



InfoSphereTM
software

IBM InfoSphere Roadshow – WELCOME

October 2010



AGENDA

- **Introduction / Welcome**
- **InfoSphere Positioning within Information Management**
- **InfoSphere overview Introduction's and Case studies**

Coffee – Demo Area open

BREAK OUT Sessions;

- **Information Server & Foundation Tools (Trusted Data)**
- **Master Data Management (Multi Domain)**
- **Data Warehousing / IBM Smart Analytics System**

Lunch and Demo Area Open

IBM Software

Lotus. software

Rational. software

Tivoli. software

WebSphere. software

Information Management

- Cognos
- FileNet/Enterprise Content Management
- Enterprise Data Management
 - DB2, Informix, U2,
 - Migrations,
 - Optim
- InfoSphere
 - Master Data Management
 - Industry models
 - DataStage/ETL
 - InfoSphere CDC

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- **InfoSphere Positioning within Information Management**
- **InfoSphere – Information Server (Trusted Data)**

Coffee – Demo Area open

- **Master Data Management (Multi Domain)**
- **Data Warehousing / IBM Smart Analytics System**

Lunch and Demo Area Open



InfoSphereTM software

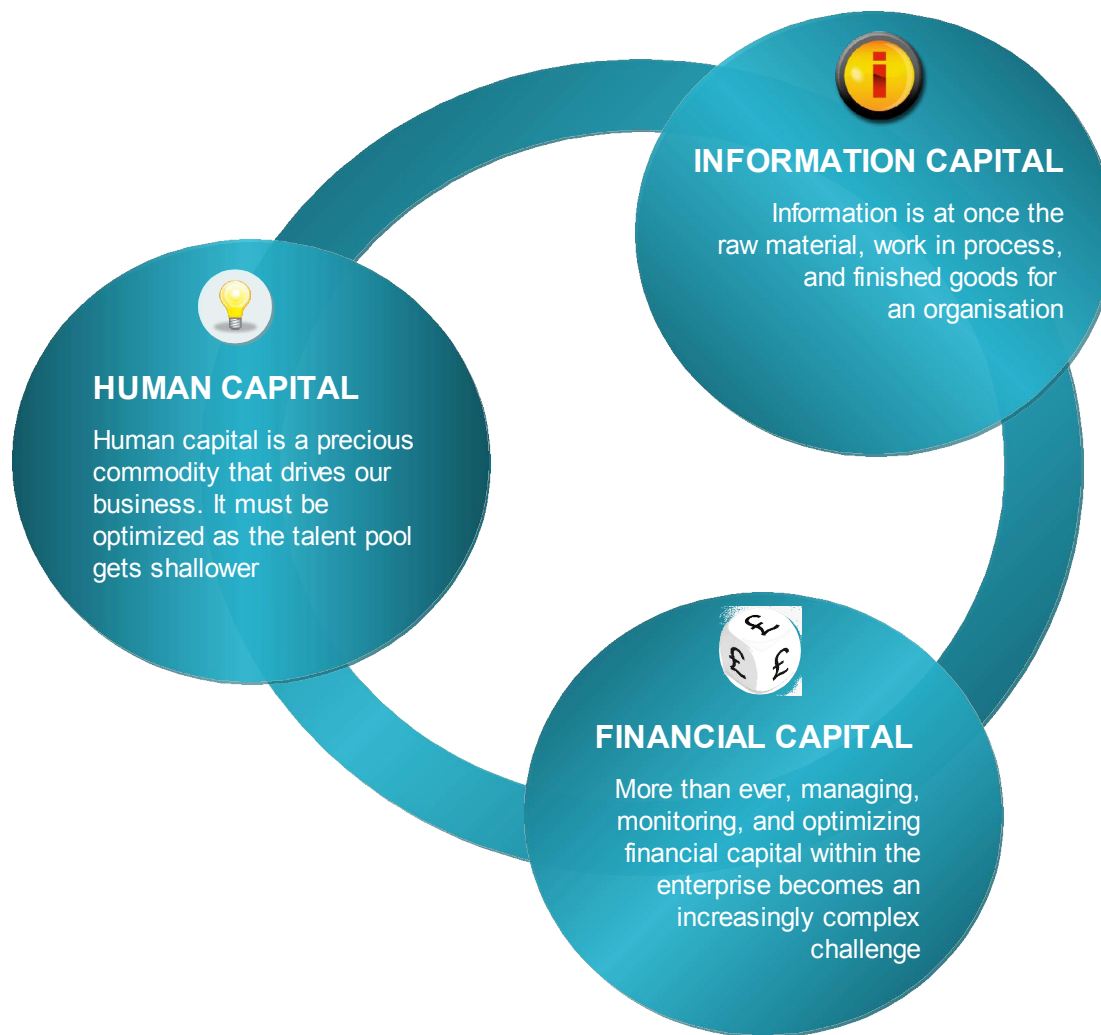
Positioning InfoSphere within an Information Management Strategy

October 2010

Tony Hulme
Information Management Specialist
Lead Architect: London Analytics Solution Centre



Your Capital Assets ...



Optimising Information Capital ...

- ... delivering trusted information
- ... to the right people and processes
- ... at the right time
- ... relevant to the task
- ... for better decisions



Information On Demand

Treating information
as a strategic asset

But for most this is a challenge!

Information Chaos

High Cost. High Risk. Lack of Trust.

Information Explosion and Silos

Volume - Formats - Locations

Multiple silos

People spend time finding information

They don't trust what they find

Not indexed properly

Not complete, authentic or admissible

Increasing litigation risks and costs

No context

Numerous copies

Information leakage

Multiple versions of the truth

Little cross organisational collaboration

Unmanaged and disorganized

Retention and Disposition Policies Not Enforced

Huge amounts of paper

Management by spreadsheet

Destroyed too soon ... Kept forever

Not trustworthy

Shared drive – n Terabytes

Hard to find

Information not re-usable

Relentless growth of email

Positioning Questions ...

1. Do we know what data we have?
2. Do we have a business glossary in place?
3. Do we know how clean our data is - data quality dashboards
4. Do we have trusted information readily available for reporting and analytics?
5. Do we have a single view of key business entities?
6. Do people spend time looking for information - do they trust what they find?
7. Do we have a data quality firewall in place?
8. Do we have data governance in place?

1 in 3

Business leaders frequently make major decisions with information they don't trust

1 in 2

Business leaders don't have sufficient information from across their organizations to do their jobs

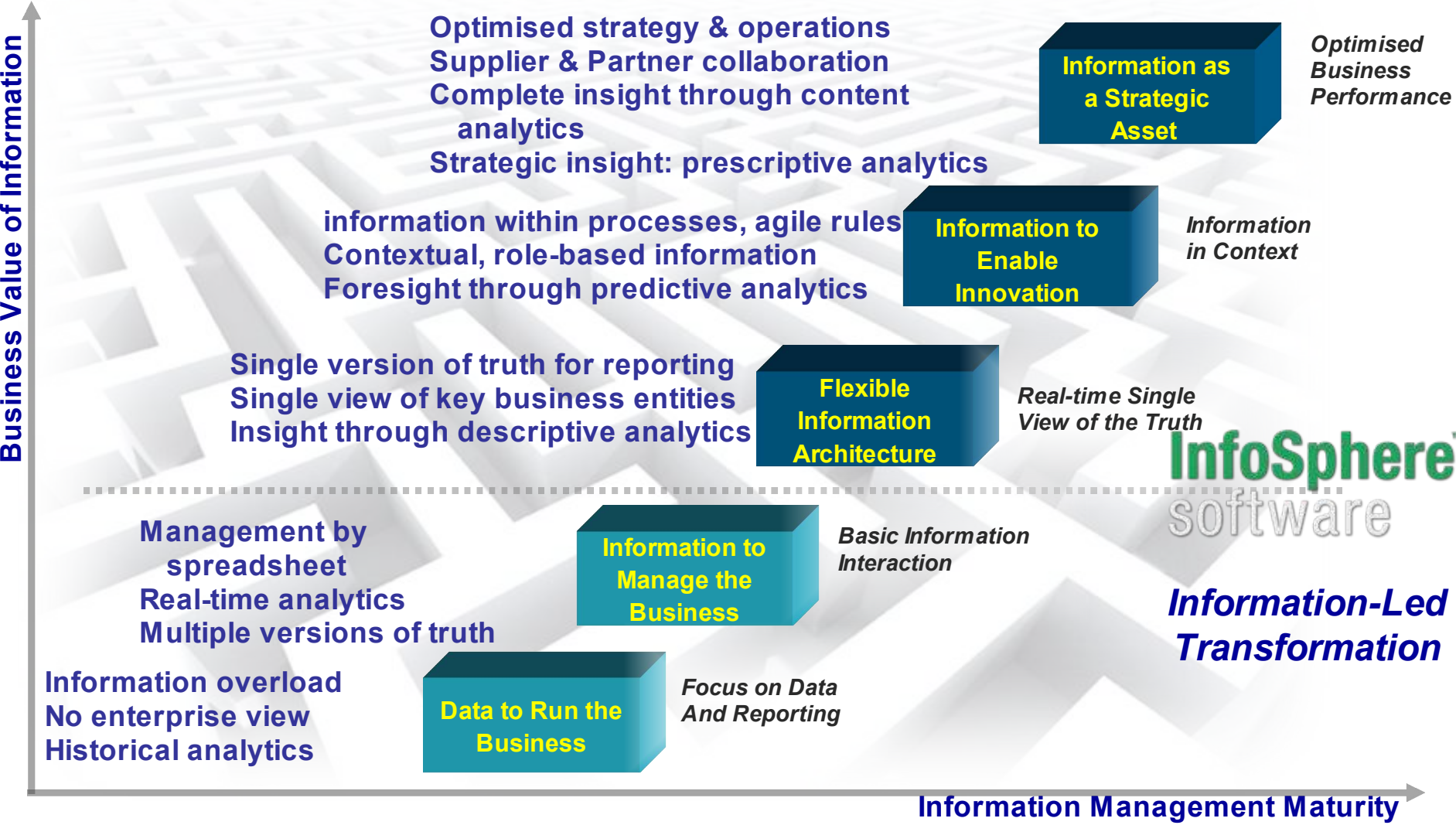
3 in 5

Organizations don't share critical information with partners and suppliers for mutual benefit

Source: IBM Institute for Business Value - April 2009

InfoSphere addresses these questions

Information Management Maturity Model



Transformational Questions

1. Do we know what kind of insight is critical for our future success? **Business**
2. Do we have a clear and decisive plan to instrument, connect and invest in the things we must to gather that insight? **IT**
3. Based on this insight, how do I optimize my strategy and operations? **Business & IT**
4. What must I change about my leadership, organization, and governance approach to drive the maximum benefits from this new kind of intelligence? **Business & IT**

How do we address these questions?

Information On Demand

Unlocking the Business Value of Information

InfoSphere™
software

Analytics and Performance Optimization

Trusted Information Management

Data Management

Enterprise Content Management

Information Agenda Business Optimisation

Plan, understand and optimise business performance

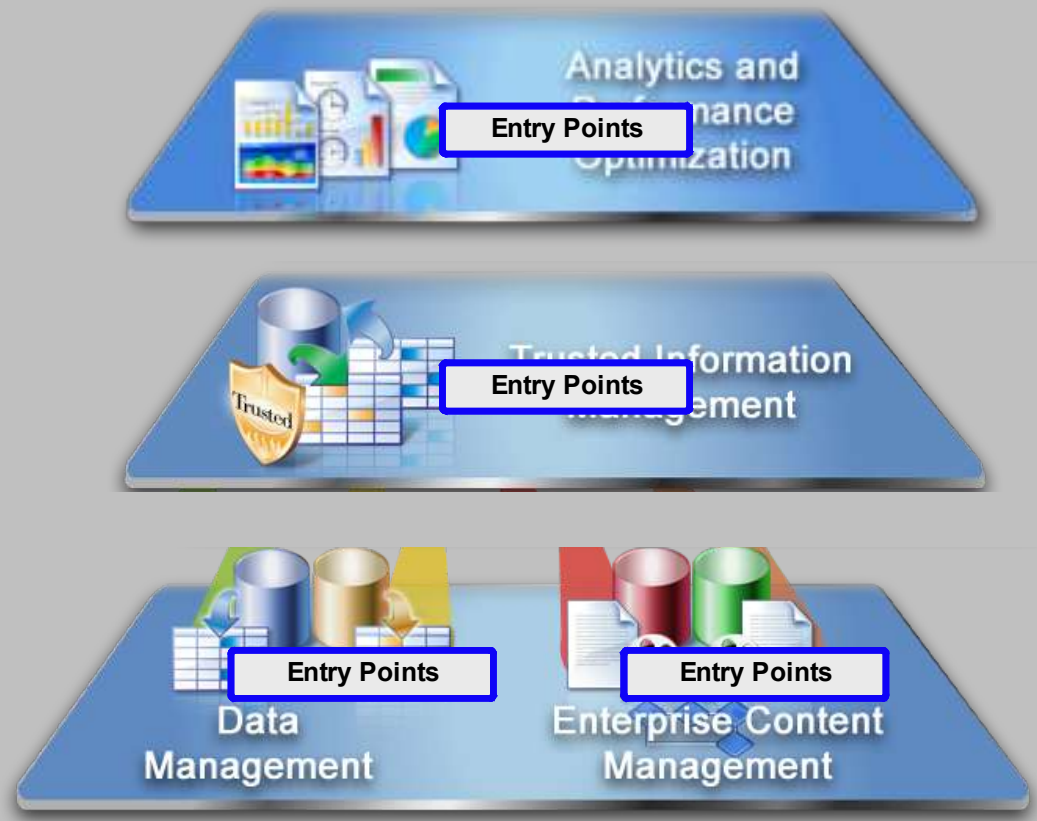
Establish and maintain an accurate, trusted single version of the truth

Manage information over its lifecycle and use it as part of business processes

Application Agenda Business Automation

Industry Models, Accelerators, Blueprints
 Strategy (Vision/Roadmap)

Information On Demand Reference Architecture



Taxonomy, Governance, Security, Privacy and Compliance

Provisioning: Service Oriented Architecture, Cloud

Infrastructure Platform and Storage Virtualisation; Messaging Infrastructure



Authored by: Tony Hulme & Doug Coombs

Industry Models, Accelerators, Blueprints
Strategy (Vision/Roadmap)

Access & Delivery

Portals & Web Applications

Line of Business Applications

Collaborative Solutions

Composite Applications

Mobile Devices

Business Process Management

Business Modelling & Simulation

Process Execution Design

Workflow Management

Rules Management

Services Choreography

Advanced Analytics & Optimization

Enterprise Search

eDiscovery

Identity Analytics

Predictive Analytics

Prescriptive Analytics

Content Analytics

Stream Computing

Business Intelligence & Performance Management

Measuring/Monitoring (Dashboards)

Strategy Planning (Scorecards)

Query and Reporting

Analysis and Visualisation

Budgets, Forecasts and Plans

Enterprise Information Management

InfoSphere[®]
software

Enterprise Data Management

Data Lifecycle Management

Structured Data Management / Optimisation Tools

Enterprise Content Management

Content/Records Lifecycle Management

Automated Collection & Classification

eMail

Documents

Digital Assets

Forms

Host output

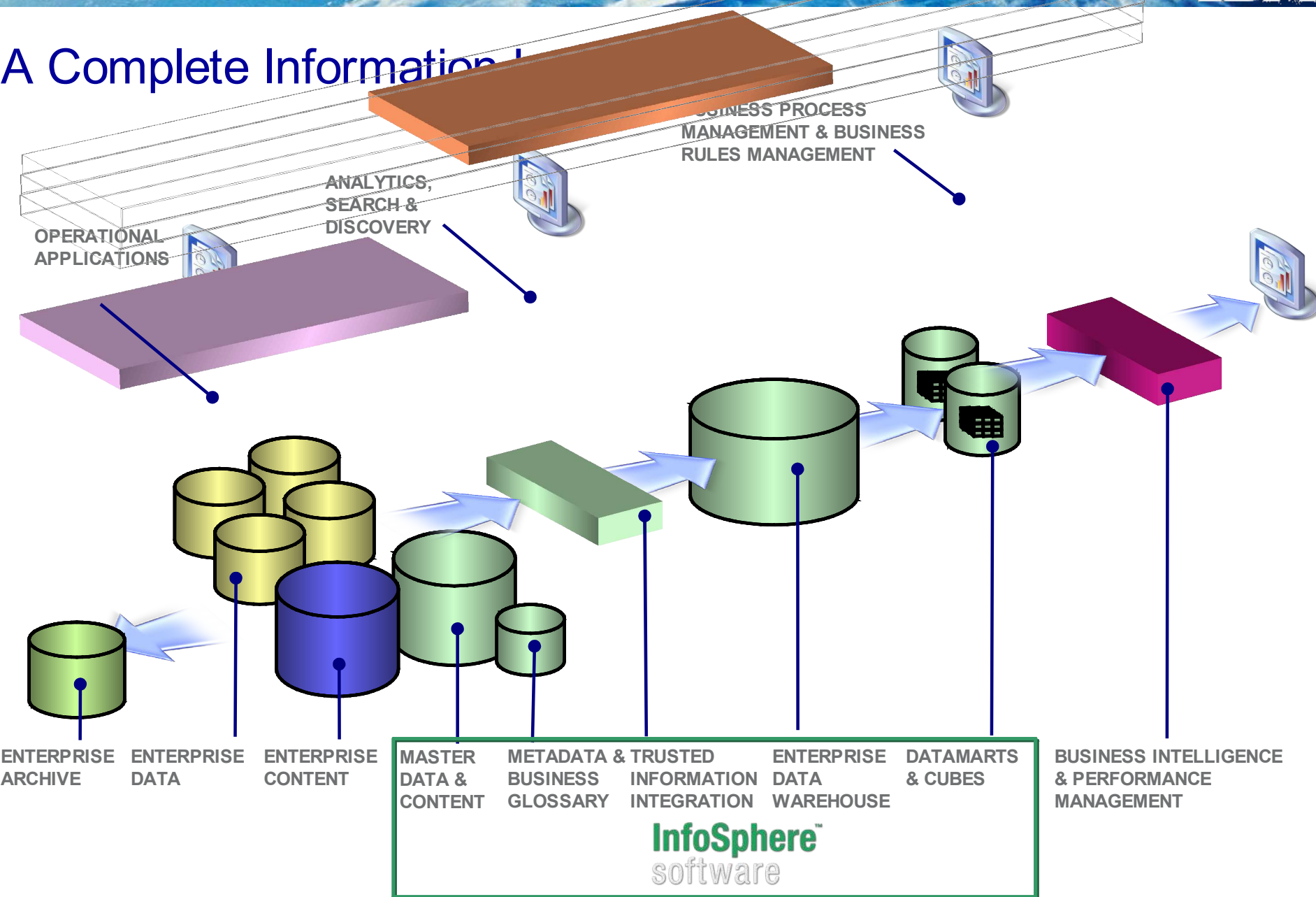
Infrastructure

Platform and Storage Virtualisation; Messaging Infrastructure

Taxonomy, Governance, Security, Privacy and Compliance

Provisioning: Service Oriented Architecture, Cloud

A Complete Information System



MASTER DATA & CONTENT	METADATA & TRUSTED BUSINESS GLOSSARY	ENTERPRISE DATA WAREHOUSE	DATAMARTS & CUBES
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InfoSphere™
software

This represents an investment of \$12B in last 4 years

Optimized Business Performance

Leverage information to better understand & optimize business performance



BI & Performance Management
2008



Business Rules & Optimisation
2008



Predictive Solutions
2009

Trusted Information

Establish accurate information for a single version of the truth, managed over time



Identity Resolution
2005



Enterprise Data Integration
2005



Customer Data Integration
2005



Name Recognition
2006



Metadata Management
2006



Dynamic Data Integration
2007



'Light Touch' MDM
2010

Integrated Data & Content Management

Manage data & content over its lifecycle and as part of processes



Search & Content Management
2005



Business Process & Content Management
2006



Enterprise Data Management
2007



Real-time, In-Memory Data Management
2008



Data Relationship Management
2009



Database Solutions Monitoring
2009

NYPD Crime Information Warehouse

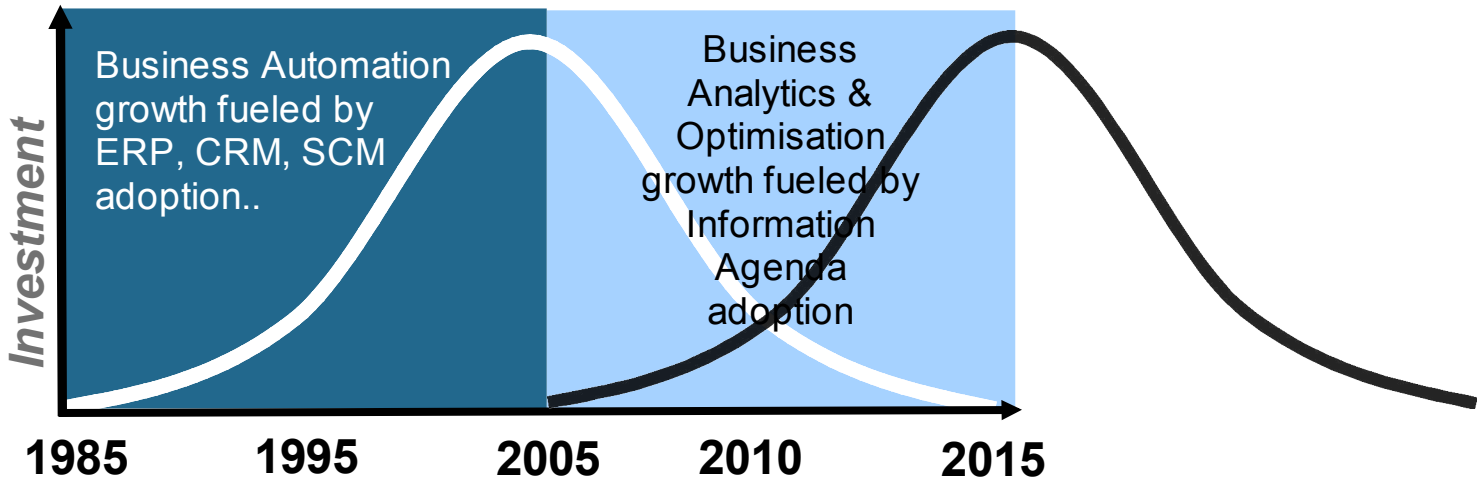


The Real Time Crime Center provides investigators with information about crime scenes, potential suspects and other leads to bring criminals to justice as soon as possible.

Press Conference: www.nyc.gov and search for Real Time Crime Center

Video: [Video Link](#) and search for Real Time Crime Center

Increasing Focus on Business Analytics & Optimisation



Information Agenda

Pervasive, Real-time Advanced Analytics

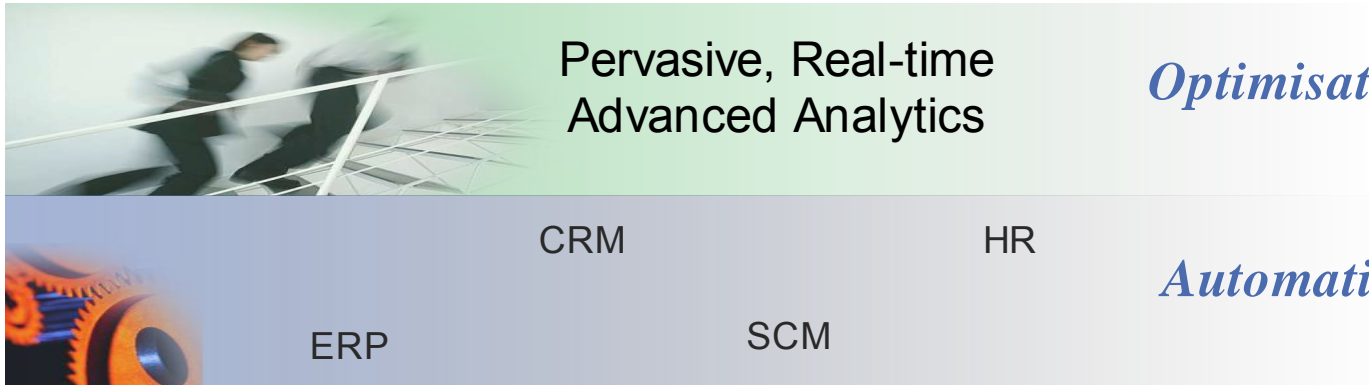
Optimisation

Application Agenda

CRM HR

Automation

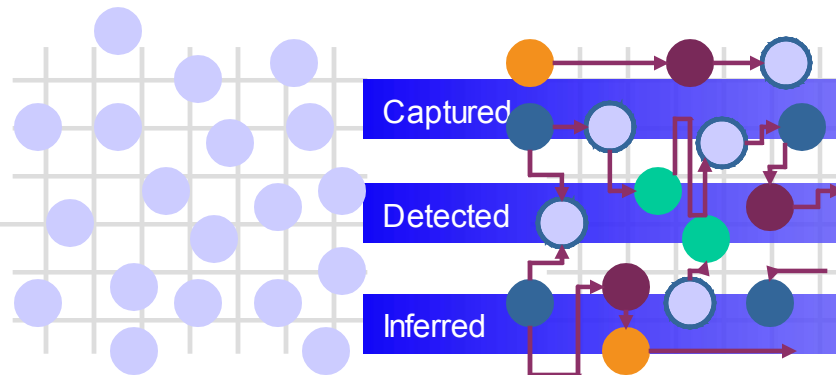
ERP SCM



An agile trusted information platform is essential for this

Levels of analytical sophistication

Analytics Sophistication →



What is happening	What could happen? <i>Simulation</i>		
How many, how often, where?		How can we achieve the best outcome? <i>Optimisation</i>	
What exactly is the problem?	What if these trends continue? <i>Forecasting</i>		
What actions are needed?	What will happen next if? <i>Predictive Modelling</i>	How can we achieve the best outcome and address variability? Stochastic Optimisation	Extracting insight, concepts and relationships

Descriptive Analytics

Predictive Analytics

Prescriptive Analytics

Content Analytics

Structured Data & Unstructured Content

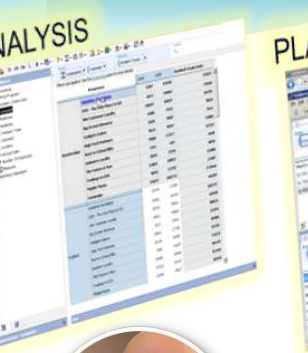
Made consumable and accessible to everyone

Descriptive Analytics

How are we doing?

Why are we on/off track?

What should we do next?



Executive



Business Manager



Casual Business User



Line Manager



Business Analyst

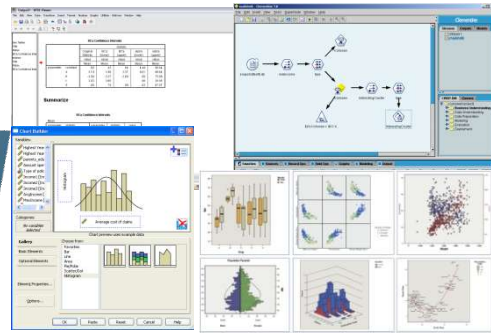


Financial Analyst

Predictive Analytics

Analyze ALL forms of data to provide insight and predict the future

Understand



Predict

Predicting what will happen

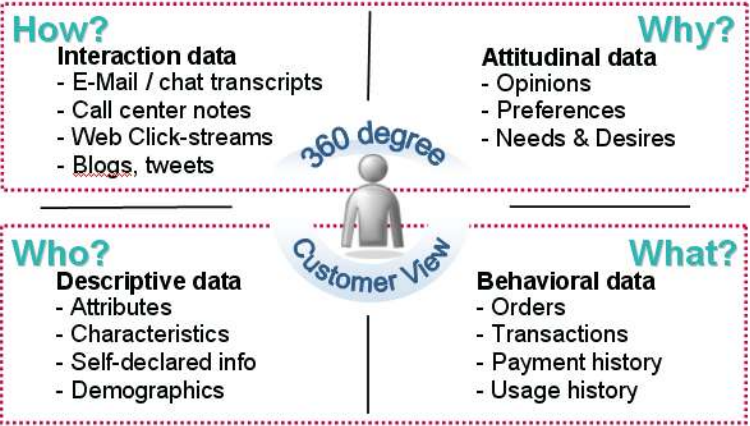


Recommend the most appropriate action to take

Act

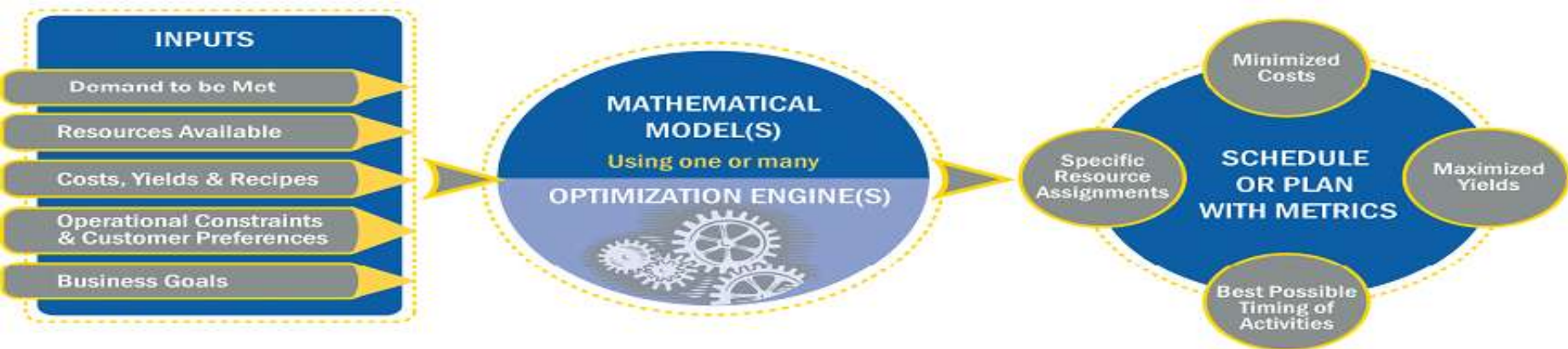


High-value, dynamic



"Traditional"

Prescriptive Analytics



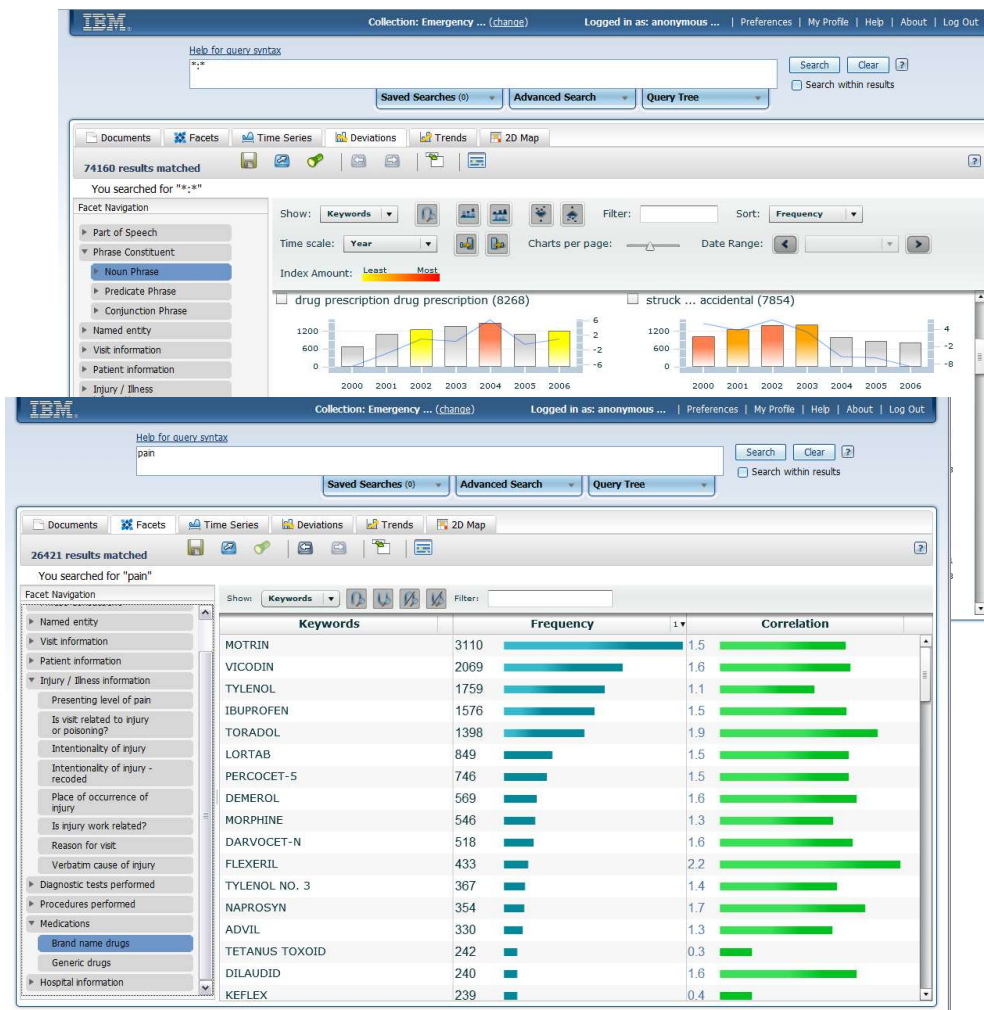
Based on what we know and have predicted –
how to optimise day to day operations –
or strategic planning –
exploring alternatives –
and understanding trade-offs

Also based on what we know is variable –
Stochastic optimisation

- Manage risk
- Reduce Cost
- Maximize profitability
- Increase asset utilization
- Shorten production & service delivery cycle times
- Better, more flexible service to customers
- More personalized schedules to employees
- Reduce inventories

Content Analytics

- Entity and relationship extraction
- Trend and pattern detection and anomaly highlighting
- Analysis and categorization with exploratory mining and operational reporting
- Pre-built and customizable visualization



The Information Agenda

How to Approach the IOD Vision



Foundational Tools



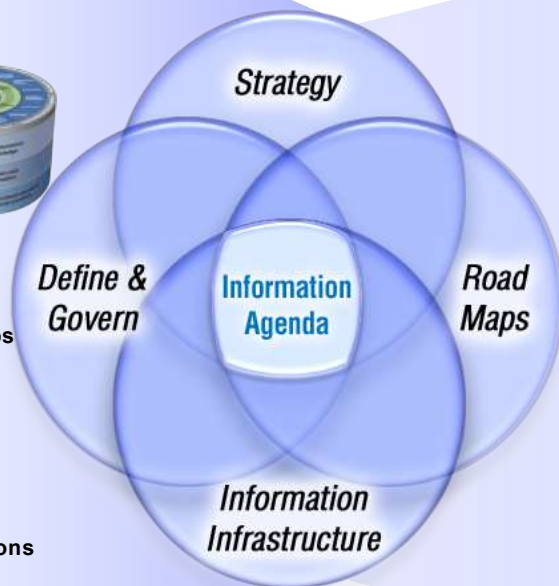
Information Guides & Workshops



Accelerators for industry solutions



Competency Centers



Information Agenda Roadmap Workshop

Begin developing your Information Agenda

Build vision and high level roadmap

2-3 days on site with relevant IT and Business people

Additional 2 weeks work for IBM team

IBM IA consultant

Executive Briefing at the IBM Hursley Lab

Take a deeper dive into specific solution areas.

Laboratory and product executives, IBM Fellows, Distinguished Engineers, Senior Technical Staff Members, and developers deliver our highly customized and fully facilitated briefings.



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software

Watson



[Hyperlink: IBM Project Watson Video](#)

[Hyperlink: IBM Project Watson Article](#)

NYPD Crime Information Warehouse



The Real Time Crime Center provides investigators with information about crime scenes, potential suspects and other leads to bring criminals to justice as soon as possible.

Press Conference: www.nyc.gov and search for Real Time Crime Center

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InfoSphere™ software

Introduction – Information Server & Foundation Tools

Paul Ranson
InfoSphere Information Server - Sales





Industry Models, Accelerators, Blueprints
Strategy (Vision/Roadmap)



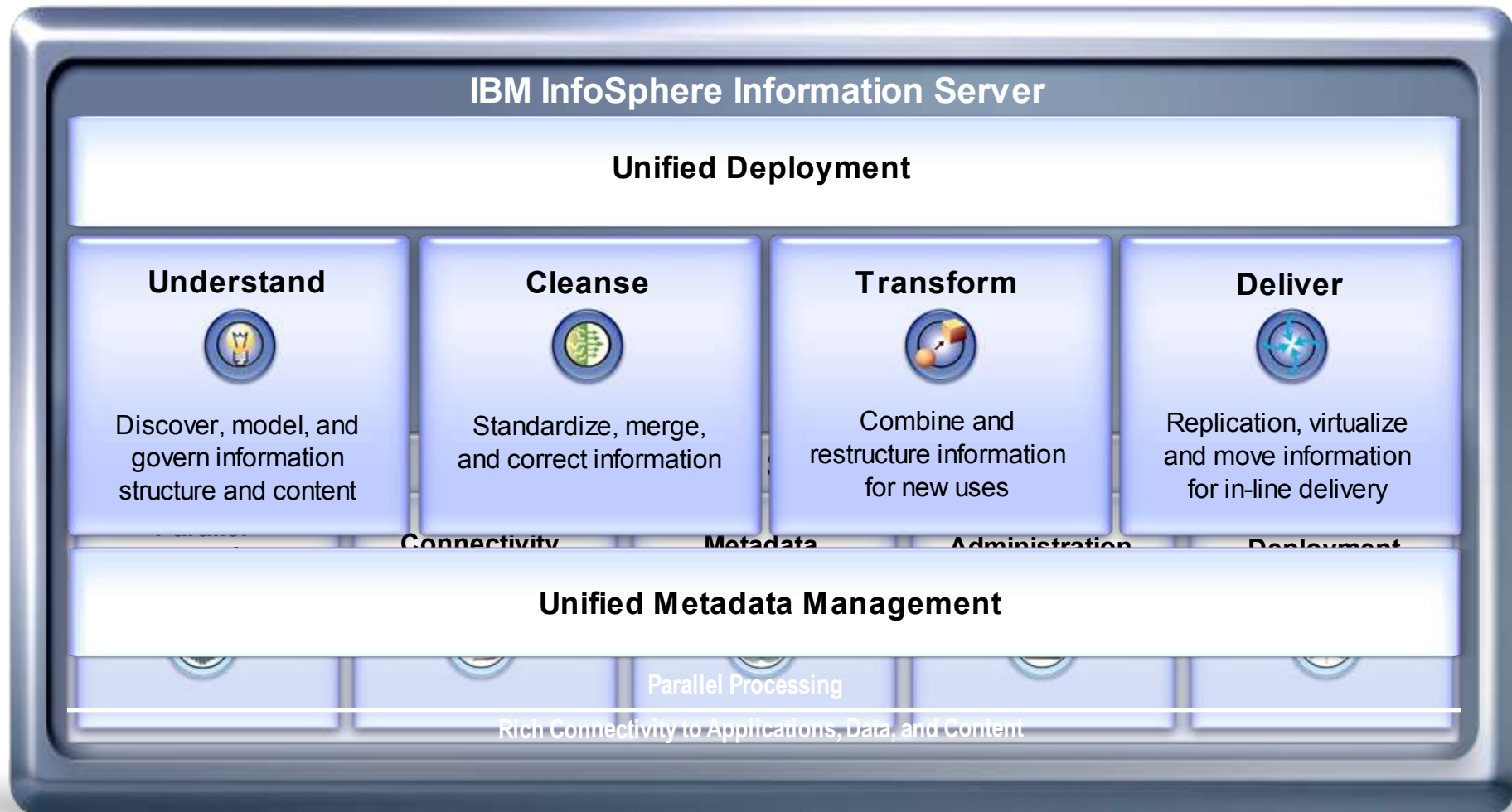
Taxonomy, Governance, Security, Privacy and Compliance

Provisioning: Service Oriented Architecture, Cloud

Infrastructure

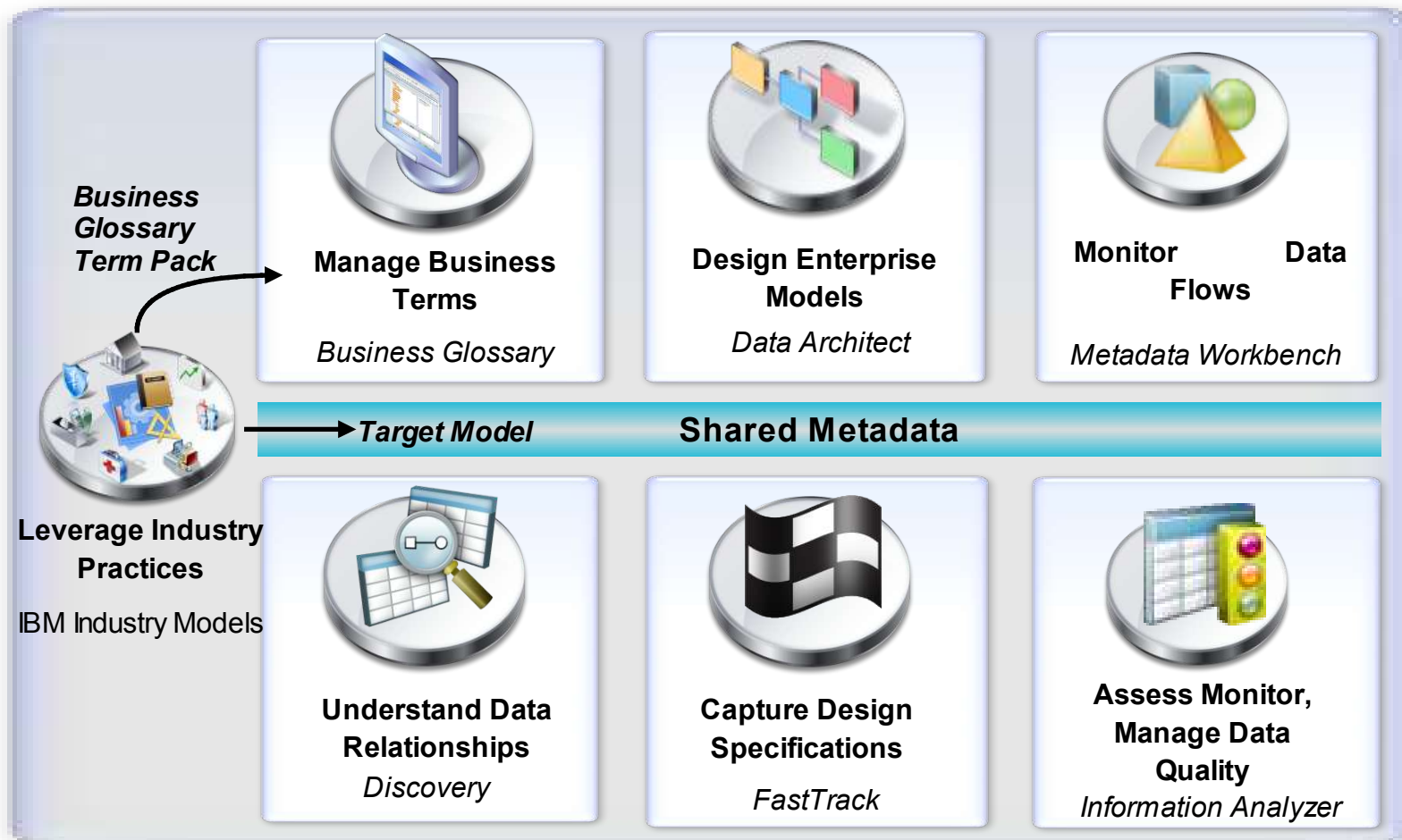
Platform and Storage Virtualisation; Messaging Infrastructure

InfoSphere Information Server











IBM InfoSphere Foundation Tools

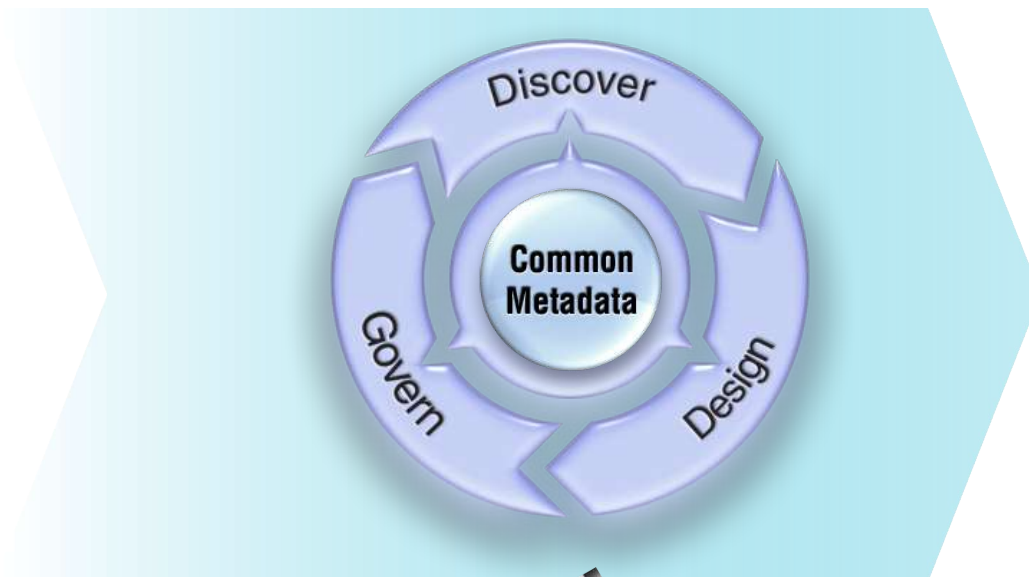
Integration drives collaboration across Business and IT



Foundation Tools

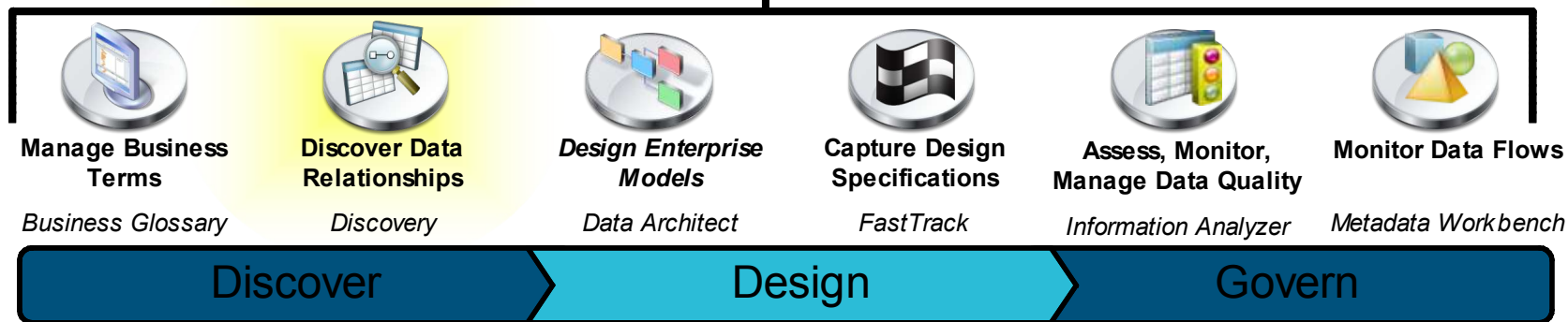
Information-Centric Projects

-  Test Data Generation
-  Application Retirement & Consolidation
-  Data Archival
-  Data De-identification
-  Data Quality
-  Data Integration
-  Master Data Management
-  Data Warehousing



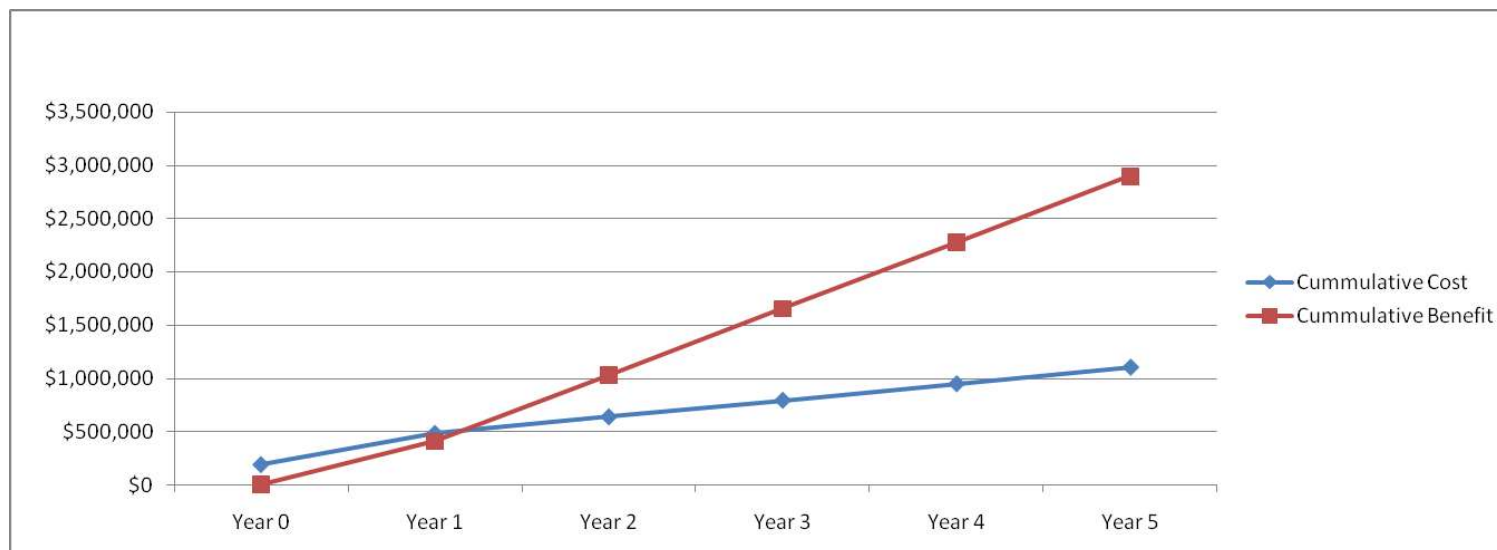
Leverage Industry Practices

IBM Industry Models



Cumulative Cost versus Benefit

Full Case Study Available at: <http://www-01.ibm.com/software/data/infosphere/foundation-tools/index.html>



- **The Forrester TEI study found that by spending \$1.1 million over five years on implementing InfoSphere Foundation Tools, the representative organization:**
 - Reached **break-even** on their investment in InfoSphere Foundation Tools after **1.23 years** - **Risk adjusted five year ROI – 132%**
 - **Unadjusted risk five years ROI = 145% Payback = 1.17 Years**

Information Integration



UK Ministry of Defence | Provides logistics functions for the Army, Navy and Royal Air Force, managing 20% of UK defence budget and £22 billion in assets

Problem

Separate logistics systems for each military wing increased inventory and IT costs; created data quality problems; limited group purchasing power; and prevented NATO compliance. Manual consolidation was estimated at £31.5 million and 11 person-years.

Solution

QualityStage was used to automate the process. **Consolidated inventory items and suppliers** were matched against the NATO master, cleansed, de-duped and assigned a unique owner. There are now master files to support the new applications.

Result

Project completed in 9 months at a total cost of £1.8 million -- £30 million less than original estimate.

In addition, 40,000 items were identified for disposal or deletion, which represents a **2.5% reduction in the MoD inventory and a savings of £18 million!**

Billing Consolidation

Together we can achieve
the right balance

- London Energy is part of [EDF Energy](#)
- one of the largest energy companies in UK,
- employing 11,300 people across the country.
- EDF Energy supplies energy services to over 5 million customer accounts in the UK
- Through **London Energy**, **Seaboard Energy**, **SWEB Energy** and **Virgin Home**

Business Goal	Problem & Opportunity	Solution	Impact and Value
<ul style="list-style-type: none"> ▪ Become the UK's largest regulated and private electricity network operator in the UK 	<p>Problem: Disparate customer, metering and billing applications that needed to be consolidated into a single application</p> <p>Opportunity: Bring together disparate data into Billing Application from these legacy non-SAP sources. Support better data quality</p>	<p>Use ASCL's platform to prepare and load data into the new Billing Application in the correct format, automatically use QualityStage and DataStage to load better quality data into application.</p>	<ul style="list-style-type: none"> ▪ Time to delivery reduced by 45% - 9 months to 5 months ▪ 43% less resource (20 developers rather than 35 Cobol programmers) ▪ Reduced risk vs hand coding – unknown elements with hand coding ▪ Integration development costs were reduced by £2m over estimate ▪ Consolidated billing sys delivered estimated weekly savings £1m per week

Insurance Application Consolidation



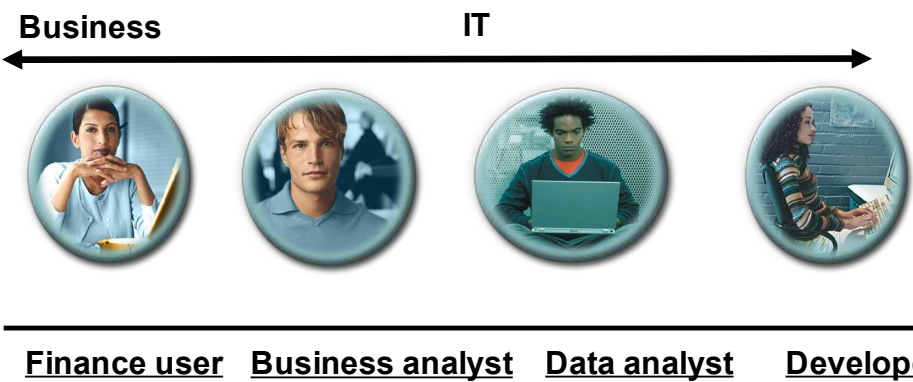
- Royal & Sun Alliance is one of the world's leading multinational insurance groups.
- Our focus is upon general insurance but we do have a small number of life operations
- We have leading or significant market positions in the UK, Scandinavia and Canada.
- Employee around 32,000 people
- business in some 130 countries and have some 20 million customers around the globe.

Royal & SunAlliance in the UK

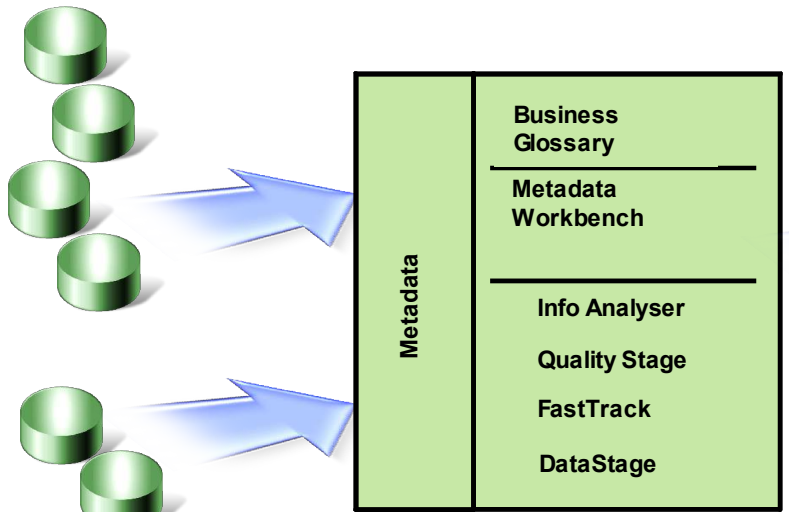


Business Goal	Problem & Opportunity	Solution	Impact and Value
<p>Create a competitive advantage by installing a rapid implementation of a new Application suite</p>	<p>Problem: Disparate customer policy and claims applications that needed to be consolidated from 150 applications into the Accenture Insurance Suite.</p> <p>Opportunity: Bring together disparate data from 150 systems into the new AIS application</p>	<p>Use ASCL's platform to Analyze, Cleanse and load data into the new AIS Application in the correct format, automatically use QualityStage and DataStage to load better quality data into application.</p>	<ul style="list-style-type: none"> ■ Reduce risk by analysing larger amounts of data ■ Reduced man days from 15000 to 3000 ■ Cleanse Sourced Systems prior to loading into new application ■ Saved £2-3million on data migration ■ Regulated reporting deadlines met ■ Single View of Customer

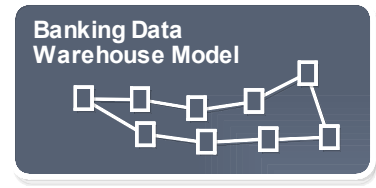
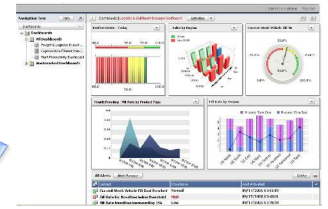
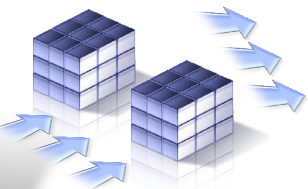
BREAK OUT Session 'Trusted Information'



Source



OLAP





InfoSphereTM software

Introduction – Master Data Management

Vis Bowatte
InfoSphere Solution - Sales



Islands of key business data = no master data

Slow time to market for products, poor customer satisfaction, missed revenue opportunities

Key Business Information



A Customer ...

Name: Jane Smith
 Address: 123 Oak
 Account #: 44444
 Transaction: purchased a gas grill



A Product ...

Name: Gas Grill
 SKU: 1111111
 Current Price: \$550



A Vendor ...

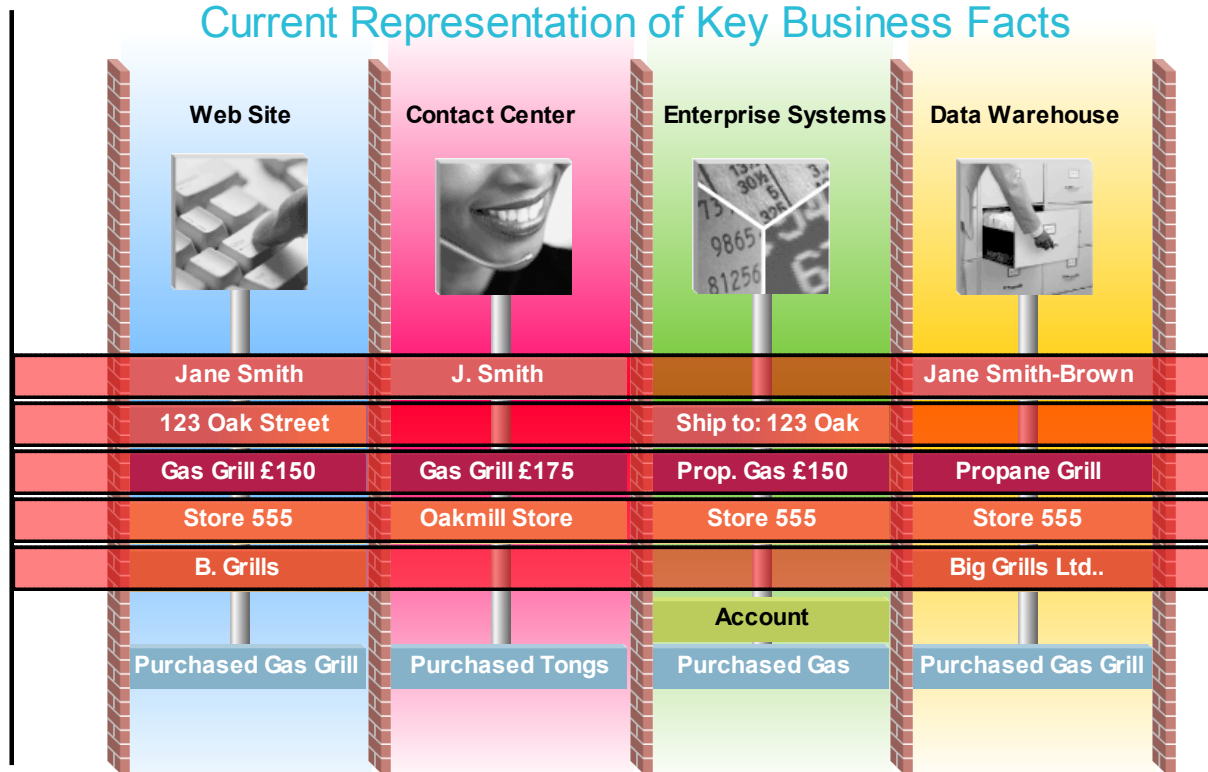
Name: Big Grills Ltd



A Location ...

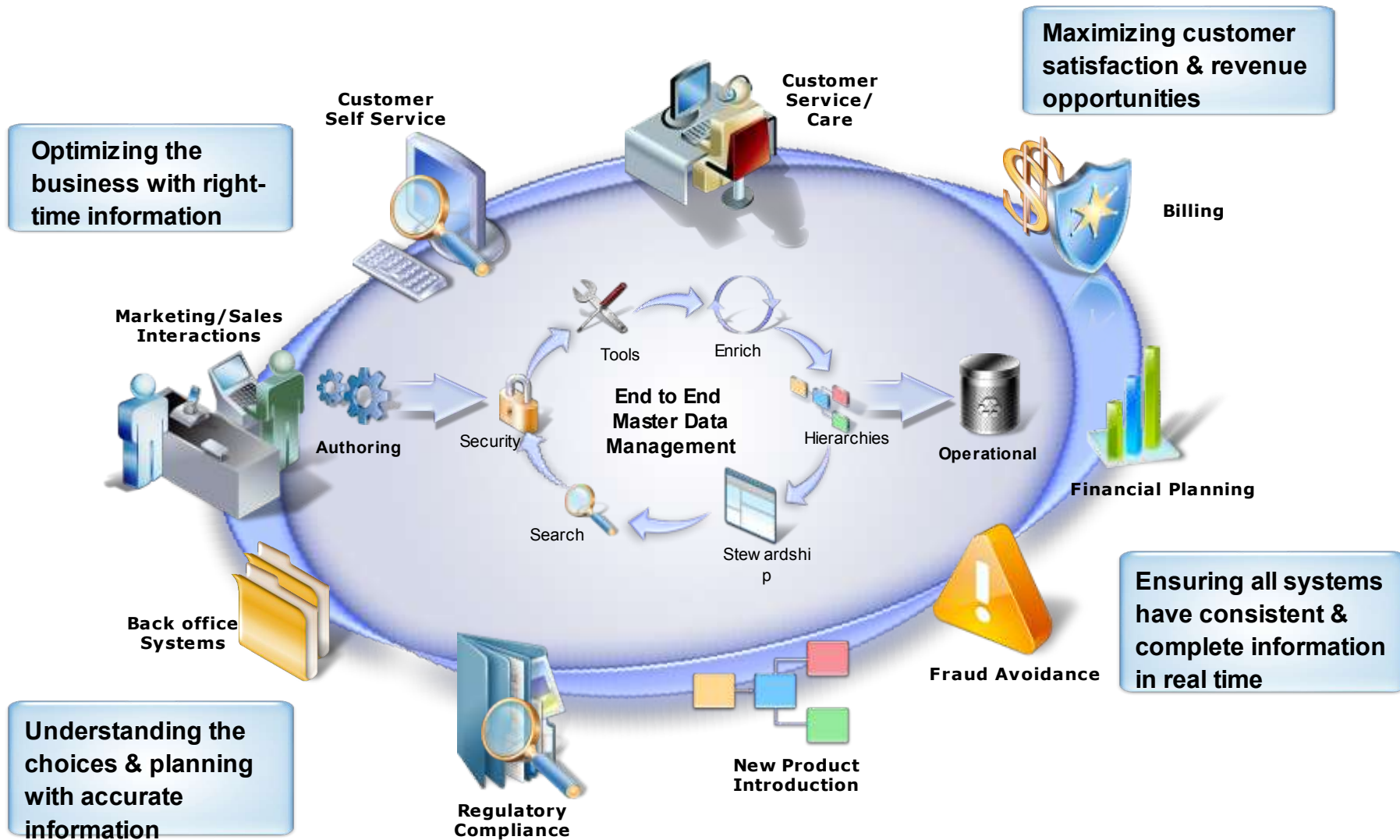
Store #: 555

Current Representation of Key Business Facts



Applications force you to manage data in silos. MDM is designed to manage a complete and accurate profile of all key data across the enterprise, providing each application with accurate and timely information.

The Effect of Information on your Business



Client Case: Heinz

\$10 billion global food manufacturing company
32,500 people around the globe
Thousands of food products manufactured on 6
continents and sold in more than 200 countries and
territories



Business Need

1. Consolidate Master Data (Products, Vendors and Customers) from legacy systems and siloed applications inherited from various acquisitions
2. Provide legacy systems (Purchasing, e-Business, Supply Chain) with a single version of the truth
3. Ensure data consistency and accuracy and therefore reduce error-processing costs
4. Reduce data maintenance costs with a centralized data repository and business processes
5. Allow the search and finding of master data information, globally, to improve business decisions making and speed to market

InfoSphere MDM Server for PIM

1. Central repository for Product, Vendor and Customer data with harmonized classification, shared across multiple countries (multi language, multi currencies and localized data)
2. Data Standards and Data Dictionary required to support the business processes
3. One-stop data maintenance with streamlined business processes, data validation and deduplication, supporting the data stewardship strategy
4. Flexible solution supporting business processes changes and strategic initiatives (acquisitions, GDS)
5. Automated data synchronization across multiple systems (SAP, Manugistics, etc.)
6. Consolidated reporting using common codes giving a global view on master data
7. 1st deployment in the UK, Ireland and Hungary in 2006 - On-going deployment in Europe and WW

Irish Life & Permanent

Gaining a single source of truth



Challenge

With customer information duplicated in and stored across many different systems:

- *Staff couldn't understand each client's relationship with the company so didn't know when clients were having a problem*
- *Service staff could not accurately identify cross-sell opportunities*
- *The company couldn't provide customers with online access to all their holdings using a single PIN number.*

Solution

- *IBM InfoSphere™ MDM Server*
- *IBM InfoSphere Information Server*
- *IBM WebSphere MQ*

Benefits

- Improved customer satisfaction and reduced costs
- Improved ability to cross-sell services
- Enabled the delivery of new services

“ We've standardized our customer name and address data using IBM InfoSphere QualityStage. This allows us to identify, match and merge duplicate records so we have a single view of our customers.”

— Noel Garry
Executive Manager
Irish Life & Permanent

Case Study: Capital One



Customers:

- 160 Million Records
- Individuals & Organizations
- Identity, Business & Household Relationships

Systems:

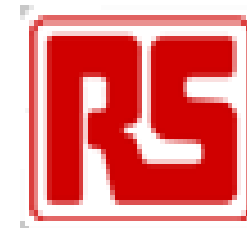
- 8 Different Systems
- LOB Centric

Business Lines:

- Credit Cards
- Auto Finance
- Direct Banking
- Loans

- *Optimized Marketing Effectiveness*
 - Targeted rewards programs and up-sell/cross-sell offers
 - Established House-holding relationships within the CDI Hub to minimize offers going to the same household
 - Tools to measure the effectiveness of marketing campaigns
- *Improved Compliance*
 - Improved fraud prevention capabilities
 - Increased privacy compliance, including opt-out management
 - Ability to match with third-party lists such as OFAC
- *Increase Product & Account Penetration via:*
 - Up-sell/cross-sell
 - Offering history
 - Improved customer service
 - Understanding household valuation
- *Registry Style Customer Master*

Client Case: RS Components



Leading international high service distributor of electronic, electrical and industrial supplies

33% of sales via e-Commerce

5,700 employees, 27 countries

Business Need

1. Consolidate product data across all geographies
2. Moving from 600k to 2.5M products
3. Multi-channel strategy with an existing large print catalogue and strong focus on reducing time to market (Web)
4. Streamline business processes to manage product information more efficiently and reduce data quality issues

InfoSphere MDM Server for PIM

1. WPC as a central repository allowing to register, dedup, and enrich new products across all regions and product types
2. Capability to adopt existing products already available in other regions
3. Single version of the truth available for local enrichment in the ERP and for direct publication to the WEB.
4. Step increase in throughput capabilities
5. 1.8M items (increasing by 120k / year)

IBM Smart Analytics System



Paul Ranson / Chris Williams
Data Warehousing - Sales

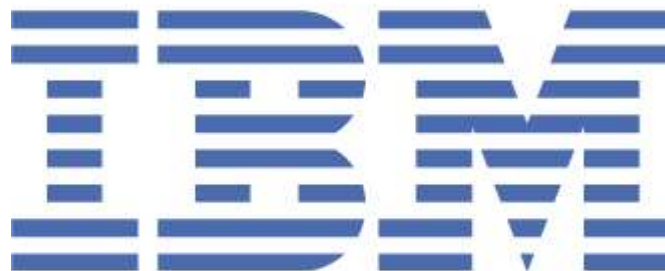


IBM Smart Analytics System

Overview

- ✓ IBM Smart Analytics System Overview
- ✓ The Smart Analytics System Family
- ✓ Features and Capabilities - whiteboard

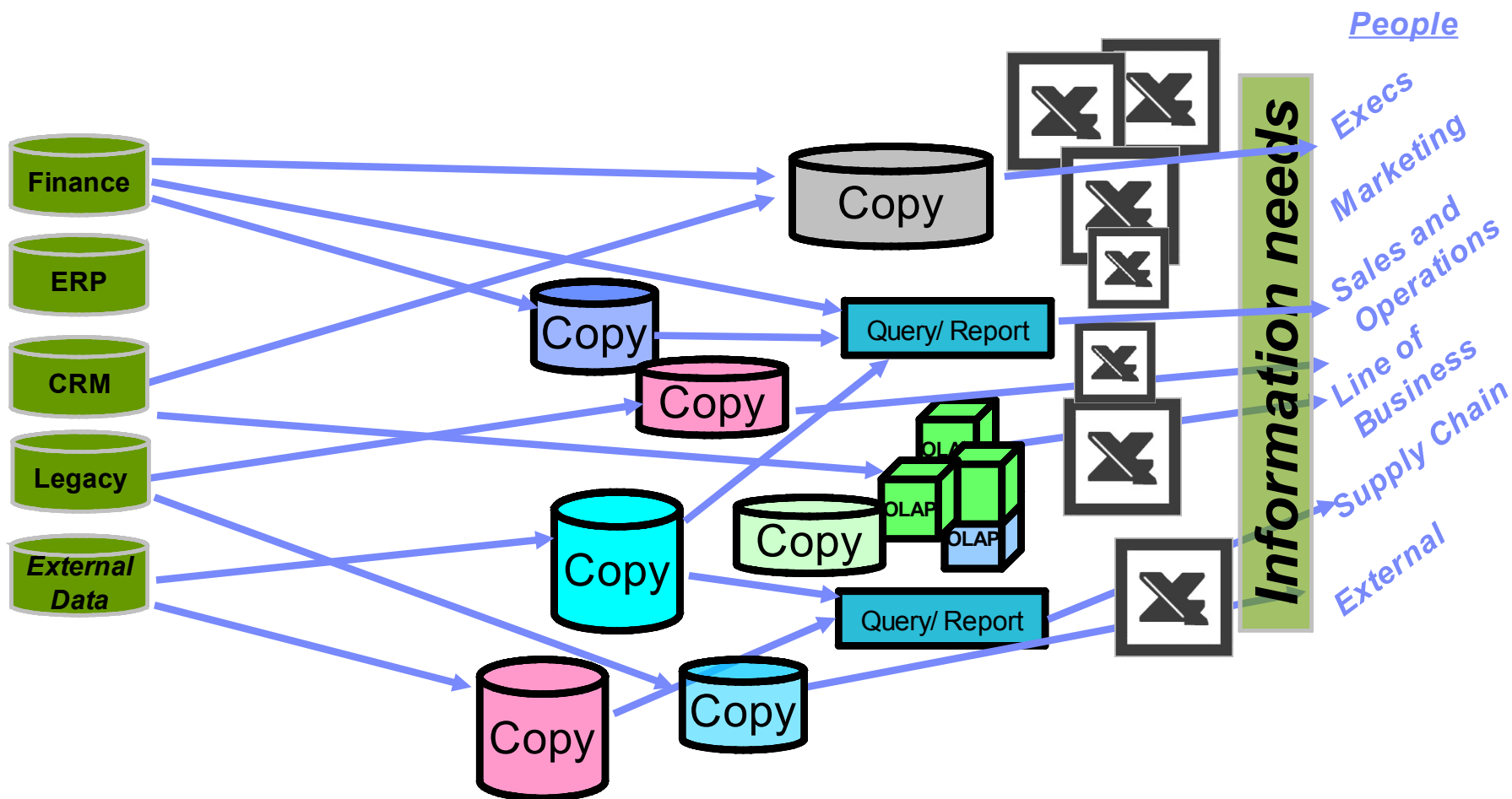
IBM Smart Analytics System - What is it?



It's a Business Machine.....



Typical Business Analytics Infrastructure

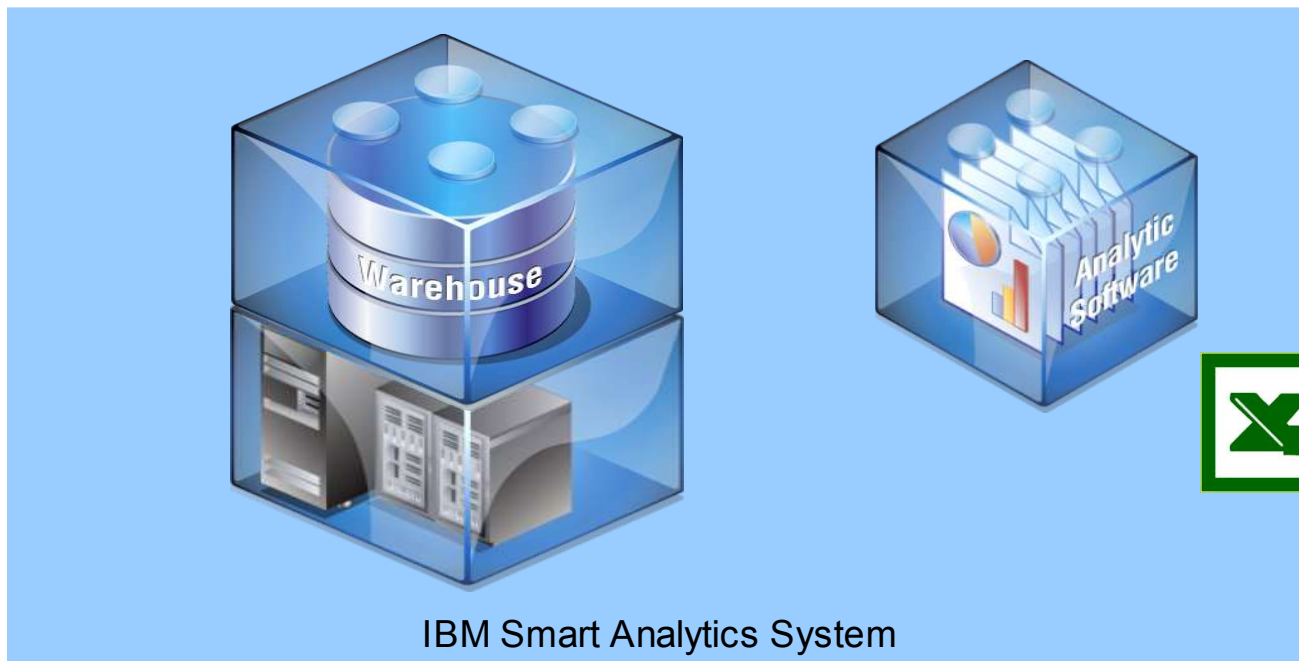
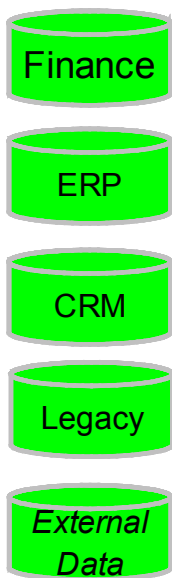


- Obtaining data, adding data?
- Data Quality?

- Cost ?
- Performance?

- Lack of an 'enterprise view'
Development speed over time
- Maintenance / development 80:20

The Smart Analytics System Alternative



Execs
Marketing
Sales and Operations
L.o.B
Supply Chain
External

IBM Smart Analytics System

Real time, ready to go data warehousing solutions

This new IBM system of analytics software, server and storage hardware and services eliminates the time and cost of integrating and optimizing analytics solutions for business use, while preserving the flexibility not offered by single use appliances.



Smart Analytics System

IBM Smart Analytics System includes **everything** required to serve as a foundation for your business intelligence solutions. Some of the included highlights are:

- Robust Cognos / InfoSphere Warehouse software
- The latest in IBM Server technology
- High performance IBM storage
- Comprehensive total solution support

InfoSphere Warehouse Pack!

What Is It??

What are the Warehouse packs

- A set of pre-built, consolidated data structures across products & clients to support true analysis of who are our client's most and least profitable customers.
- The Warehouse Packs are applicable to any Smart Analytics System or Warehouse deployment

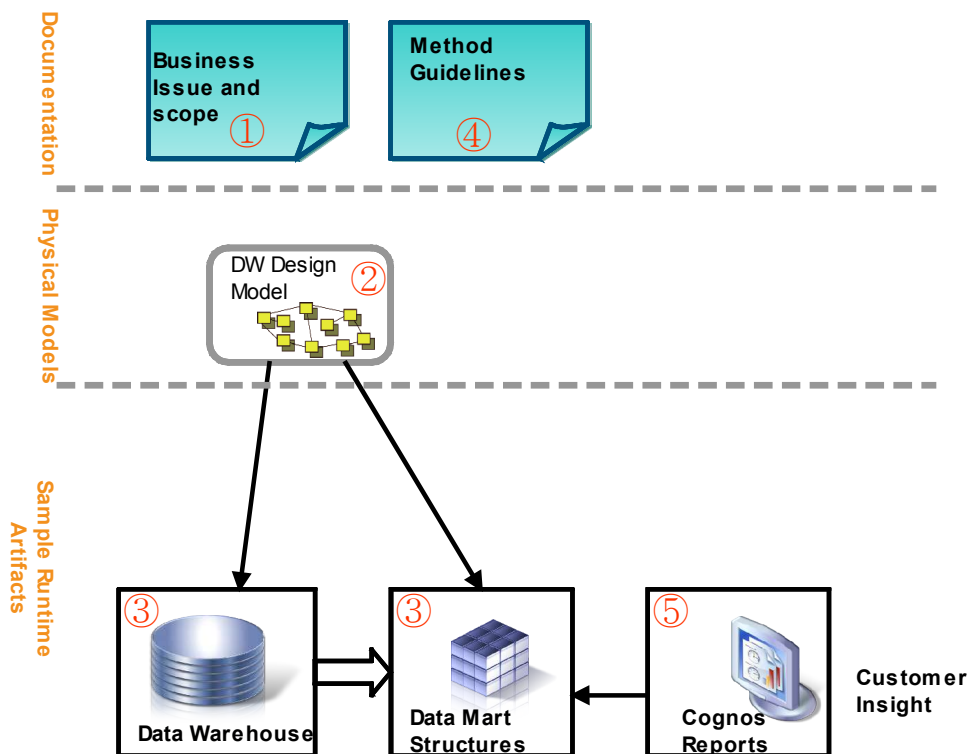


Industry Models InfoSphere Warehouse Pack –

Packs Available: Customer Insight, Market and Campaign Insight and Supply Chain Insight

Initial InfoSphere Warehouse Pack will include:

- Document outlining the business issue and how the particular contents of this pack addresses this Business issue (e.g. Customer Analytics)
 - Customer Profitability
 - Customer Profiling
- Predefined **Physical** Models (in IDA or Design Studio)
 - containing the DW and Mart definitions needed for the particular business issues
- Associated Sample runtime artifacts (Data Warehouse and Data Mart DDL)
- Document outlining the proposed method and design decisions re the Physical Relational and Star Schema models (volumetrics, partitioning, etc)
- Integrated sample best-practice OLAP Cognos reports and Framework Manager structures.



IBM Smart Analytics System

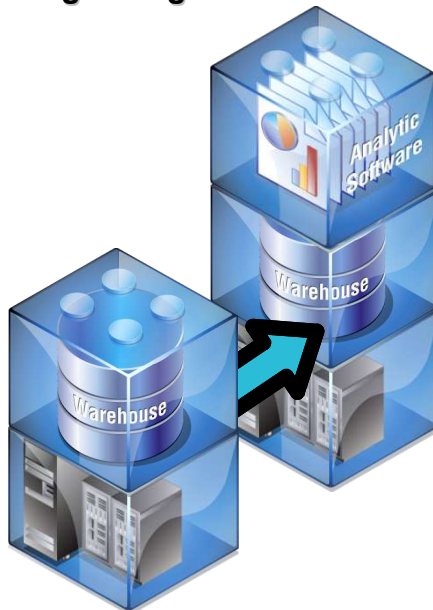
Highly Flexible and Scalable

Choose the way that your IBM Smart Analytics System is deployed
 Add capacity and analytic capabilities as your business requirements evolve

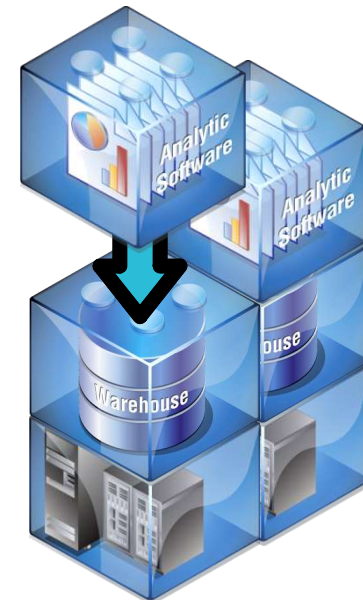
Start with a System that fits your needs



Add capacity for growing data & users



Add analytic capability to meet new business needs



IBM SMART ANALYTICS SYSTEM

IBM Smart Analytics System

Complete Modular Construction



Analytics Software Options

- Cognos 8 Business Intelligence
- InfoSphere Warehouse Cubing Services
- InfoSphere Warehouse Data Mining & Text Analytics

Data Warehouse Software

- InfoSphere Warehouse
- InfoSphere Warehouse Advanced Workload Management
- Tivoli System Automation

Hardware/OS

- IBM Power or Intel or IBM System z
- IBM System Storage
- AIX or Linux or z/OS

IBM Smart Analytics System – Breakout will cover

White Boarding and Questions.....but brief customer story before





InfoSphere™
software

**IBM InfoSphere Roadshow
Next Steps?**



Next Steps;

One on One visits/meetings – Sales / Architects

Proof of Technology events;

- Replication / CDC
- Information Server
- Data Warehousing
- Data Mining
- Cognos

Plus;

- Data Quality Assessments
- Business value Assessments

InfoSphere™
software





InfoSphere™
software

IBM InfoSphere Roadshow
Many Thanks...Enjoy the Break out
sessions

