The Secrets of Analytical Leaders:
Insights from Information Insiders

Wayne W. Eckerson

Director of Research and Founder

Founder, BI Leadership Forum

Secrets

Dan Ingle, Kelley Blue Book
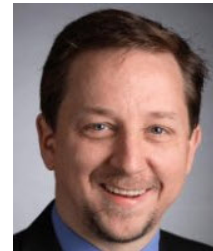1. Incremental development
2. Teamwork
3. One size doesn't fit all

Amy O'Connor, Nokia
1. Data is a product
2. Create an ecosystem
3. Change management

Darren Taylor, Blue KC
1. Create the right team
2. Get executive support
3. Deliver a quick win

Eric Colson, Netflix
1. Eliminate coordination costs
2. Work fast, cohere later
3. Build with context

Tim Leonard, USXpress
1. Talk language of business
2. Let business present
3. Deliver quick wins

Kurt Thearling, CapitalOne
1. Curate the data
2. Statisticians are craftsmen
3. Manage model production

Ken Rudin, Zynga
1. Questions, not answers
2. Impacts, not insights
3. Evangelists, not oracles

BI LEADERSHIP FORUM

Purple People

- Straddle business and technology domains

- Talk the language of business

- Run the analytical group like a business

- Recruit business people to work on their teams

- Manage "front" and "back" offices
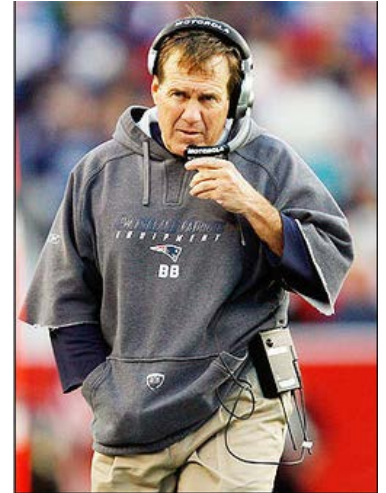
What is analytics?

Analytics with a capital "A"   "A"

Analytics with a small "a"   "a"

User Environment

"Drive the business"

Analytics

"Improve the business"

Performance Management

"Use the data"

Business Intelligence

"Get the data"

Data Warehousing

HDFS
Cloud
Mobile
Web Services
Web
Client/Server
[Platform]

Hive/Pig
Hadoop
Text analytics
Cloud BI
Predictive analytics
Mobile BI
Visual discovery
Operational BI
Data integration suites
Packaged analytic applications
Data virtualization
Dashboards and scorecards
Business intelligence suites
Web query/reporting
On-line analytical processing (OLAP)
Desktop query/reporting
Extract, transform, load tools
Data warehouses

Enterprise BI
SAP, SAS, IBM, Oracle, MSTR, IBI

Departmental BI
QlikTech, Cloud BI, Tableau, Other

Technology Environment
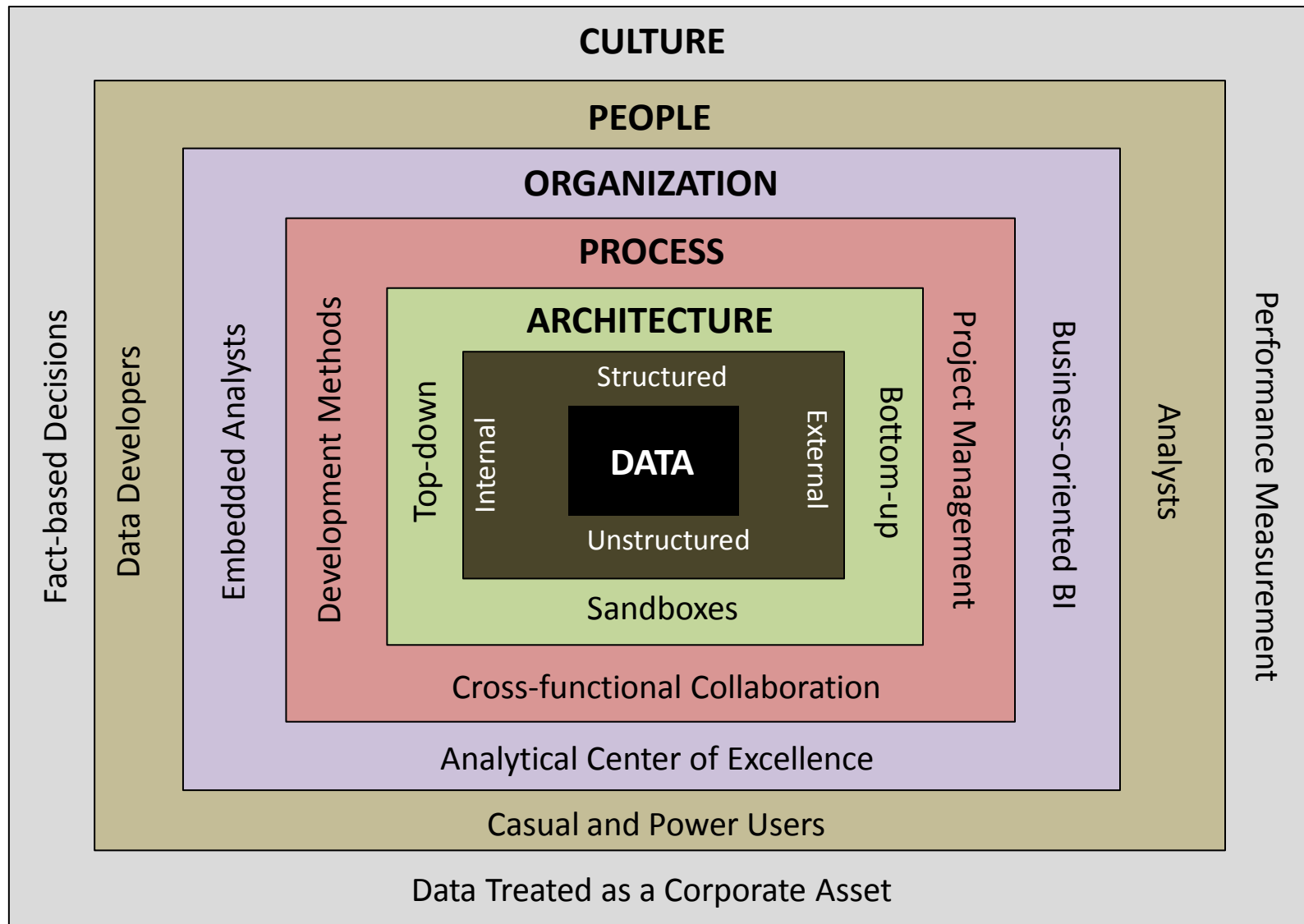
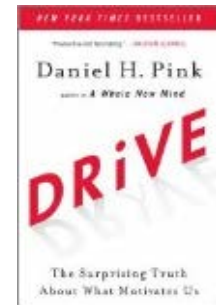1990s   2000s   2010   2015

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Analytics success framework

Analytical Team

- **Hire** people with business knowledge and emotional IQ
- **Embed** analysts in departments
- **Practice** the principle of proximity
- **Empower** teams (Scrum) or individuals (Spanner) to build complete solutions
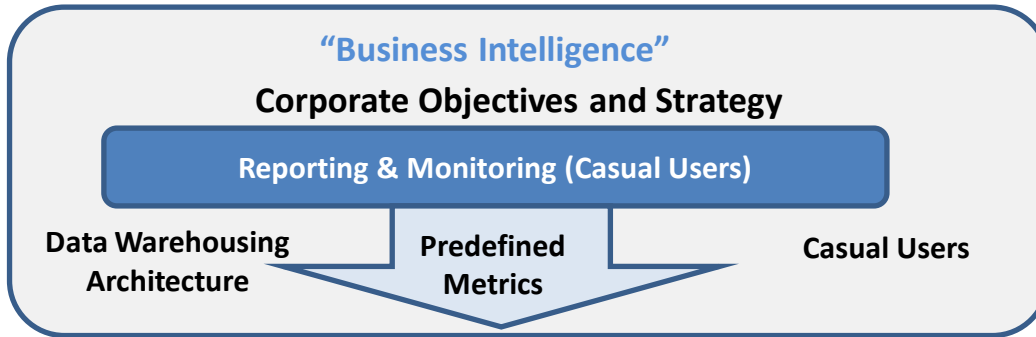- **Foster** teamwork and trust
- **Allow** failure

Autonomy, mastery, purpose

BI LEADERSHIP FORUM

Two Types

TOP DOWN

"Business Intelligence"

Corporate Objectives and Strategy

Reporting & Monitoring (Casual Users)

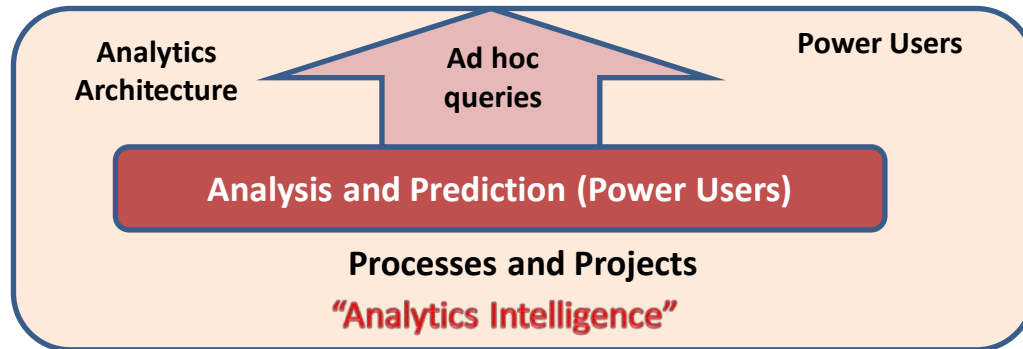**Data Warehousing Architecture** | **Predefined Metrics** | **Casual Users**
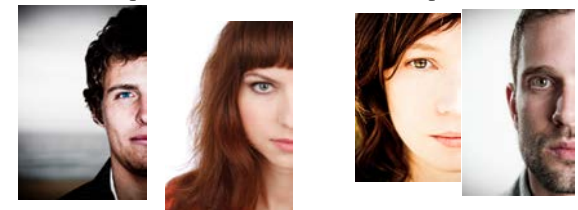
Data Developers

Data architects, ETL developers, report developers, data administrators, DW administrators, technical architects, requirements specialists, trainers, etc.

Analytics Architecture | **Ad hoc queries** | **Power Users**

Analysis and Prediction (Power Users)

Processes and Projects

"Analytics Intelligence"

BOTTOM UP

Analysts (embedded)

Super users, business analysts, statisticians, data scientists, data analysts

8

BI LEADERSHIP FORUM

Meet Your Analysts

BUSINESS FOCUSED

DATA FOCUSED

HYBRID

Sam
"Super User"

Beth
"Business Analyst"

Ann
"Analytical Modeler"

David
"Data Scientist"

Dan
"Data Analyst"

-Answer ad hoc questions
-Build reports/dashboards

-Explore data statistically & visually
-Create & maintain analytical models

-Purchase, document, and organize data

BI/Analytical Center of Excellence

Sponsors

Steering Committee (Executives)
- Approve roadmap
- Secure funding
- Prioritize projects

Departments

Super Users/
Analysts

BOBI Team

Data governance
User support

Director of BI/Analytics

Business team ("Business-oriented BI" team)
- Evangelize analytics
- Coordinate super users and depts
- Define best practices
- Define and document metrics
- Gather requirements
- Govern reports

Technical team (Data developers)
- Build and maintain the EDW and Hadoop
- Build semantic layer for BI tools
- Create complex reports and dashboards
- Develop model management platform
- Coordinate databases and servers w/ IT
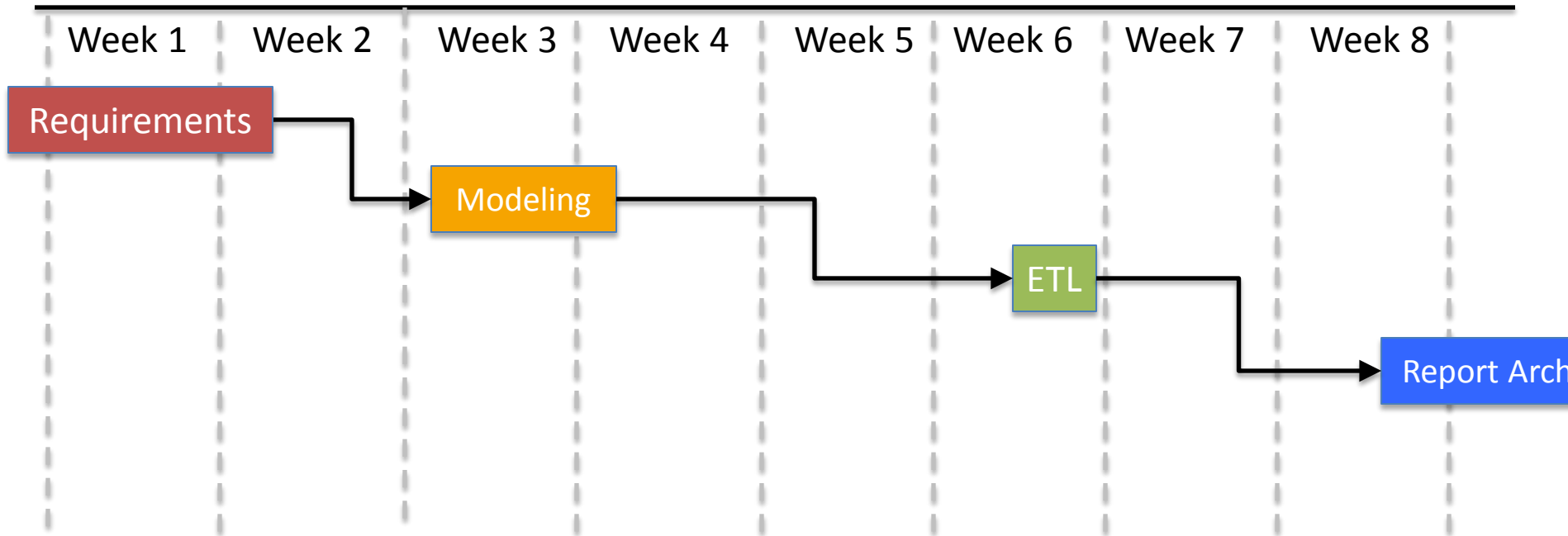
Deliver value fast

- "Death march"

- Scrum

- Spanner

U.S. XPRESS ENTERPRISES

KELLEY BLUE BOOK OFFICIAL GUIDE

NETFLIX

BI LEADERSHIP FORUM

Impact of specialists on development cycles

Requirements Gathering ⇨ Data Modeling ⇨ ETL Development ⇨ Report Architecture Development ⇨ Report Development

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8

Requirements

Modeling

ETL

Report Arch

Business-domain oriented roles

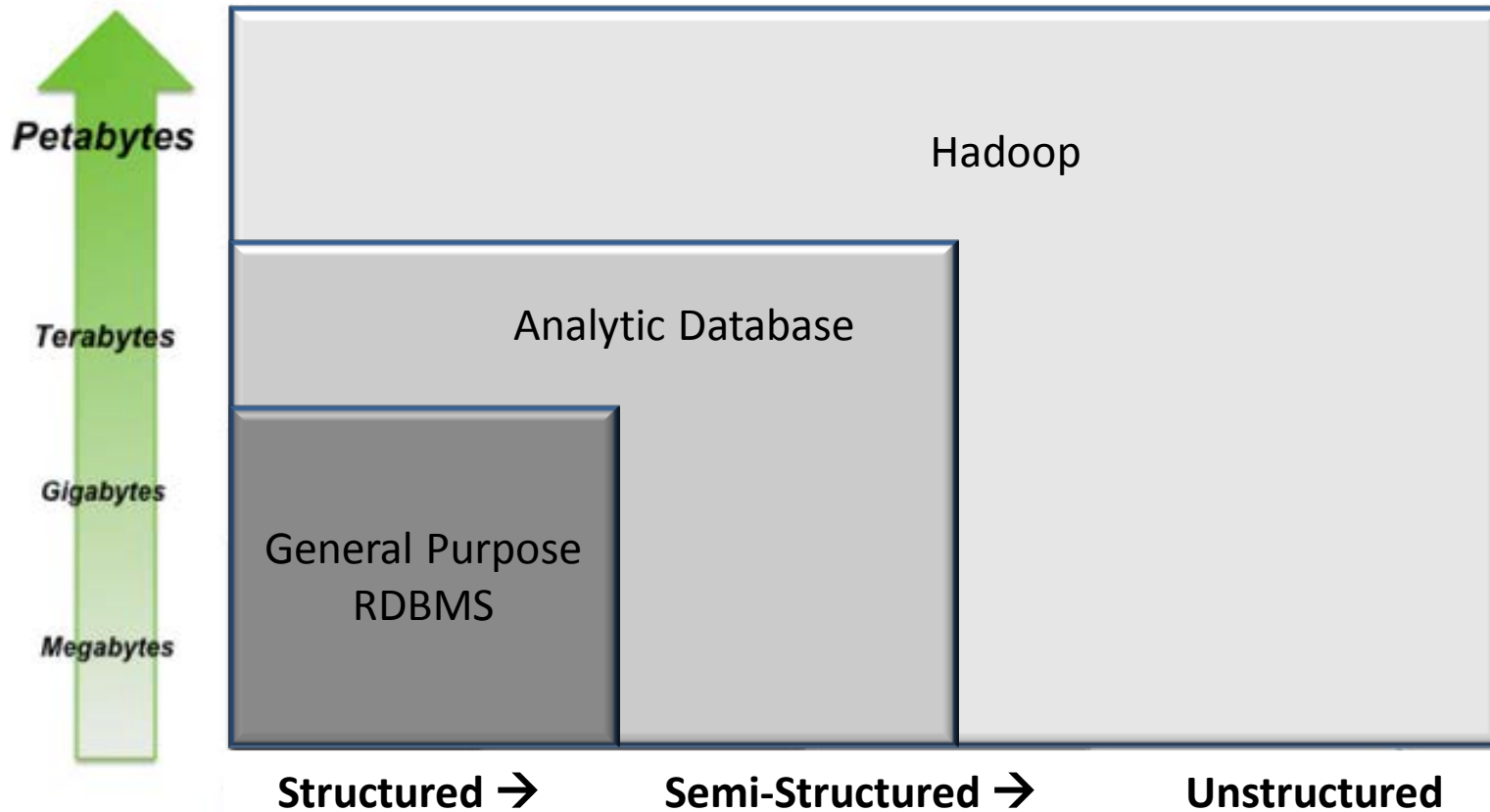|	Subj Area 1	Subj Area 2	Subj Area 3
	Reporting	Reporting	Reporting
	Database	Database	Database
	ETL	ETL	ETL

BI LEADERSHIP FORUM
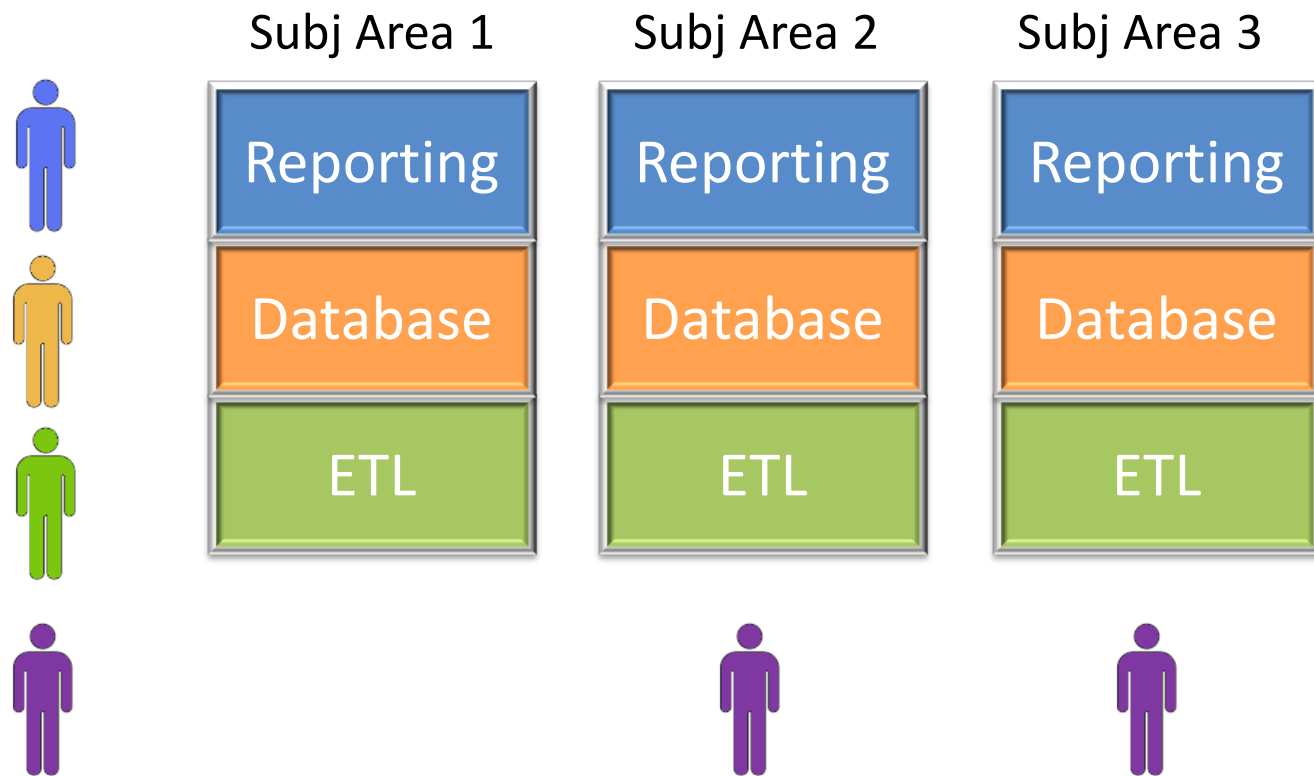
Change Management

- Kelley Blue Book
  - *Intuition-driven → data-driven*

- Nokia
  - *Phones → data services*

- Zynga
  - *Oracles → evangelists*

Which platform do you choose?
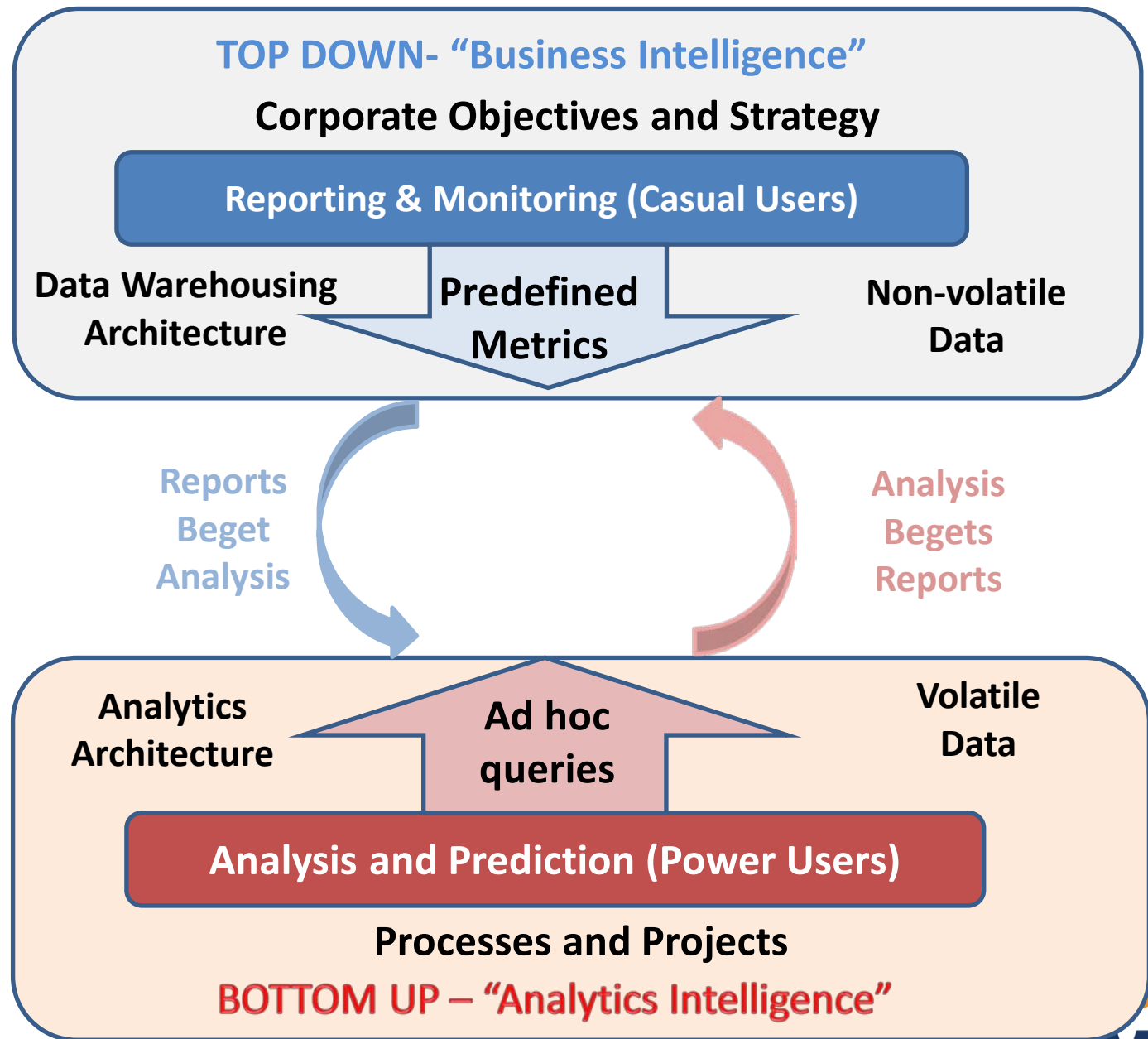
Big Data = Transactions + Interactions + Observations

Petabytes	Hadoop
Terabytes	Analytic Database
Gigabytes	General Purpose RDBMS
Megabytes	

Structured →   Semi-Structured →   Unstructured

BI LEADERSHIP FORUM

BI Framework

Pros:

- Alignment
- Consistency

Cons:

- Hard to build
- Politically charged
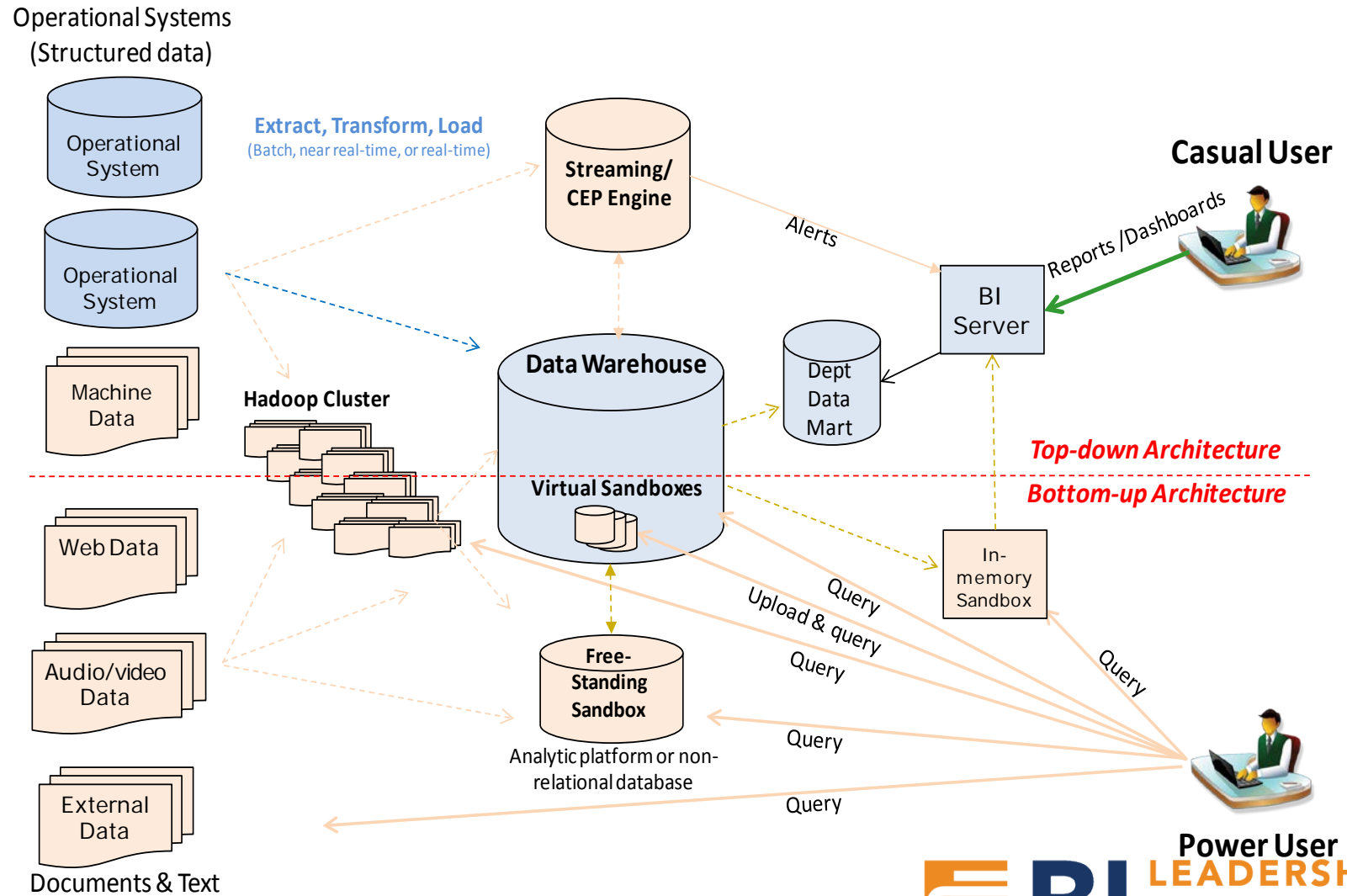- Hard to change
- Expensive
- "Schema Heavy"

TOP DOWN- "Business Intelligence"

Corporate Objectives and Strategy

Reporting & Monitoring (Casual Users)

Data Warehousing Architecture

Predefined Metrics

Non-volatile Data

Reports Beget Analysis

Analysis Begets Reports

Pros:

- Quick to build
- Politically uncharged
- Easy to change
- Low cost

Cons:

- Alignment
- Consistency
- "Schema Light"

Analytics Architecture

Ad hoc queries

Volatile Data

Analysis and Prediction (Power Users)

Processes and Projects
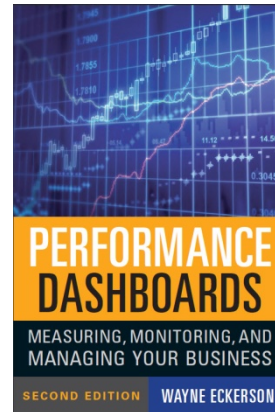
BOTTOM UP – "Analytics Intelligence"

BIFORUM

The new analytical ecosystem

Questions?

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- Founder, BI Leadership Forum
- Director of Research, TechTarget
- Former director of research at TDWI
- Author

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