COMPUTERWORLD

BI & ANALYTICS PERSPECTIVES

Analyzing the PRESENT,
Anticipating the FUTURE,
Optimizing BUSINESS VALUE

September 18-20, 2011

Wigwam Resort • Phoenix, Arizona

Getting the Most from BI & Analytics in the Cloud

Shyam Desigan, CFO & CIO, Volunteers of America Chesapeake

Sept. 20 2011

Volunteers of America

- **Mission:** "To inspire self-reliance, dignity and hope through health and human services."
- **Vision:** "To provide those in need a sense of belonging and a place to call home."
- **Core Values:** *Caring, Respect, Faith, Quality & Trust*
- **37** affiliates of Volunteers of America, one of the nation's largest and most comprehensive human services organizations

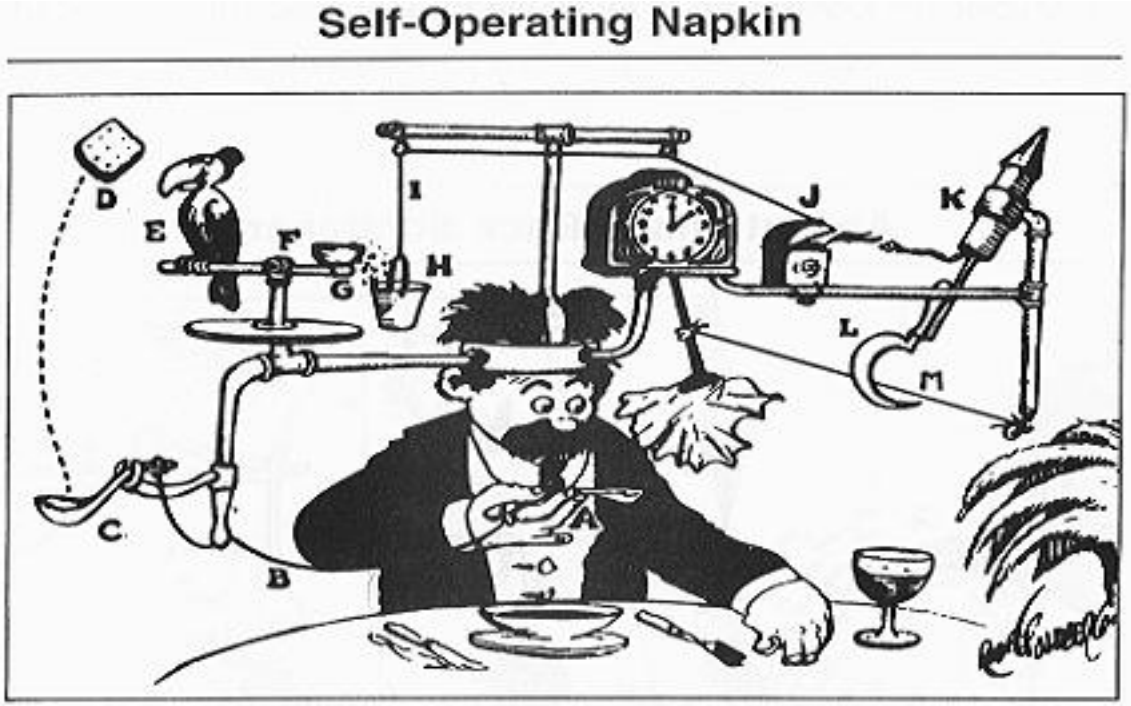
Volunteers of America®
CHESAPEAKE

Volunteers of America Chesapeake

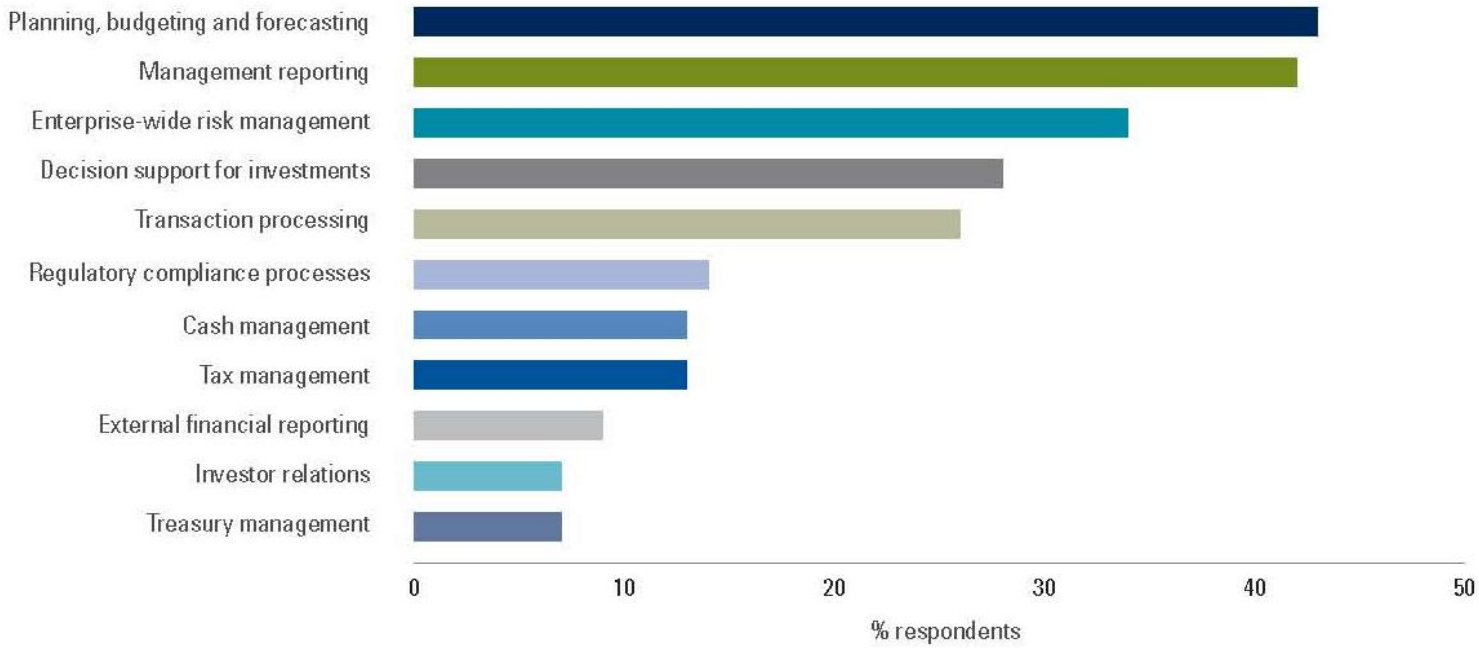
- Serve more than 9,000
- Operate 26+ Programs in Maryland, Virginia and the District of Columbia:
  - 11 Homeless Services Programs
  - 4 Supportive Housing Services
  - 3 Intellectual Disability Services with 13 Residential Programs
  - 5 Mental Health Services programs with 23 Residential Centers
  - 2 Substance Abuse Services
  - 2 Community Corrections Programs
  - 1 Senior Services Program

Our Pain Points

- Poor document retention and retrieval → missed/delayed reimbursement from funders → Multiple audit findings & accreditation prol



Where is finance most dissatisfied with its current capabilities?



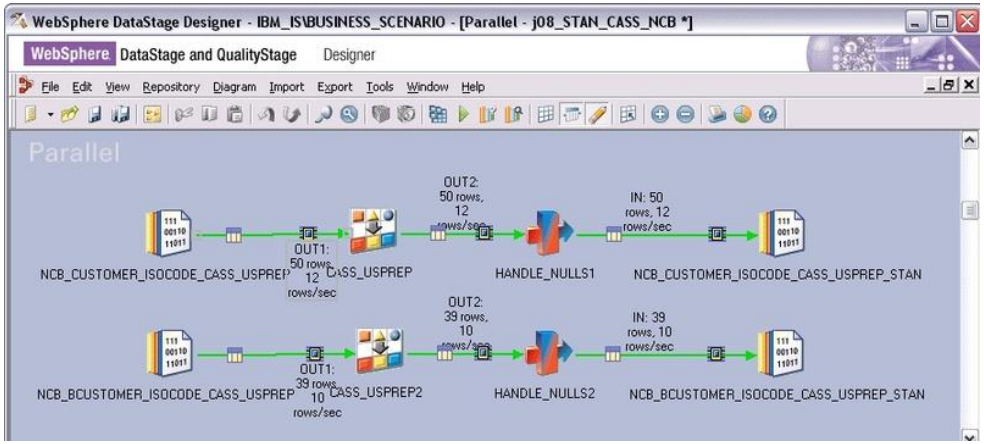
Source: Economist Intelligence Unit, 2006

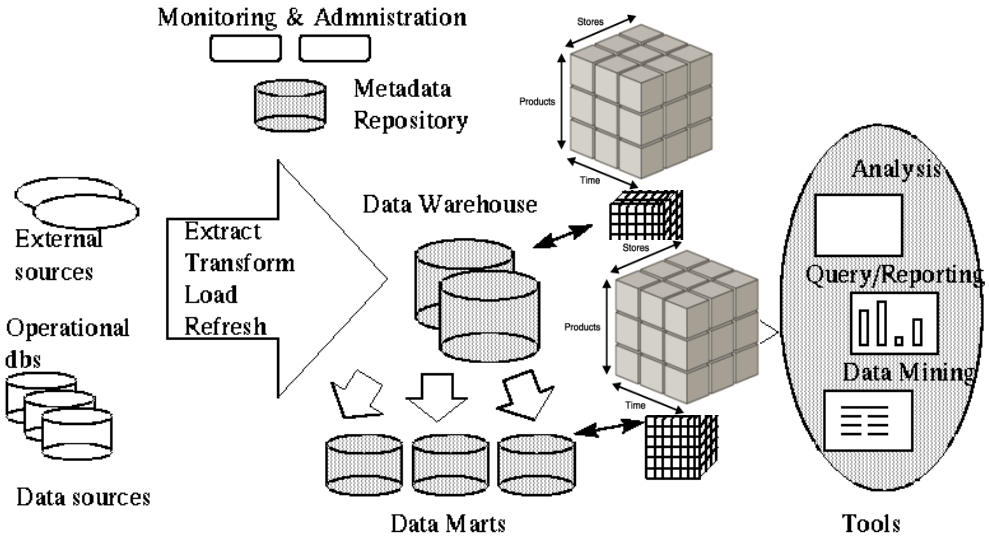
Executive Team needs: Rear View Mirror + Magnifying Class + Crystal Ball!!

REAR VIEW MIRROR	MAGNIFYING GLASS	CRYSTAL BALL
What happened?	**What exactly is the problem?**	**What will happen next?**
How many, how often?	**Why is this happening?**	**What if the trends continue?**
	What actions are needed?	**What are the risks/opportunities?**

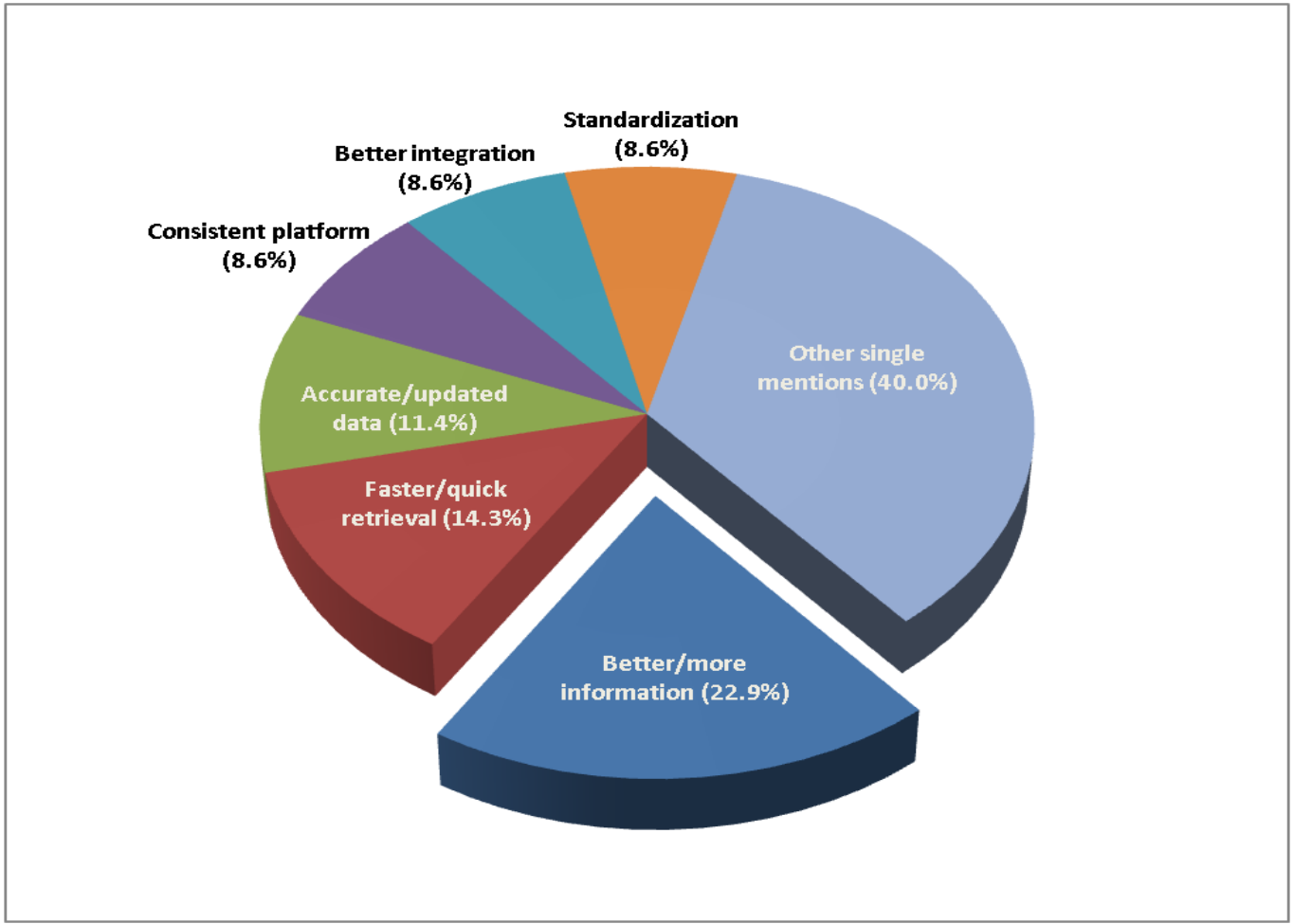
REAR VIEW	CURRENT VIEW	FORWARD-LOOKING VIEW
Balance sheet, P&L and cash flow statements	Customer, product & market profitability	Cash forecasting
Revenue & cost variance analysis	Spend optimization	Scenario-based planning & forecasting
	Working capital analysis	Strategic investment & decision support
	Market, customer & channel pricing	Volatility & risk-based predictive & behavioral modeling
	Sales & supply chain effectiveness	

Traditional Business Intelligence

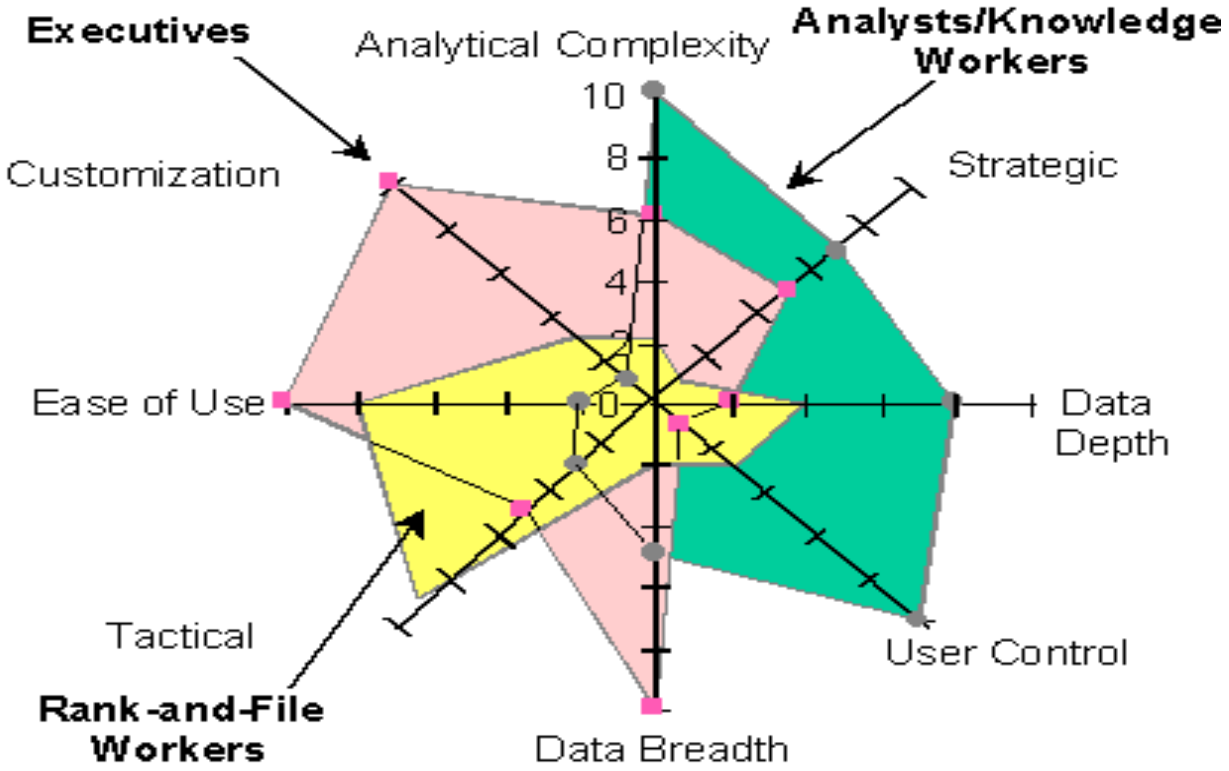


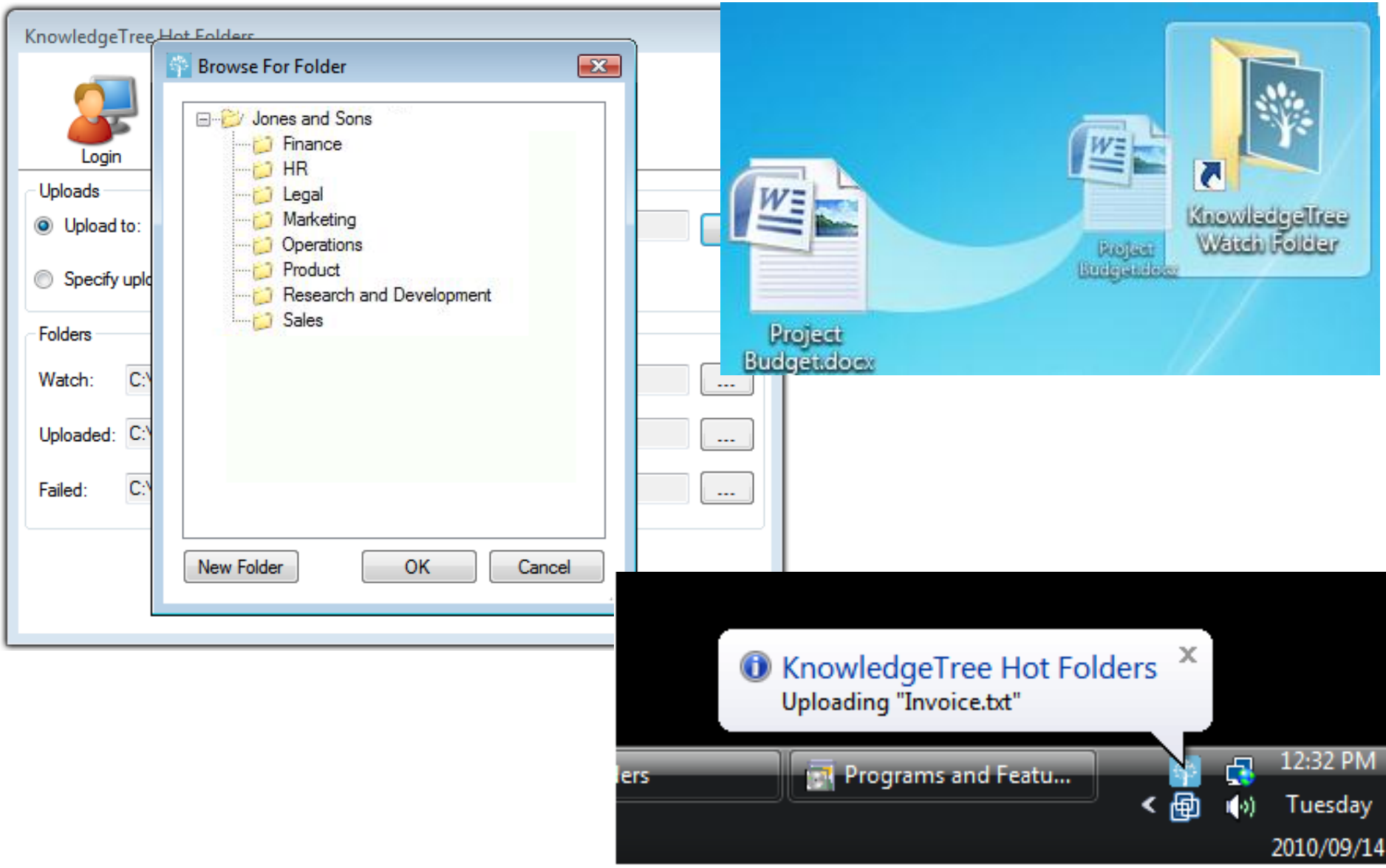


What was missing?



How we did it?


Executives
Analytical Complexity
Analysts/Knowledge Workers
10
8
6
4
2
0
Customization
Strategic
Ease of Use
Data Depth
Tactical
User Control
Rank-and-File Workers
Data Breadth


KnowledgeTree Hot Folders
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Watch:
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Browse For Folder
Jones and Sons
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HR
Legal
Marketing
Operations
Product
Research and Development
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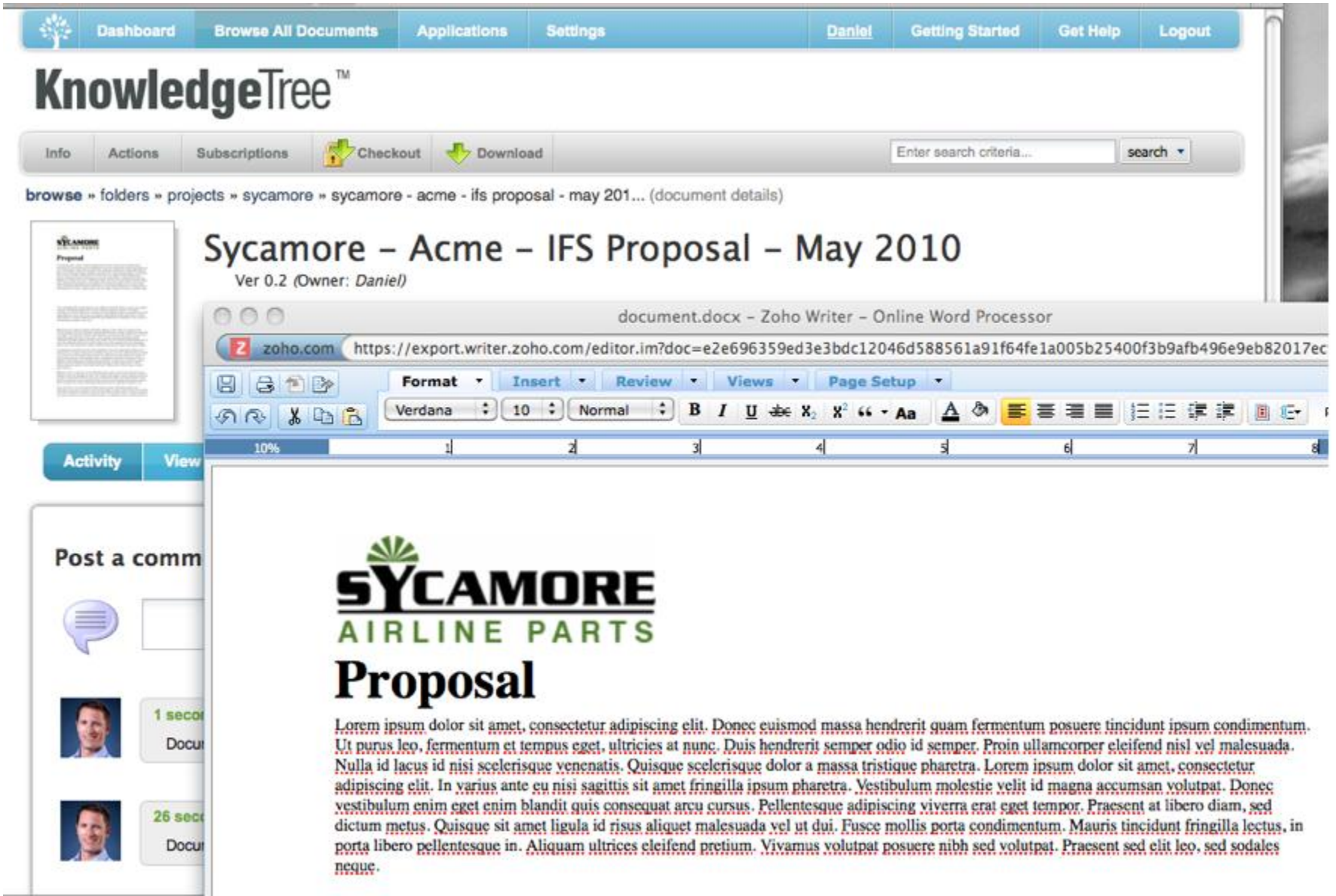
Tuesday
2010/09/14


Dashboard
Browse All Documents
Applications
Settings
Daniel
Getting Started
Get Help
Logout
KnowledgeTree™
Info
Actions
Subscriptions
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Sycamore – Acme – IFS Proposal – May 2010
Ver 0.2 (Owner: Daniel)
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Format
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Proposal
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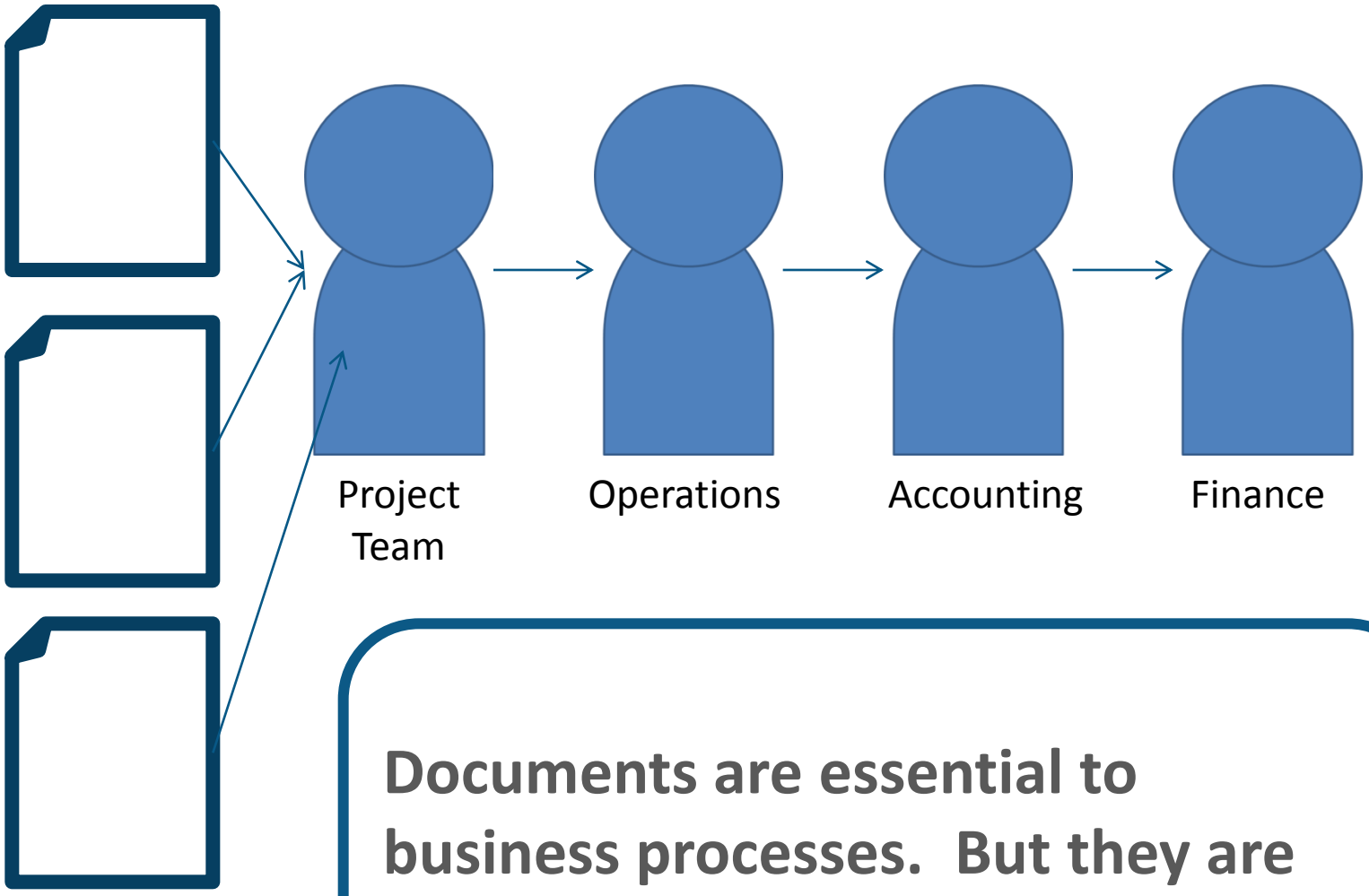
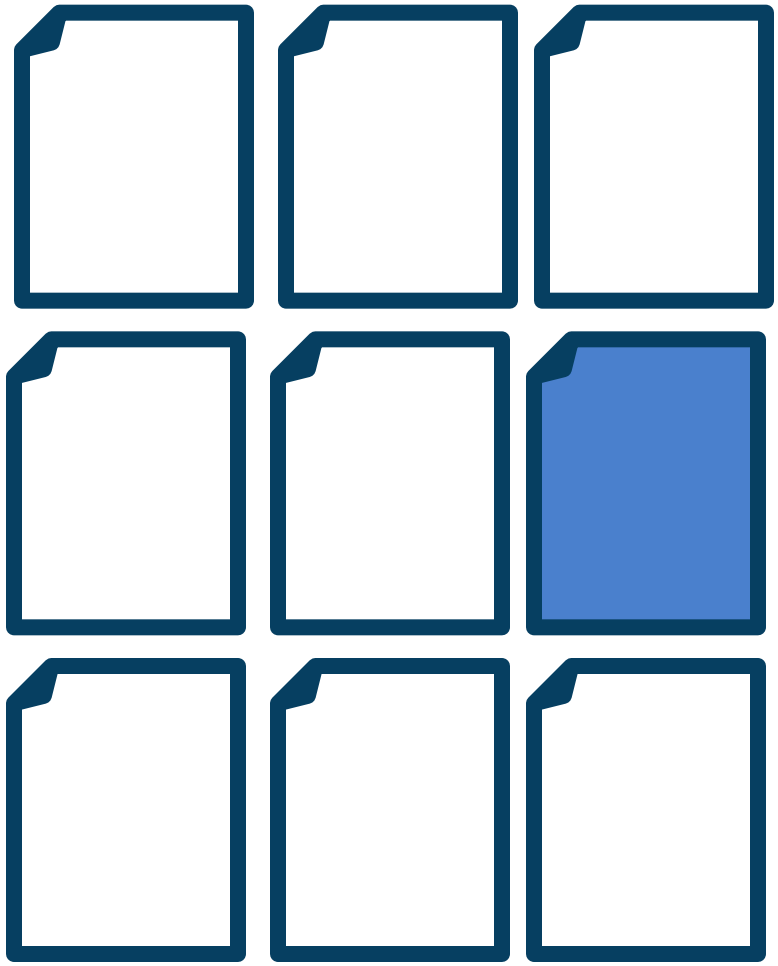
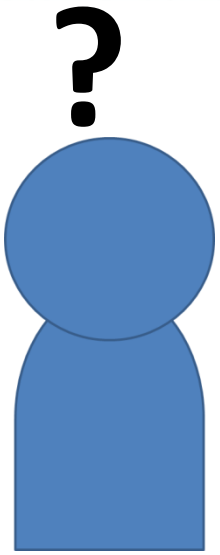
Intuitive user experience makes teams immediately productive



Documents are essential to business processes. But they are complicated to manage.

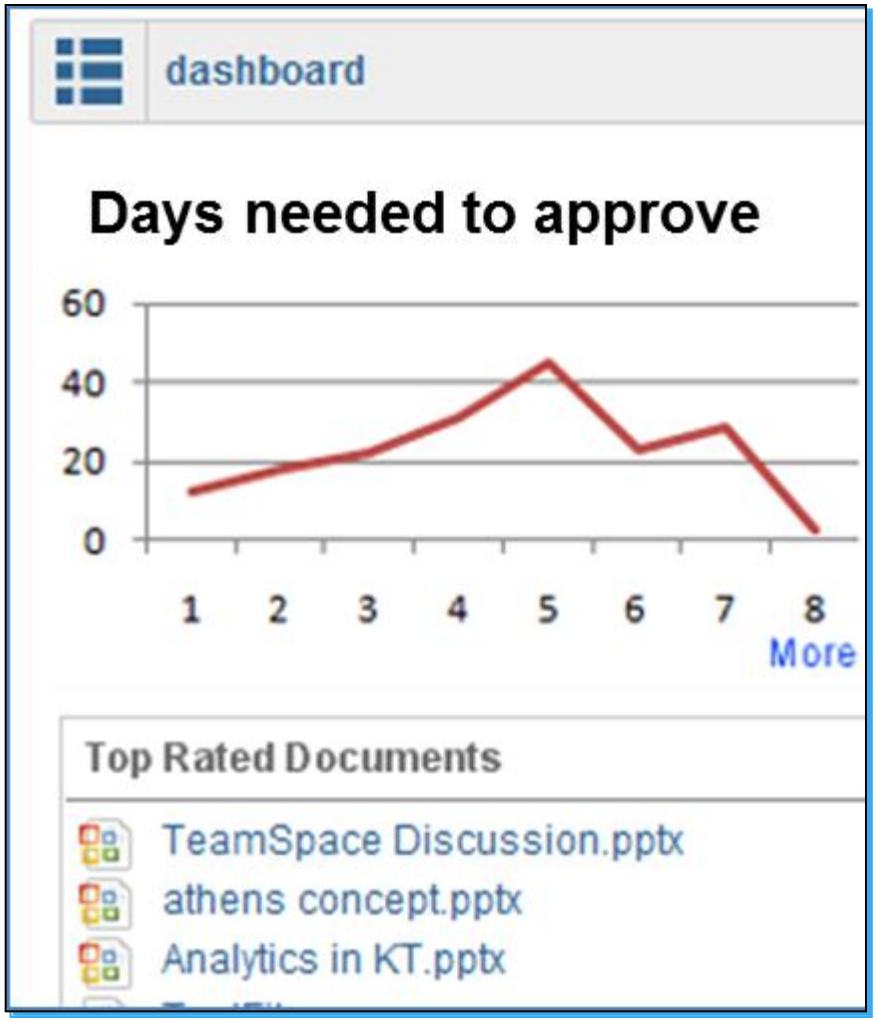




Thousands of stored documents means users can't find what matters.

What is needed to work with documents smarter?

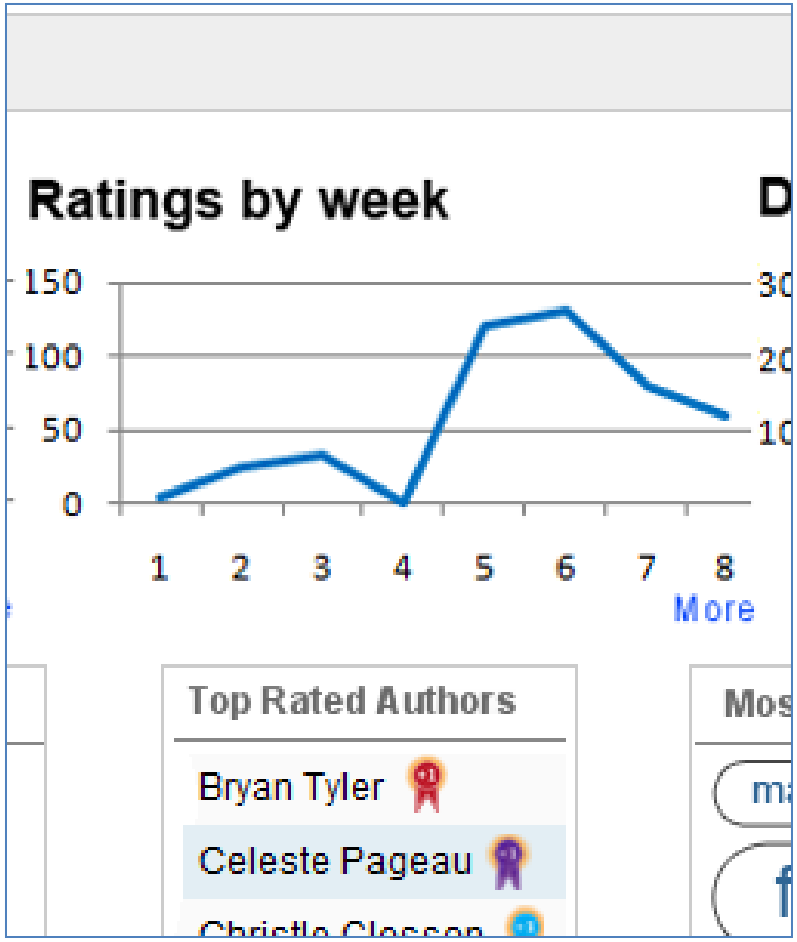
- **Manage** document processes unique to your business
- Find value and retain **control over key documents**
- Increase user **engagement**
- Make important documents **available and visible**

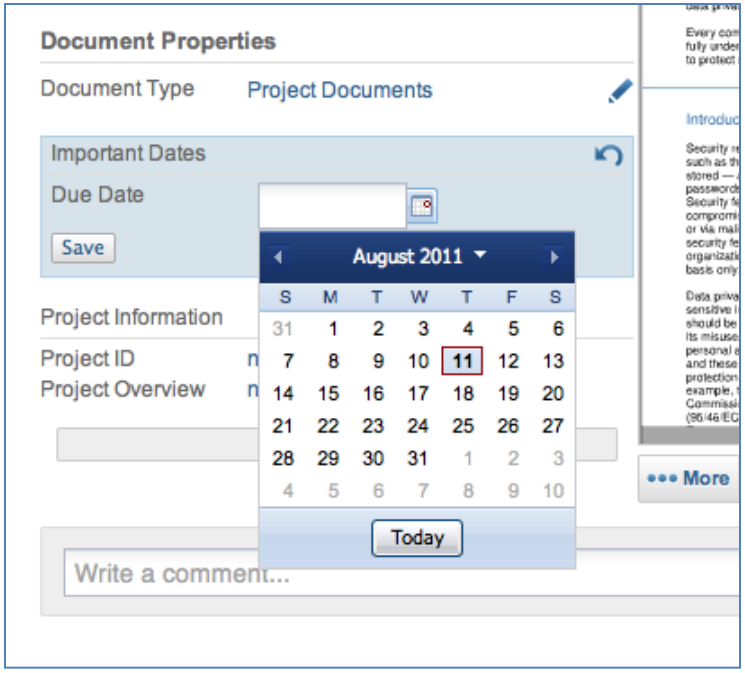


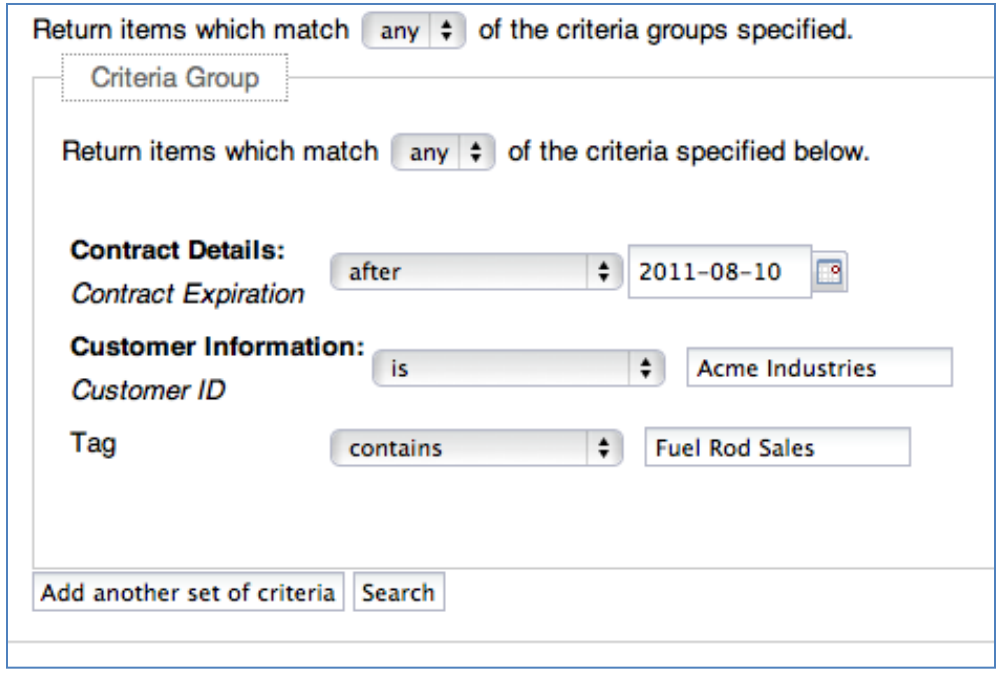
Smart Analytics locate documents that are holding up business processes

Like You and one other person likes this

Smart Analytics
uncover documents that peers find valuable – helping productivity

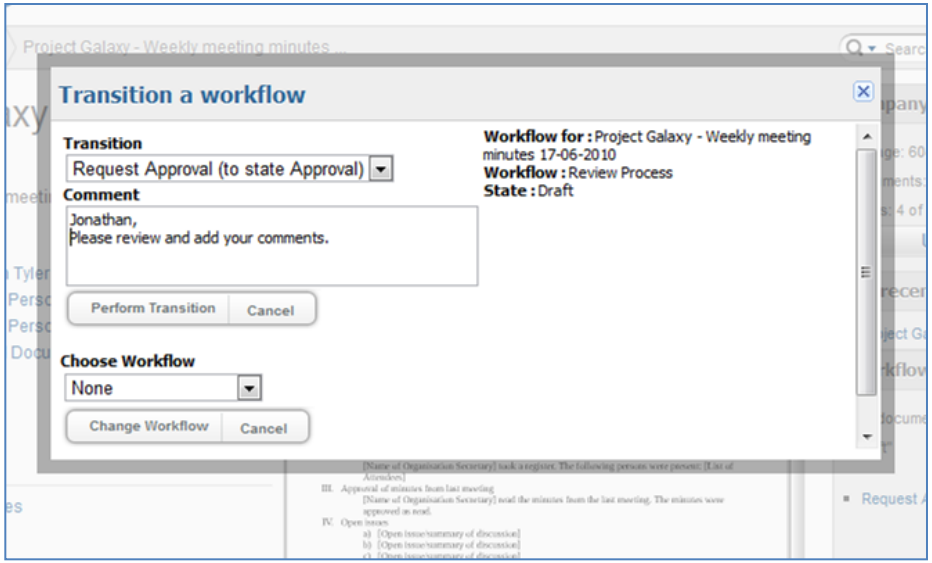


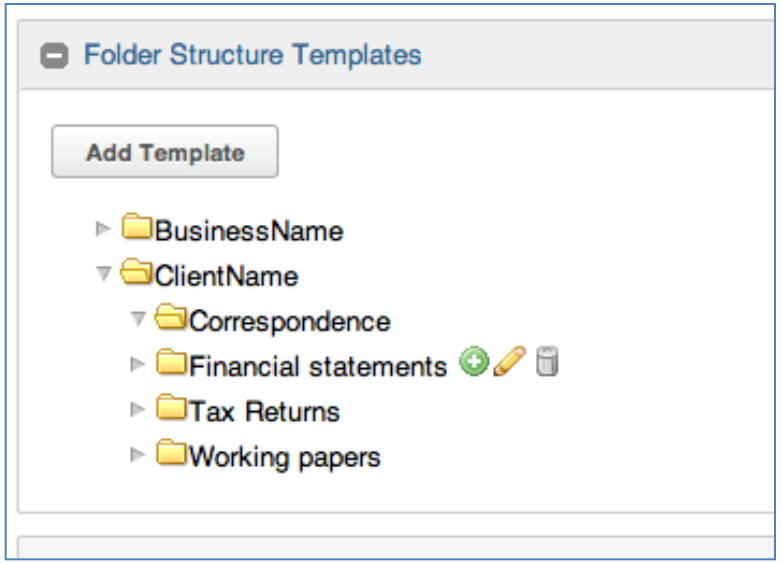




Smart Tag fields capture custom document metadata relevant to a business

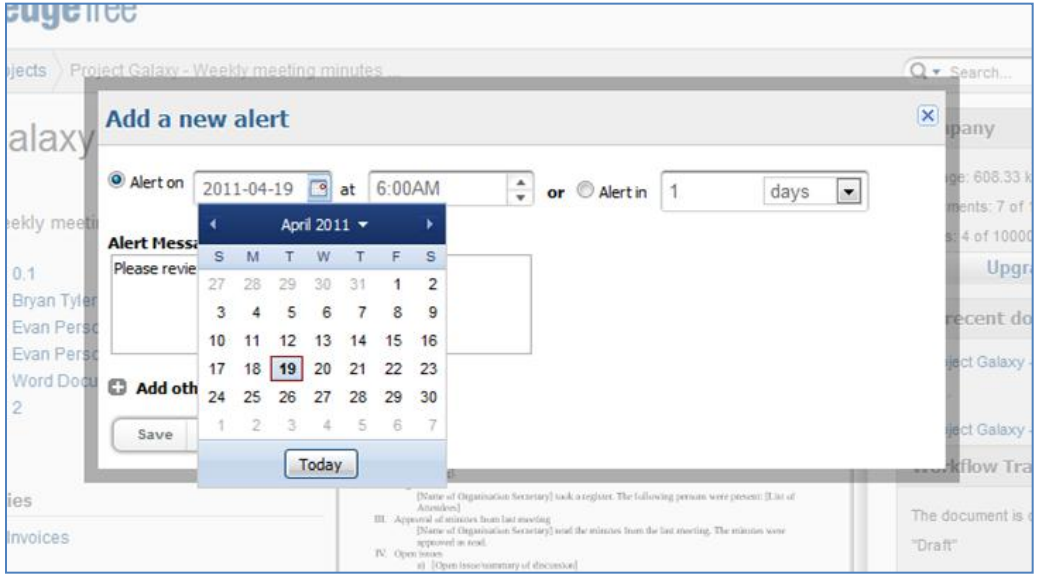
Smart Search goes beyond simple content search to support querying business context

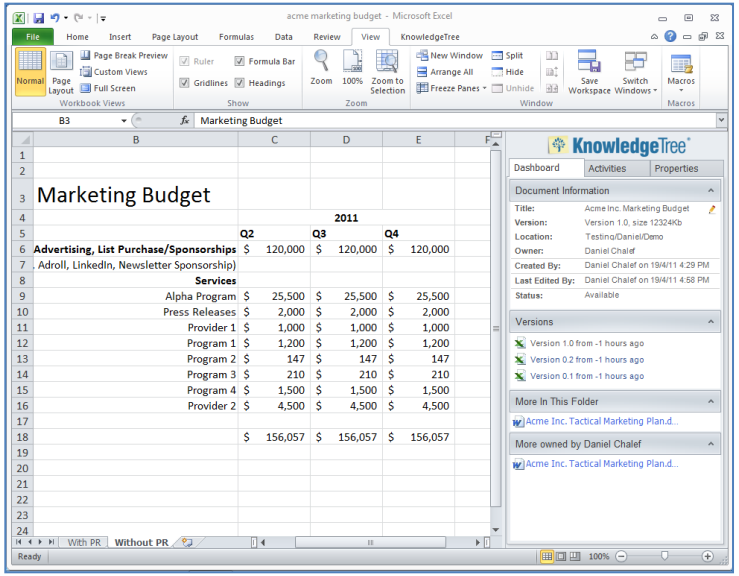




Smart Processes map business processes, simplifying management and approval of documents

Smart Templates of best practice folders and documents can be reused by teams

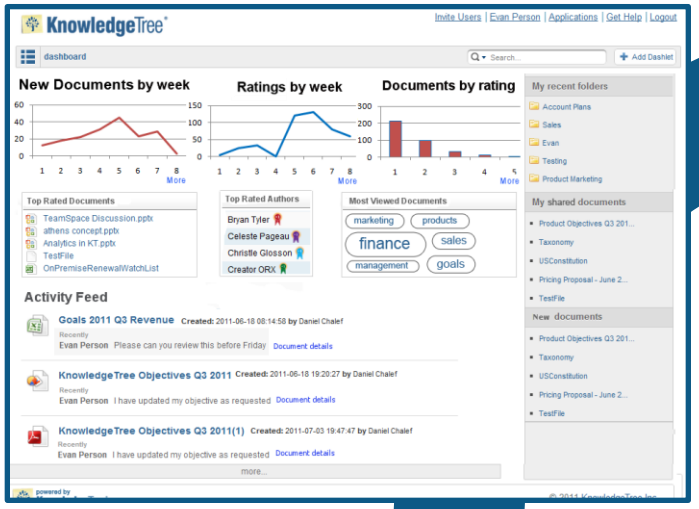




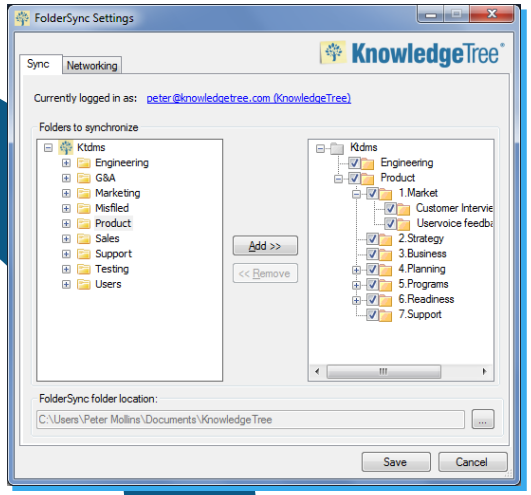
Smart Alerts notify users when documents need action, keeping documents current and relevant

Smart Office tools streamline document editing and sharing

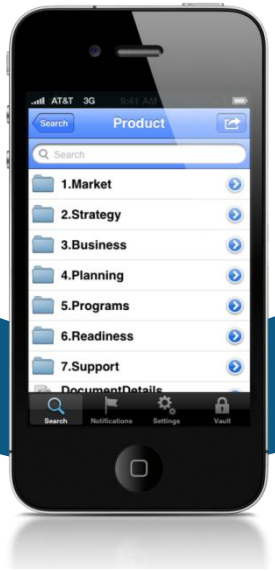
Browser



Desktop



Mobile



Smart Tools Drive Productivity From Anywhere

Data Visualization

BI within Microsoft Apps

- Integrate into SQL, Office, SharePoint; no separate products
- PowerPivot “IMBI” technology is critical
- Master Data Services will grow in importance
- Data cleansing is coming
- SQL Server Parallel Data Warehouse (PDW) is a big deal

PowerPivot

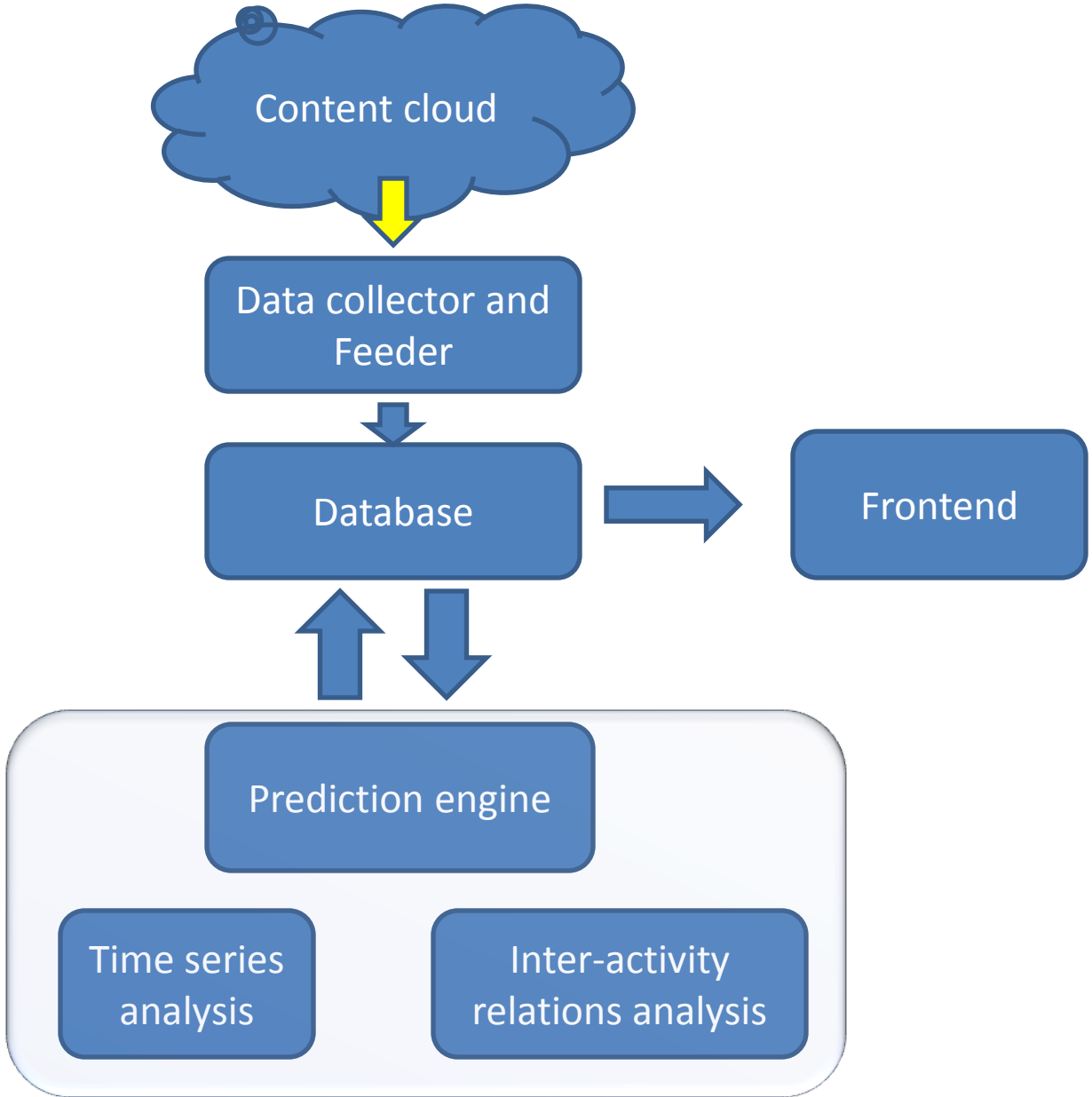
- Columnar, in-memory; handles millions of fact rows
- Self-service: integrates with Excel and SharePoint
- Uses DAX
- SharePoint models compatible with SSAS clients, including SSRS and Excel
- Client is free
- Server free with SQL Server 2008 R2 and SharePoint 2010 Enterprise
- PP technology is strategic to MS going forward

Open Source BI

- FOSS/COSS and Community vs. Enterprise editions
- OLAP is mostly ROLAP technology
- APIs are mostly Java
- Postgres database figures in heavily in some areas
- Momentum is growing
- Some tools in use within commercial products

Cloud BI

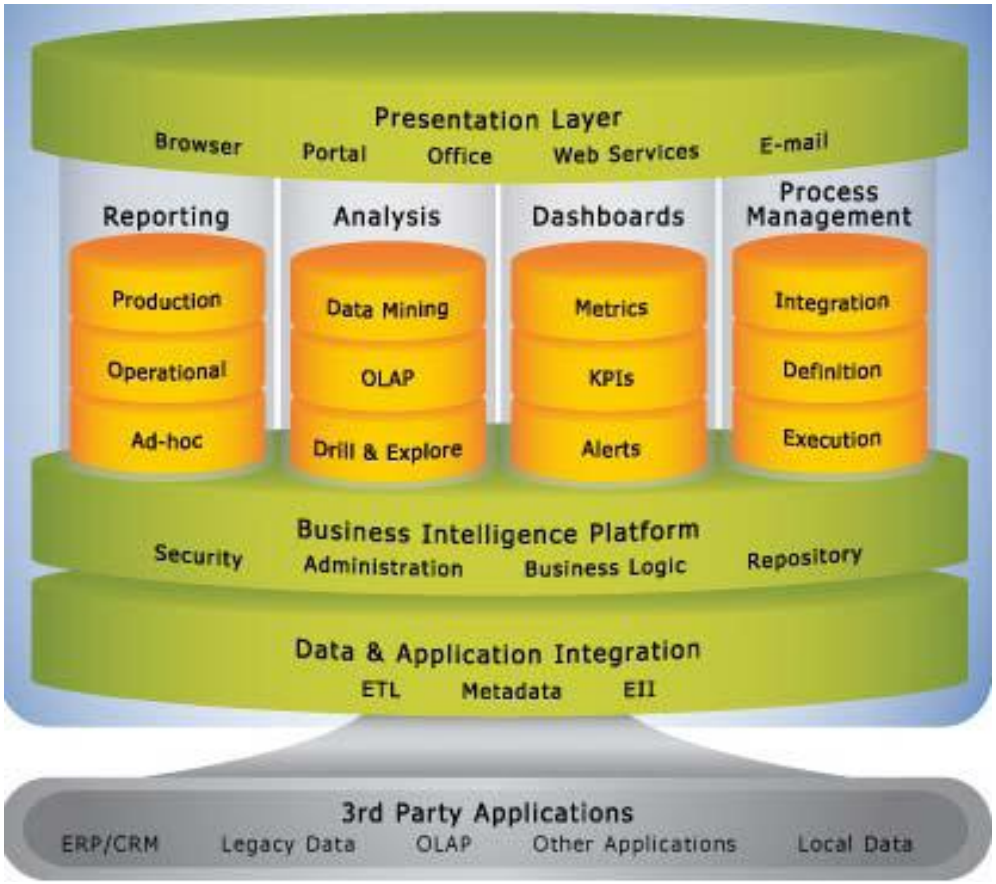
- Amazon Web Services-Based
  - Pentaho/ParAccel
  - Jaspersoft
  - GoodData
- Google Apps-Based
  - Panorama
- Proprietary
  - Oco
  - Birst
  - myDIALS
  - Tableau Public


Content cloud
Data collector and Feeder
Database
Frontend
Prediction engine
Time series analysis
Inter-activity relations analysis

Pentaho Overview

- Pentaho is the commercial open source software for Business Intelligence (BI)
- Pentaho provides comprehensive reporting, OLAP analysis, dashboards, data integration, data mining and a BI platform.

Pentaho BI Platform



Pentaho's applications

- Suite Pentaho
  - BI Platform
  - Pentaho Dashboard
  - JFreeReport
  - Mondrian
  - Kettle
  - Weka
-

Kettle

- Kettle has capabilities to access, cleanse, and integrate data from wherever your organization has it.
- Kettle delivers powerful Extract, Transform and Load (ETL) capabilities with an intuitive design environment.

Mondrian

- High performance, interactive analysis of large or small volumes of information
- "Dimensional" exploration of data, for example analyzing sales by product line, by region, by time period
- Parsing of Multi-Dimensional eXpression (MDX) language into Structured Query Language (SQL) to retrieve answers to dimensional queries
- High-speed queries through the use of aggregate tables in the RDBMS
- Advanced calculations using the calculation expressions of the MDX language

Questions?

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