREHOUSE

OLAP CUBES
We create a “one size fits all” interface

1. Define Data Source(s)

2. Cleansing & Mapping (ETL)

3. Cube Definitions, Building and Deployment

4. Create GUI
We roll out the result and find out the questions have changed

1. Define Data Source(s)
2. Cleansing & Mapping (ETL)
3. Cube Definitions, Building and Deployment
4. Create GUI
5. New Questions Arise

OLAP CUBES
DATA MARTS
DATA MARTS
DATA WAREHOUSE
DATA SOURCES
In the end we made it too complex and took too long to get it done.
The Targets Remain the Usual Suspects

**R&D and IT**
- Product Portfolio Analysis
- Product / Project Management
- System Performance Controlling
- Service Level Reporting
- Infrastructure Planning / Sizing

**Finance & HR**
- Financial Consolidation Reporting
- P&L Analysis by Division / Business Unit
- IFRS / GAAP / SOX Compliance
- Risk Management & Sustainability Report
- Workforce and Benefits Analysis

**Operations**
- Production Planning & Scheduling
- Production Management
- Quality Management
- Six Sigma / Process Analysis
- Plant / Equipment Maintenance Analysis

**General Executive**
- Balanced Scorecard
- Performance Management
- Predictive Analysis
- What-if Analysis
- Activity-Based Management

**CRM/ERP**
- Sales Planning Analysis
- Customer Analysis
- Campaign Performance Analysis
- Product Profitability / Price Waterfall
- Contact Center / SR Performance

**Supply Chain/Logistics**
- Demand Planning
- Procurement Analysis
- Supplier Performance
- Inventory and Warehouse Management
- Logistics & Fulfillment Analysis
iPhone: Blurs the Line between Life and Work

We understand visuals
Letting the user define their “wants” delivers value

We understand visuals

Visuals shouldn’t need explanation
The closer we get to delivering expectations the greater the value

We understand visuals

Visualization has become our culture

Visuals shouldn’t need explanation
The Targets

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You think in non-linear paths by building associations

Traditional OLAP technology focuses on linear thinking....

Need to give the users the means to freely associate
We start in the same place, but with fewer boundaries

1. Connect directly to a wider range of data sources
2. Associative model created
Providing a flexible interface allows users to “roll their own”

1. Connect directly to Wider Range of Data Sources
   - ERP
   - CRM
   - SQL
   - SCM

2. Associative Model Created
   - Associative Data Model

3. Create GUI

• Large data set tested against a variety of next generation Intel HW platforms
• Shows linear scaling of QlikView Server technology
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<thead>
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<td><strong>1</strong></td>
<td><strong>Connect directly to Wider Range of Data Sources</strong></td>
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<tr>
<td><strong>2</strong></td>
<td><strong>Associative Model Created</strong></td>
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<td><strong>3</strong></td>
<td><strong>Create GUI</strong></td>
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<tr>
<td><strong>4</strong></td>
<td><strong>New Questions Arise</strong></td>
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An “associative” model allows new questions to be asked and answered.

- **Connect directly to Wider Range of Data Sources** (ERP, CRM, SQL, SCM)
- **Associative Model Created**
- **Create GUI**
- **New Questions Arise**
It Can Be Done Faster, Cheaper and Simpler

1. Connect directly to a wider range of data sources
2. Associative model created
3. Create GUI
4. New questions arise

Value | Money | Time

Connect directly to Wider Range of Data Sources

ERP, CRM, SQL, SCM

Associative Data Model

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What We Are Striving for

- Fast, flexible deployment
- Quick, proven ROI
- Works the way end-user’s mind thinks
- High end-user adoption
- Drill-down to transactional level
- Large data-volume
- No pre-aggregation/pre-defined hierarchies
The Bottom Line - What Needs to Change

- A cogent, concise and value-based plan/strategy must be build and put in place (see presentation “Building Your BI House With the Right Set of Plans” will provide the outline for accomplishing this)

- The initial implementation should be low risk, low cost and doable in <90 days

- Recognize that the user and their expectations have changed dramatically. They expect
  - High degree of visualization
  - Ease of use
  - Associative thinking to replace linear programming
## This Is What We Deliver

### Budget KPI

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This Is What They Expect
To receive additional materials on

**Isn’t It Time to Get Smart about Business Intelligence?**

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