IBM**SoftwareNetwork**2013

Fare partnership con il Software IBM

Roma, 24 - 25 gennaio 2013

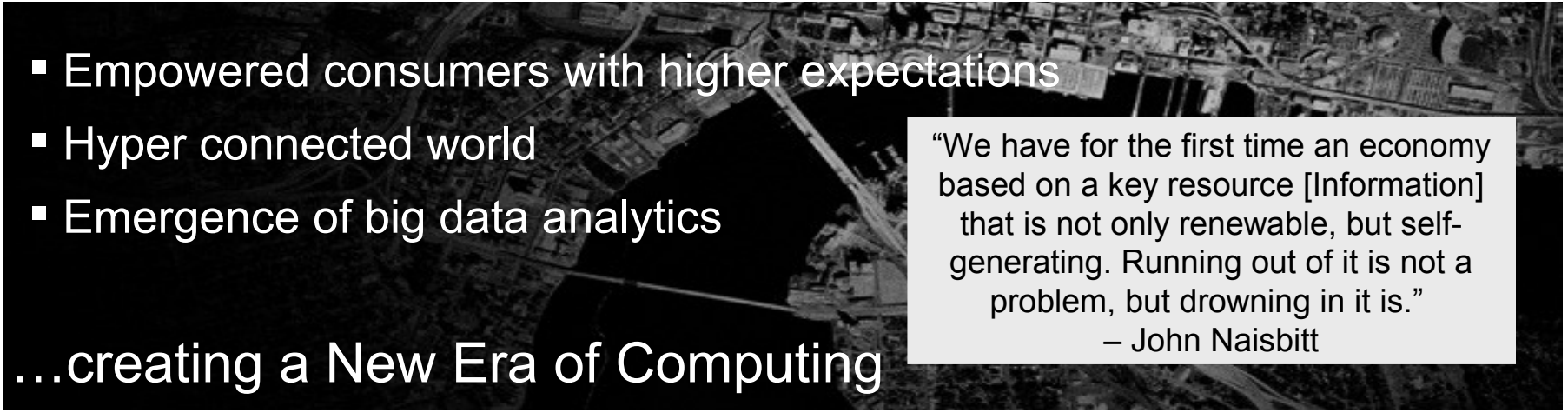
Michele Principe

Unlock the value of the information in the Big Data era

IBM

Information & The Big Data Phenomenon

…*The Next Platform Battle...*



- Empowered consumers with higher expectations
- Hyper connected world
- Emergence of big data analytics

…creating a New Era of Computing

"We have for the first time an economy based on a key resource [Information] that is not only renewable, but self-generating. Running out of it is not a problem, but drowning in it is."
– John Naisbitt

New Computing Model:
Own the technology transformation / new era of computing

- Information is a strategic asset
- Growth in data volumes is impacting IT budgets
- IT investments must evolve to big data analytics
- IT needs to reduce data center complexity and cost

Information & The Big Data Phenomenon

Today's intensifying challenges mandate a fresh approach

Accelerating Globalization

Rapidly Changing Demographics

Industry Consolidation & Convergence

Evolving Societal Relationships

Supply Chain Complexity

Enormous Economic & Cost Pressures

Intensifying Regulation – Risk & Compliance

Traditional Approaches have become obsolete

Information is compartmentalized – lack of full integration obscures visibility

Inability to link unstructured content with structured data and manage together

Query State limits ability to address complexity of threats

Untimely – Sense & Respond vs. Predict & Act

Out of context

Costly

So What's The Problem?

The Big Data Phenomenon Is Only Making It Harder

Every day, we create 2,500,000,000,000,000,000 bytes or 2.5 Exabytes of data — so much that 90% of the data in the world today has been created in the last two years alone

Volume of Digital Data

Variety of Information

Velocity of Decision Making

- *For Every 1 Minute In Realtime, 60 Hours Of Video Is Up-Loaded to You Tube*
- *12 terabytes of Tweets are created each day, providing insight into public sentiment*
- *80% of all the data created daily is unstructured – videos, images, emails, and social media*
- *Structured data now includes a massive range of sensors, click streams, log files, call records, transactions*
- *5 Billion financial transactions occur every single day*
- *30,000 commercial air flights takeoff or land in Europe daily, accounting for 1,500,000 air passengers – every single day*

So What's The Problem?
Traditional Information Architectures Stifle Insight and Action

New Challenges & Big Data Require A Different Approach

Leaders Are Breaking The Traditional Information Management Model

Traditional Approach

Business Users
Determine what question to ask

IT
Structures the data to answer that question

Big Data Approach

IT
Delivers a platform to enable creative discovery

Business
Explores what questions could be asked

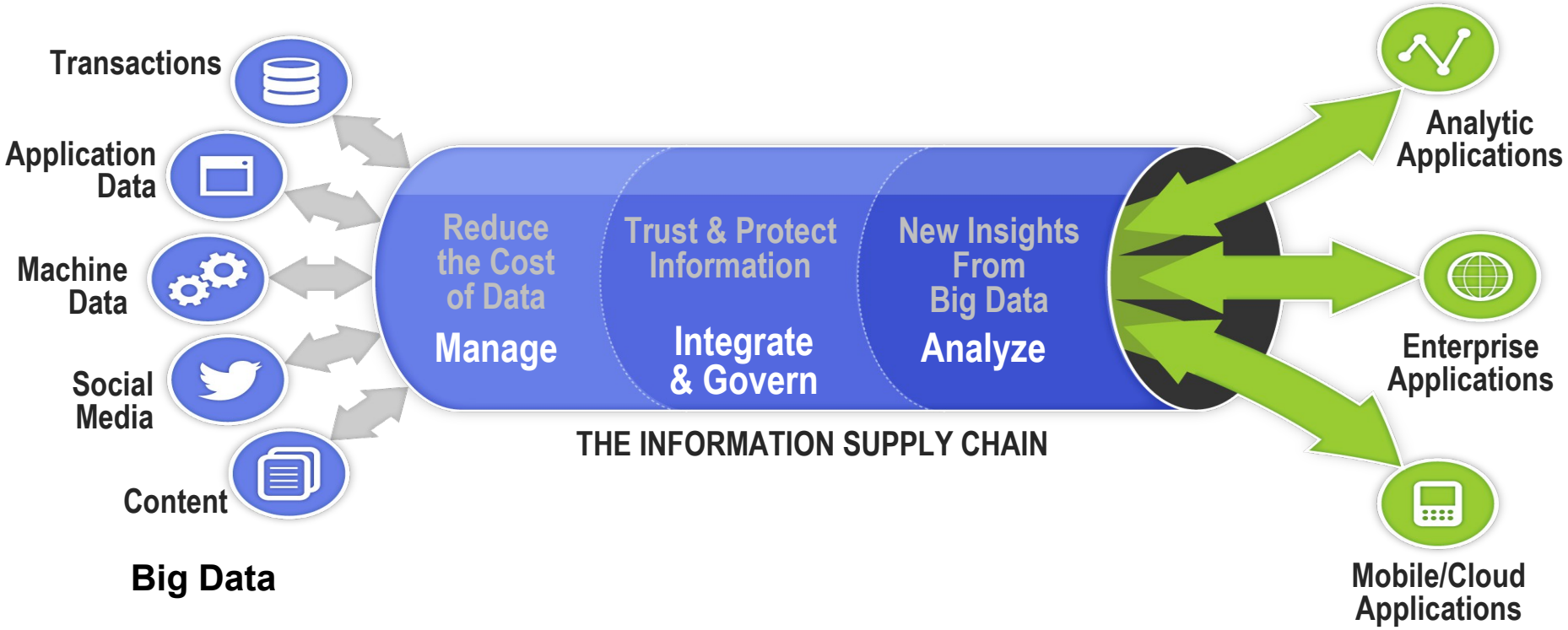
Structured & Repeatable Analytics
- Query Based -- Questions Drive Data
- Customer Surveys & Focus Groups
- Monthly, Weekly, Daily
- Data At Rest

VS.

Iterative & Exploratory Analytics
- Autonomic -- Insight Drives Answers
- Customer Sentiment
- Persistent & Ad Hoc
- Data In Motion

What We Have Learned

A Comprehensive Set of Capabilities Is Required To Address The Challenge



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The IM Portfolio Encapsulates The Complete Set of Capabilities Required…

Reduce the Cost of Data

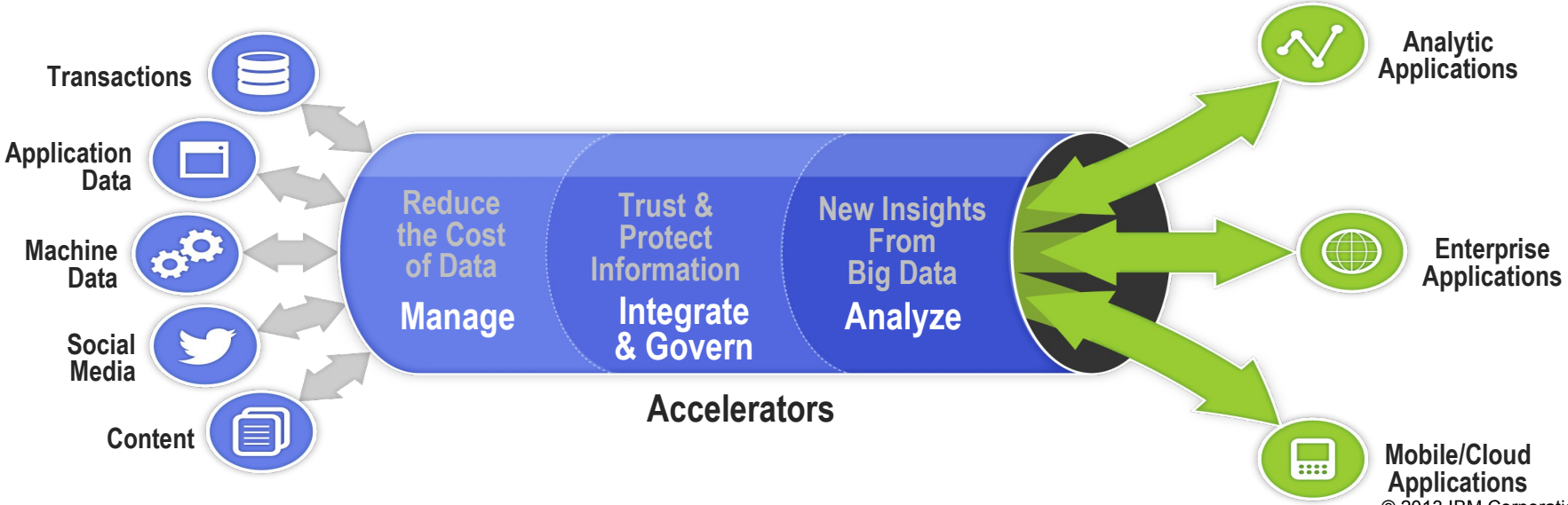
- Database Software
- Database Appliances
- Database Design and Development
- Database Administration
- Data Lifecycle Management
- Data Warehousing
- Hadoop System

Trust and Protect Information

- Information Integration
- Master Data Management
- Data Lifecycle Management
- Data Security and Privacy
- Data Quality Management
- Metadata, Business Glossary and Policy Management

New Insights From Big Data

- Data Warehousing Systems and Appliances
- Data Warehousing Software
- Data Warehouse Tools and Models
- Hadoop System
- Stream Computing
- Federated Discovery and Navigation



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The IM Portfolio Encapsulates The Complete Set of Capabilities Required…

Reduce the Cost of Data

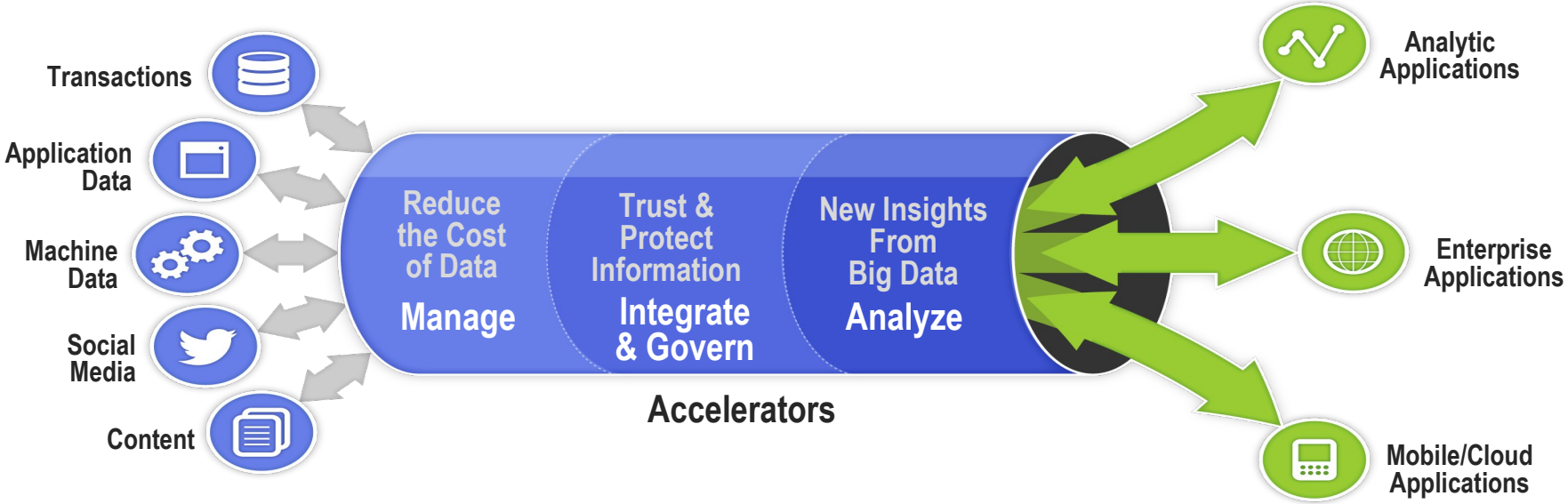
- DB2, DB2 for SAP
- PureData for Transactions
- Informix, IMS
- Database Tools
- InfoSphere Optim
- PureData for Analytics
- InfoSphere BigInsights

Trust and Protect Information

- InfoSphere Information Server
- InfoSphere MDM
- InfoSphere Optim
- InfoSphere Guardium
- InfoSphere Replication
- InfoSphere Federation
- InfoSphere Discovery

New Insights From Big Data

- PureData for Analytics
- PureData for Operational Analytics
- InfoSphere Warehouse
- Industry Models
- InfoSphere BigInsights
- InfoSphere Streams
- InfoSphere Data Explorer



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…Supports The 5 Big Data Use Cases…

Big Data Exploration

Find, visualize, understand all big data to improve business knowledge

Enhanced 360° View of the Customer

Extend existing customer views by incorporating additional internal and external information sources

Security/Intelligence Extension

Lower risk, detect fraud and monitor cyber security in real-time

Operations Analysis

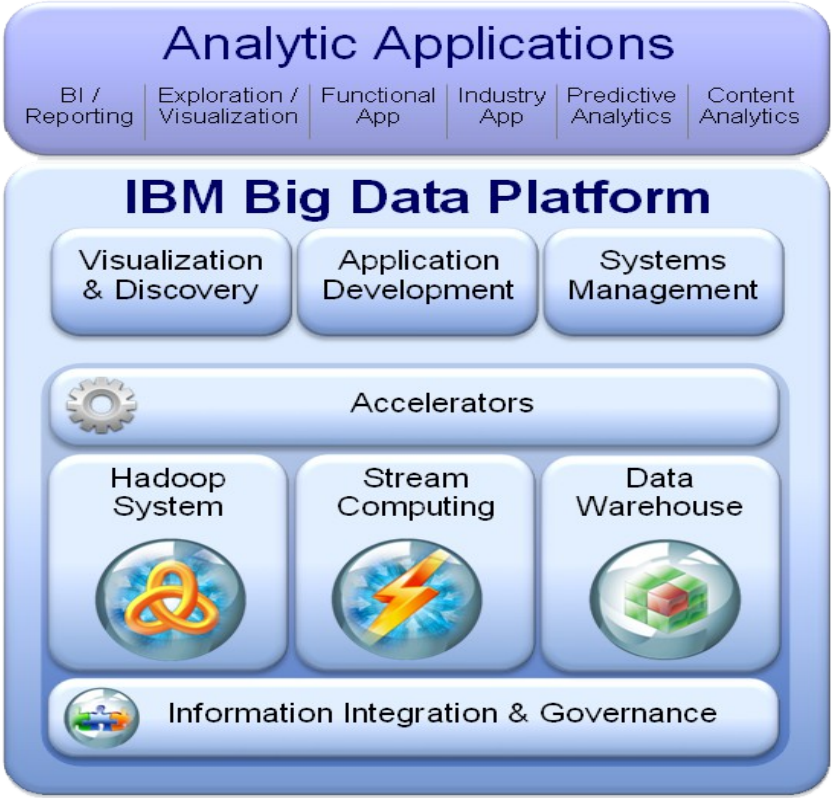
Analyze a variety of machine data for improved business results

Data Warehouse Augmentation

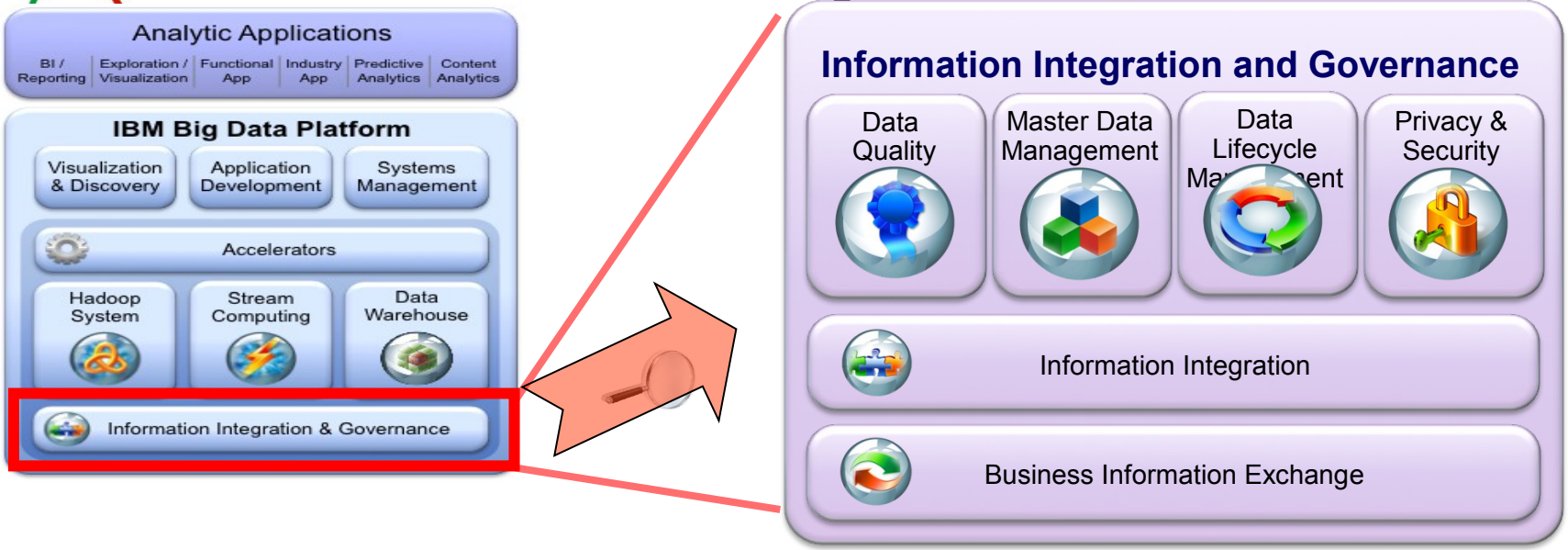
Integrate big data and data warehouse capabilities to increase operational efficiency

The IBM Big Data Platform Advantage

- The platform provides benefit as you move from an entry point to a second and third project
- Shared components and integration between systems lowers deployment costs
- Key points of leverage
  - Reuse text analytics across streams and Hadoop
  - HDFS connectors between Streams and Information Integration
  - Common integration, meta data and governance across all engines
  - Accelerators built across multiple engines – common analytics, models, and visualization



Information Governance at a glance



The desire for trusted information drives the requirements for an **INFORMATION INTEGRATION AND GOVERNANCE PLATFORM** that is foundational to big data.

1. Ensure the highest quality information
2. Master data into a single view
3. Govern data throughout its lifecycle
4. Protect and secure all information
5. Integrate all data for a common view
6. Ensure a single understanding and set of knowledge

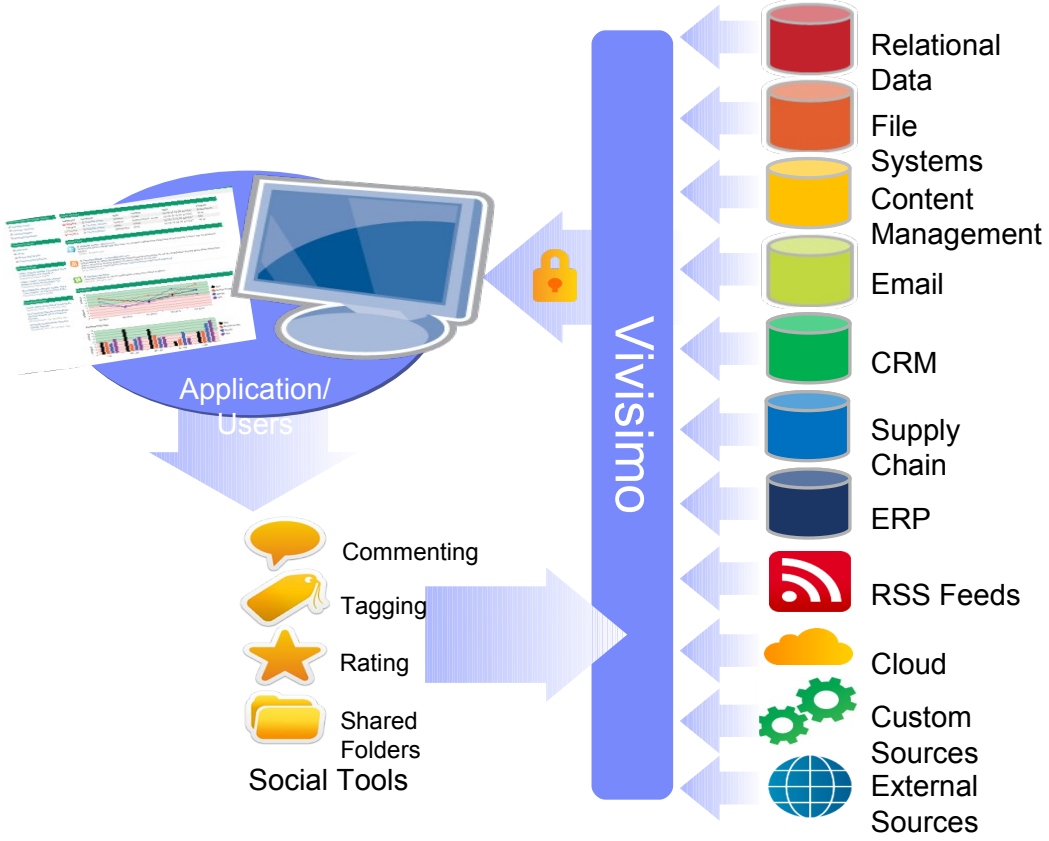
Vivisimo => a great starting point!

Allows organizations to unlock, navigate and visualize big data

- **Quickly unlocks big data**, enabling organizations to navigate all forms of content to discover high value sources
- **Create applications** that combine in a single interface structured, semi-structured an unstructured information
  - 360º view of any topic or entity (customers, products, employees, projects, etc.)
  - Enterprise content + unique big data sources such as log files, tweets, geospatial coordinates, imagery, etc.
- **Proactively push** important and relevant **content** to users based on their role, needs and interest

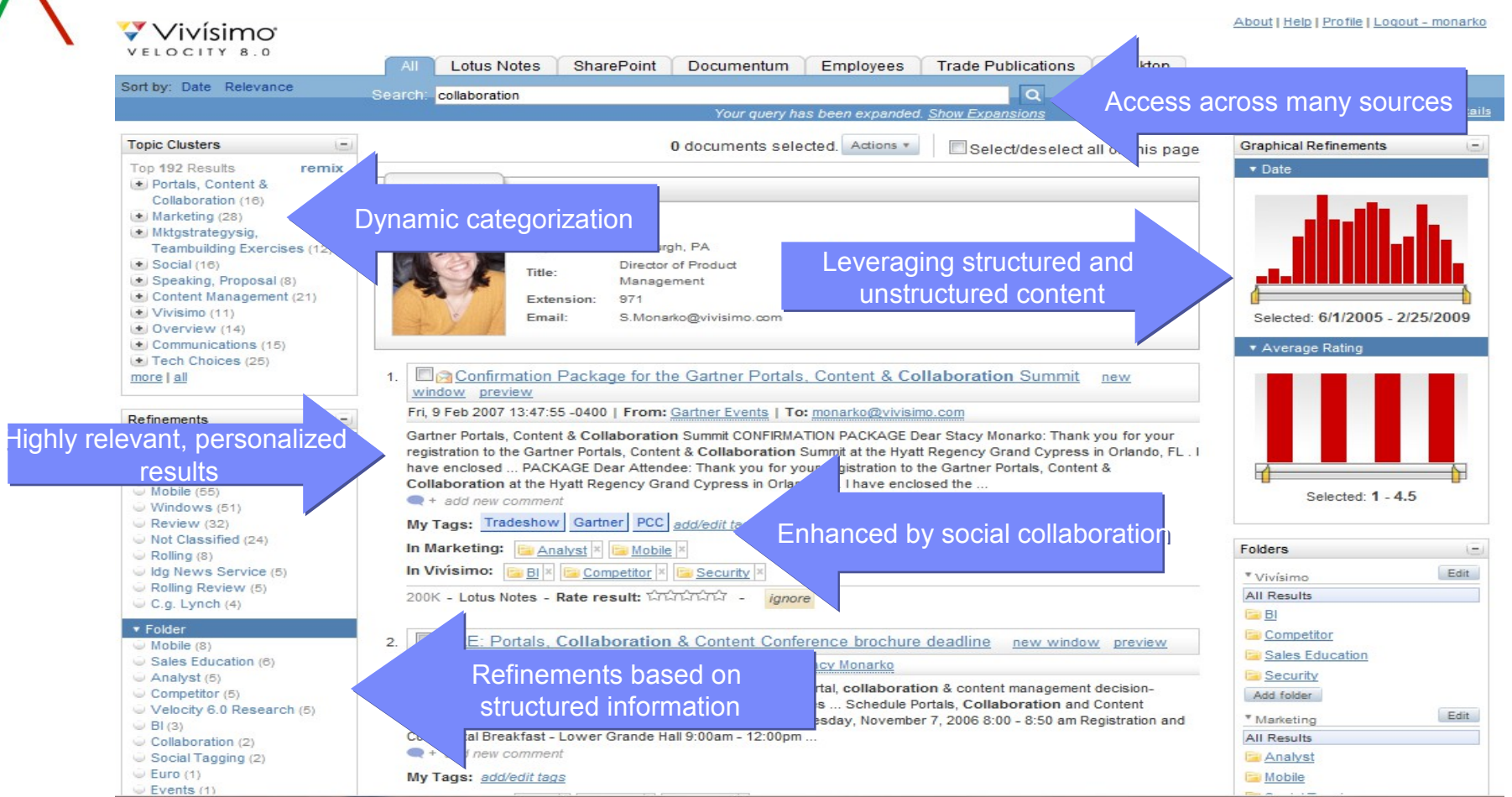
=> Demo's available on the BP Portal!

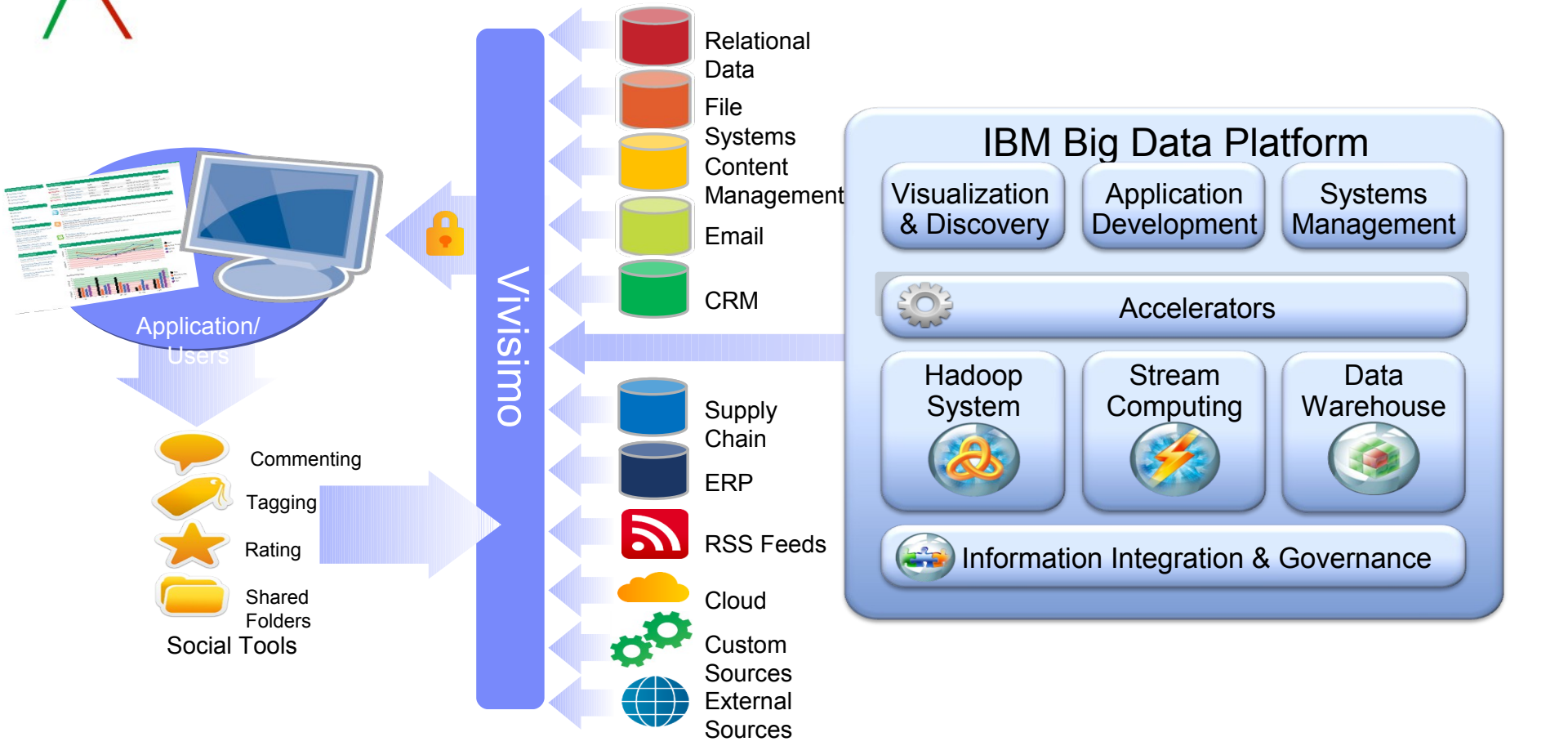
Vivisimo => a great starting point!



- Secure for access to large number of applications and data stores
- Discovery and navigation across the entire enterprise
- Fusion of structured and unstructured information to drive:
  - Better decisions
  - More efficient operations
  - Better understanding of customers
  - Innovation
- Social tools for collaboration and re-use

Navigating enterprise information




Application/
Users
Commenting
Tagging
Rating
Shared
Folders
Social Tools
Vivisimo
Relational
Data
File
Systems
Content
Management
Email
CRM
Supply
Chain
ERP
RSS Feeds
Cloud
Custom
Sources
External
Sources
IBM Big Data Platform
Visualization
& Discovery
Application
Development
Systems
Management
Accelerators
Hadoop
System
Stream
Computing
Data
Warehouse
Information Integration & Governance

PureData

for Transactions

Optimized system delivering data services for transactions

for Analytics

Optimized system delivering data services for analytics

for Operational Analytics

Optimized system delivering data services for operational analytics

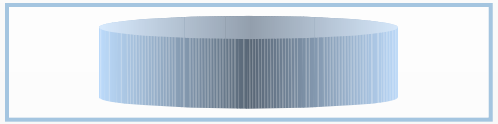
PureSystems

Different types of workloads require different data services

E-commerce

Transaction Processing

Random reads & random updates



Scalable Transactional Database

Random reads & random updates

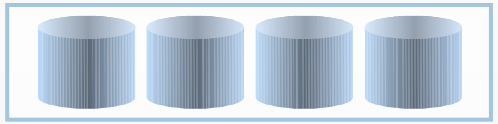
Many transactions with narrow data scope accessing the same database

Shared access to all data

Customer Analysis

Reporting and Analysis

Sequential reads & sequential data loads



Analytics Data Warehouse

Sequential reads & sequential data loads

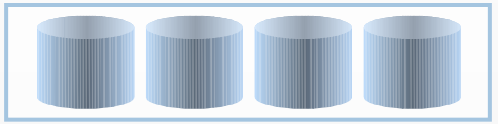
Analytics with broad data scope, split into many parts across data partitions to run in parallel

Partitioned data access

Real Time Fraud Detection

Operational Analytics

Random and sequential reads & data loads + continuous ingest



Operational Data Warehouse

Random and sequential reads & data loads + continuous ingest

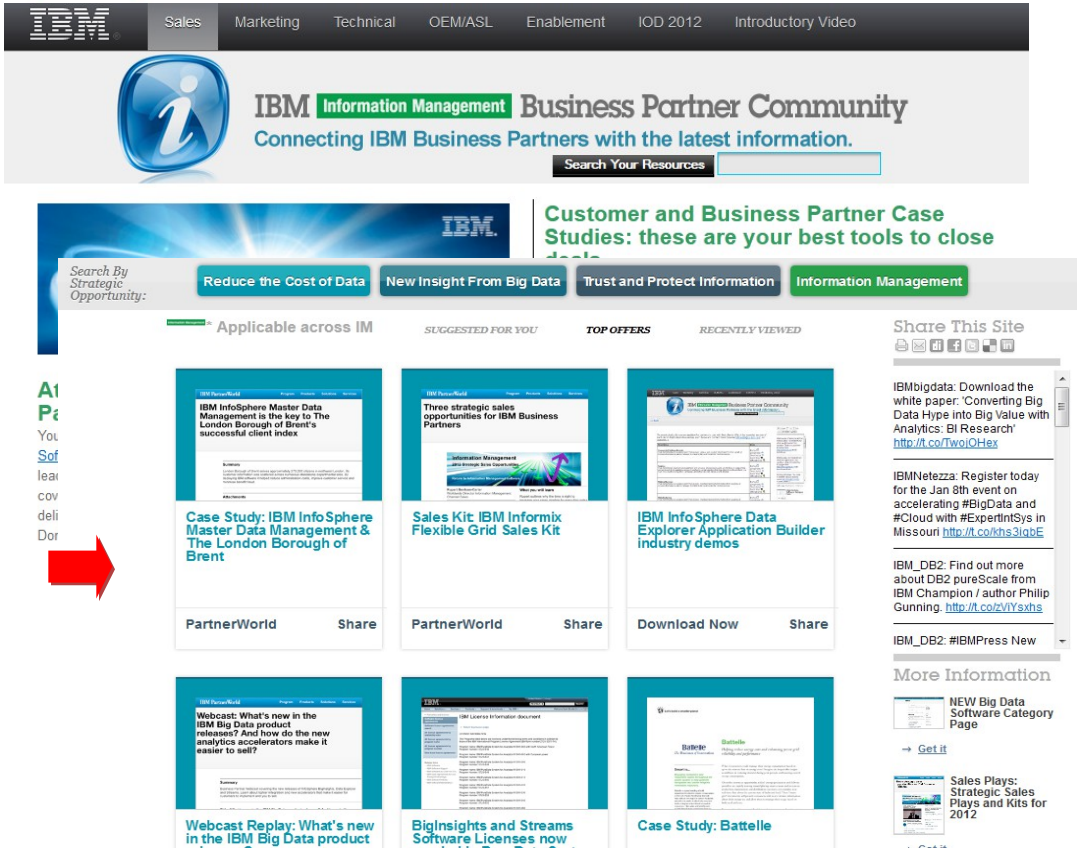
Analytics split into many parts and narrow scope operations, all running in parallel

Partitioned data access

Call to action: become a successful Big Data BP

- Leverage enablements => Bootcamps, PoT's, training-on-the-job, …
- Target account list definition
- Teaming on account strategy
- Leverage wealth of experience from the Big Data team: industry-knowledge, sales & technical experience
- Support target account selling strategy with co-marketing activities

IM Business Partner Community



- **New content and collaboration resource – try it!**
- **Sales enablement training is now available**
- **New Assets added weekly, featured at top**
- **Complement to PartnerWorld, easy to navigate**
- **Watch the introductory video and give the new community a try!**

http://impartnerresources.com