The Past, Present, and Future of Your BI Solution

Wayne Eckerson
TDWI Washington, DC Chapter
October 13, 2006
TDWI Maturity Model

• The 6-step model is generalized
  – Rates of evolution may vary!

• Stages are additive
  – Not mutually exclusive

• Skipping stages is possible but risky
  – Requires experts, strong sponsors, sizable funding
  – Good methodology takes you through the stages

• Regressing stages is also possible
  – Mergers, acquisitions, reorganizations
  – New CEO/CIO, regulations, competitors
Maturity Model Adoption Curve

1. Prenatal
2. Infant
3. Child
4. Teenager
5. Adult
6. Sage

“Management Reporting”
“Spreadmarts”
“Data Marts”
“Data Warehouses”
“Enterprise DW”
“Analytic Services”

GULF
CHASM

Business Value
Semantic Integration
Data Consolidation
Adoption Rates

- **Stage of BI/DW deployment** *(from TDWI Survey of BI Directors, 2006)*
  - “We're getting serious about it for the first time.” (8%)
  - “We have completed our first iteration and looking to expand.” (23%)
  - “We’ve successfully completed two or more iterations.” (23%)
  - “We’re doing a major overhaul of the program.” (31%)
  - “We have a mature solution that delivers high business value.” (15%)
Prenatal-Infant Stages

• Management Reporting
  – Static, scheduled, reports
  – Run off operational systems or ODS
  – IT-developed
  – Backlog of custom reports

• Spreadmarts
  – Users circumvent IT
  – Cheap, easy to use tools
  – “Human data warehouses”
  – Analytic silos
The Gulf - Symptoms

• Executive perceptions
• Proliferation of spreadmarts
  – *The five “C’s”*
• Data quality issues

“Spreadmarts”
“Data Marts”
2. Infant
3. Child
Child-Teenager-Adult Stages

- **Overall trend**
  - Greater data consolidation
  - More semantic consistency

- **Data Marts**
  - Departmental applications
  - Project focus

- **Data warehouses**
  - Divisional applications
  - Program focus

- **EDW**
  - Enterprise applications
  - BI Governance, BI CoE
Chasm

• Business volatility
• Transition to corporate IT
• BI for the masses
• Mental silos
• Architectural inflexibility
Architectural inflexibility

• Organizational antidotes
  – Visionary, committed sponsors
  – DW steering committees, BI Centers of Excellence
  – Separate BI/DW from IT department
  – IT business savvy (anticipation)
  – Super user networks

• Technical antidotes
  – Rapid development methodologies and tools
  – Model and load all subject areas
  – Operational data access via EII
  – Flexible, intuitive query and reporting tools
  – Configurable packaged applications
Analytic Services

- BI services
- Operational BI
- Process-driven BI
- DW as revenue center
- Predictive analytics
- Decision automation

“Enterprise DW”

CHASM

5. Adult

6. Sage

“Analytic Services”
## Local vs Enterprise Value

<table>
<thead>
<tr>
<th>Stage</th>
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<tr>
<td><strong>Scope</strong></td>
<td>System</td>
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- **Local control**
  - “Think Local, Resist Global”
  - “Plan Global
  - Act Local”

- **Enterprise Standards**
  - “Negotiate & Consolidate”
  - “Plan Global
  - Act Local”

- **Product Reporting**
- **Spreadmarts**
- **Data Marts**
- **Data Warehouses**
- **Enterprise DW**
- **Analytical Services**
Strategic Value and ROI

<table>
<thead>
<tr>
<th>Type of System</th>
<th>Prenatal</th>
<th>Infant</th>
<th>Child</th>
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<td>OLAP</td>
<td>Dashboards</td>
<td>Scorecards</td>
<td>BI Extranet</td>
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<td>Executive Perception</td>
<td>“Cost Center”</td>
<td>“Inform Executives”</td>
<td>“Empower Workers”</td>
<td>“Monitor Processes”</td>
<td>“Drive the Business”</td>
<td>“Drive the Market”</td>
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ROI

Architecture

Mgmt Reporting
Spreadmart
Data Marts
Data Warehouses
Enterprise DW
BI Services
## Analytic Usage

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<tr>
<th>User Focus</th>
<th>Application</th>
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<tr>
<td>Casual Users</td>
<td>Production Reporting</td>
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<td>Power Users</td>
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</table>

### Prenatal
- **All Results Monthly Report**
  - Casual Users
  - Power Users
  - Production Reporting

### Infant
- **Analyst Plans Briefing Books**
- "IT Backlog"

### Child
- **Kn. Worker Tasks Interactive Reports**
- "Self Service"

### Teenager
- **Manager Processes Dashboards**
- "Customized Delivery"

### Adult
- **Executive Strategy Scorecards**
- "The BI Utility"

### Sage
- **Customer Services BI Extranet**
- "The BI Utility"
# Analytic Output

<table>
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<th>BI Focus</th>
<th>Prenatal</th>
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<tr>
<td>Information</td>
<td>What happened?</td>
<td>What will happen?</td>
<td>Why did it happen?</td>
<td>What is happening?</td>
<td>What should we do?</td>
<td>What can we offer?</td>
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<td>Plans</td>
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<td>OLAP</td>
<td>Alerts</td>
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**BI Output**

- **Information Plans Rules Alerts Action Recommendations**
- **Reports Spreadsheets OLAP Dashboards Scorecards Decision Automation**
- **Decision Latency Data Freshness Insights Action**

**TDWI EXECUTIVE SUMMIT**
Next Steps

• How do you get from one stage to the next??
Appendix

• Emerging Trends and Technologies
TDWI Technology Adoption Chart

- **High Industry Impact**
  - Time to evaluate
  - Don’t wait any longer!
- **Low Industry Impact**
  - Wait and see…
  - Adopt if appropriate

Emerging Adoption Mainstream
Emerging Technologies/Trends

- Dynamic extranets
- Flash/AJAX
- Grid
- DW appliance
- Operational BI
- Predictive Analytics
- Performance Dashboards
- BI Platforms
- BI Search
- BICC
- Process-driven BI
- EII
- MS Office Integration
- BI Software as a Service
- Open Source BI
- Extreme Scoping
- Process-driven BI

High to Low Industry Impact
Emerging to Mainstream Adoption

TDWI EXECUTIVE SUMMIT
Waves of Consolidation

Initial drivers

1995
RDBMS
OLAP
Analytic Apps
BI Suites
Reporting
BPM Suites
Data Integration

2000
2010
IBM
Microsoft
SAP
Cognos
BO/Crystal
Hyperion
IBM

Consolidation
Potential M&A: 2007+

• Wayne’s pick
  – Business Objects + Hyperion
  – BI vendors + financial applications

• Other picks
  – Oracle + Business Objects
  – IBM + Cognos
  – Hyperion + Information Builders