



LEAN AND AGILE ENTERPRISE INFORMATION MANAGEMENT

Niels Weigel

SAP AG niels.weigel@sap.com





Objectives of this presentation

- Traditional evolution of Enterprise Information Management
 - Provide a quick overview on evolution of EIM
- External influence on the market and customers reactions
 - > Changes due to the Financial Crisis, how market responds
- Meeting current demands and expectations
 - How SAP looks at a Lean and Agile Enterprise Information Management



10/2007

06/2009

Business Objects

AddressDoctor

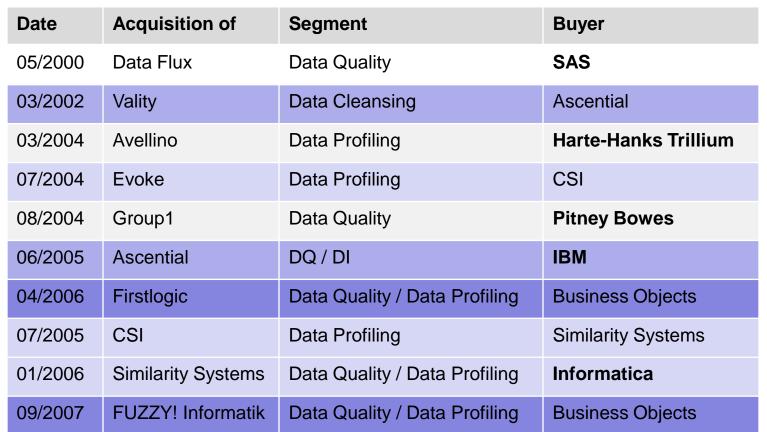
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SAP

Informatica



"The majority of small data quality software vendors will be acquired by bigger players within the next years", 2004



BI / EIM

Address Cleansing





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Was this kind of intuition?



Information Quality (IQ) Proj

Data quality assessment on business partner data in a SAP environment

Niels Weigel (niels.weigel@fazi.de)
Joachim Schmid (joachim.schmid@fazi.de)

FUZZY! Informatik AG, Eglosheimer Strasse 40, 71636 Ludwigsburg, GERMANY

MIT > 10 at MIT > Publications > Books * Papers * I

Selected IQ-1 Completed Projects - Nov 2003 partic Frank Ponzio

Authoritative Data Source (ADS) Framework

Description of the project

In a recent survey by PWC managers cite data quality as a major reason that 88% of CRM, e-business and system migration projects fail to deliver on time and within budget. Even inside existing and long running CRM systems one can not be sure that all information stored in the database are completely "fit for use". For that reason one of our customers decided to start a project for data quality assessment. During the data quality

Niels Weigel & Joachim Schmid

DQ Quality Assessment on Business Partner Data in a SAP environment

Dr. Marcus Gebauer

Cross-department solving of data quality weaknesses

Karolyn Kerr

The Development of a Data Quality Framework and Strategy for the New Zealand Ministry of Health

Selected IQ-1 Projects Proposal - May 2003 participants

Robert Zerby

Improving Quality in Information Product Manufacturing: A Financial Services Company Ca Slide Content: © SAP 2009

IQ at MIT

MITIQ program

IQ Certification

Exec IQ Course

UCB-ICIQ Workshop

ICIQ Conference

TDQM Program

Publications

FAQs

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Challenges and surrounding conditions that make ideal world tough?

ENTERPRISE INFORMATION MANAGEMENT





NO INSIGHT – Can we trust our data?







How do we do without Insight?

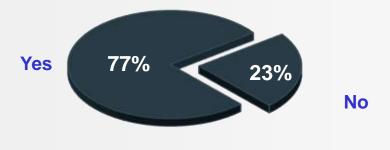


"Guts feel"

> 60% of people

>50% of the time

Aware of bad decisions made due to insufficient information



BusinessWeek

77% aware of bad decisions





LOST PRODUCTIVITY – Do we have necessary data available at the fingertip?







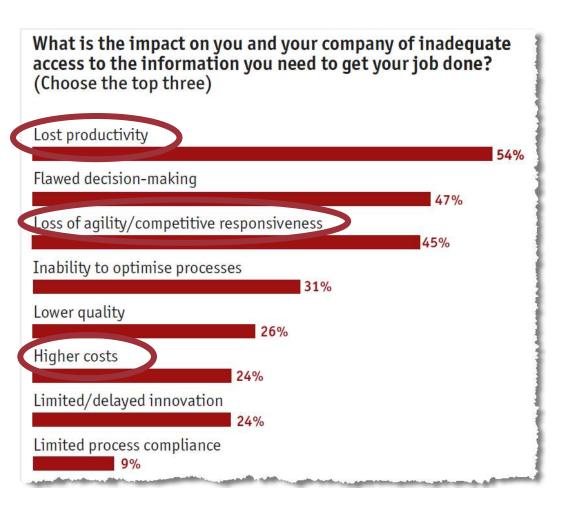
INCREASED COST – Are we working efficient?







Effects of Inadequate Access to Information



Lost productivity is #1 impact of inadequate access to information

Need for responsiveness causes much higher costs in environment not meant to be agile by design.

Source: Economist, 'Enterprise Knowledge Workers Study; November, 2007





Business strategies evolve

... but silos create gap between strategy and execution



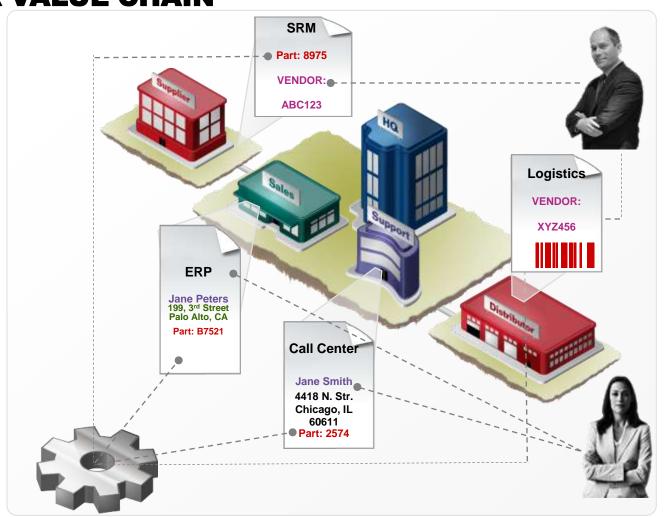
Functional silos and non-integrated systems reduce agility and undermine growth





Complex processes create separated silos of Master Data

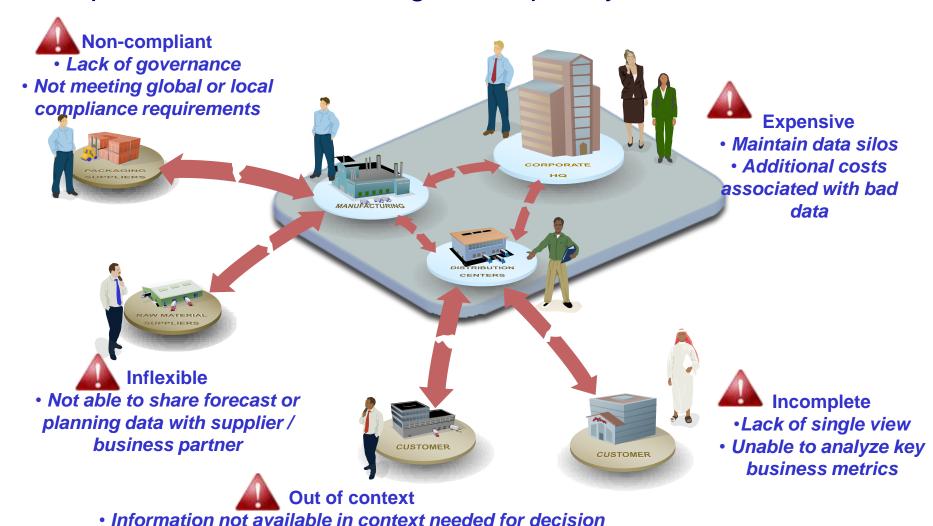
YOUR VALUE CHAIN



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IT Departments are drowning in complexity







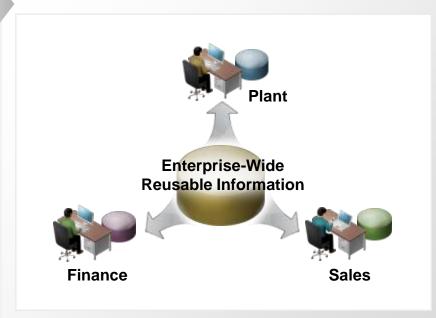
Establish EIM strategy to manage fragmented information

Information Managed in Silos



- Each department creates and stores their own data
- Data inconsistencies and errors impact organizational results
- Information management rework and redundancies escalates IT costs

Enterprise Information Management



- Formal enterprise-wide information architecture, governance, and reuse
- Information asset readily available, understood, useful and trusted for all users

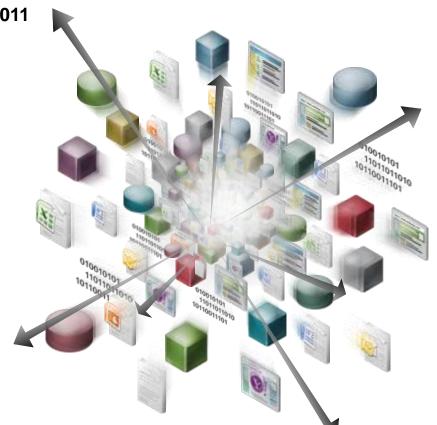
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Data Explosion: A Natural Result of Modern Societies, Businesses and the Internet

10X data

growth 2006 - 2011



281 billion gigabytes

of digital data created in 2007

93% data stored in digital form

Business IP traffic grows by 35% 2007 to 2012



STRUCTURED

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Increasing demand: Need for Access to all type of data

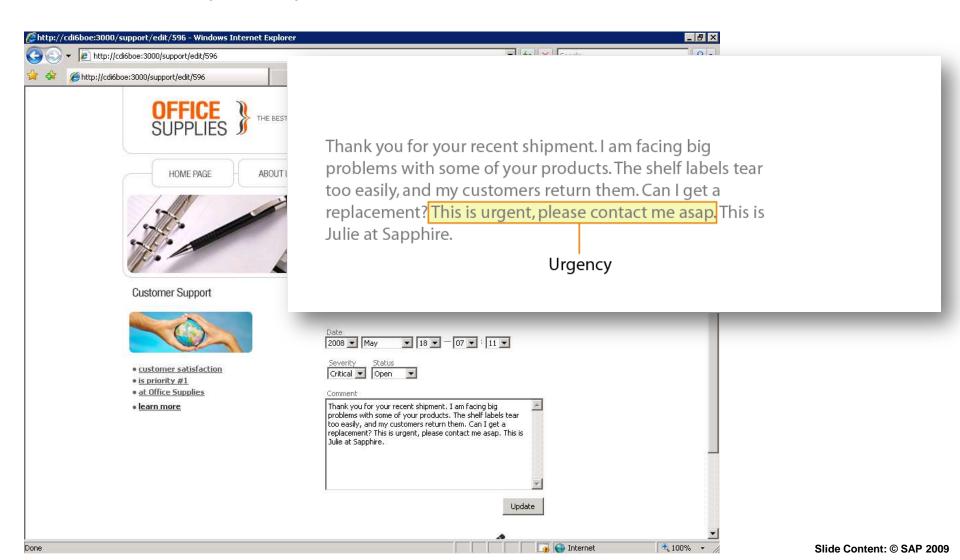




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Automatically analyze unstructured content







A tool, a project, a change process, ...?

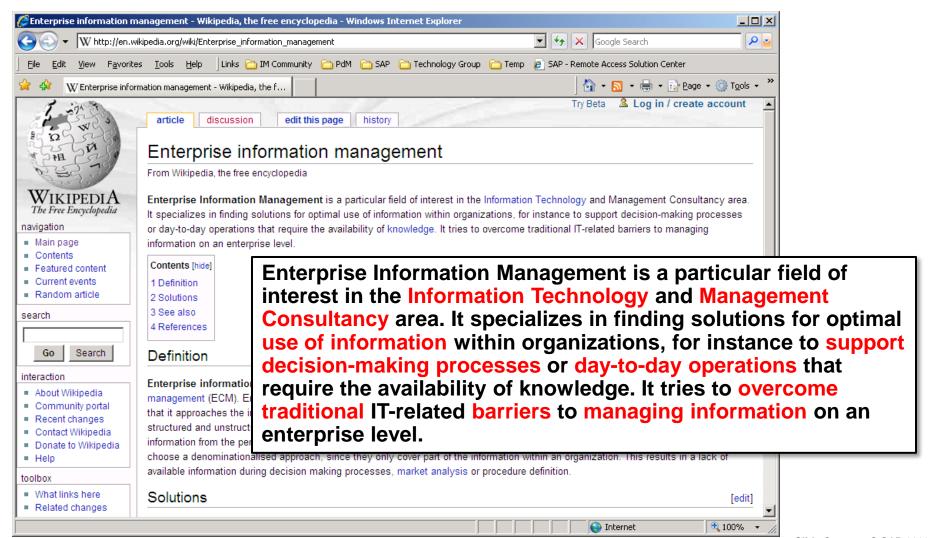
ENTERPRISE INFORMATION MANAGEMENT



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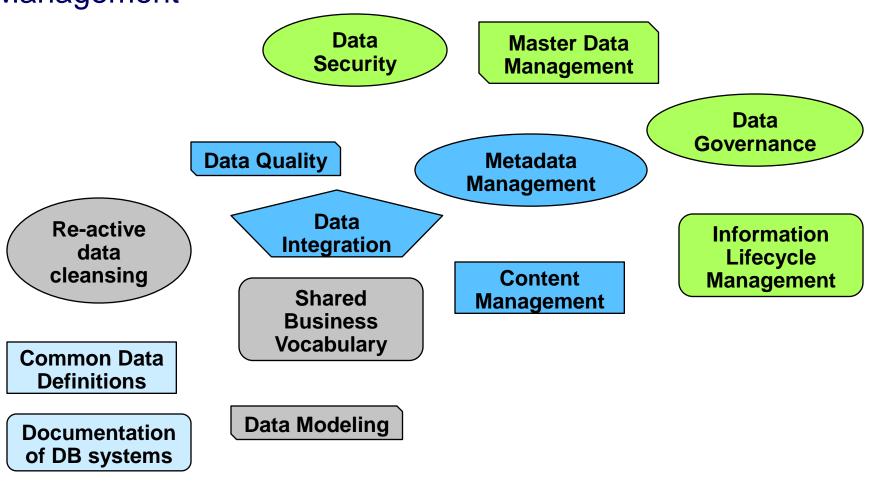
Enterprise Information Management: One of many definitions







From the Technology side: Puzzle pieces of Information Management



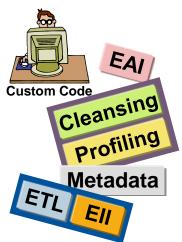




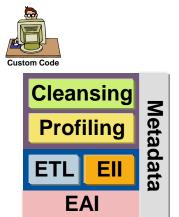
Gartner: Data Integration & Quality Technologies and Markets



- Custom code dominates
- Single-purpose tools
- Market fragmentation
- Tactical deployments



- Custom code remains
- Vendor consolidation around related tools
- Cross-project usage



- Custom code minimized
- Continued tools convergence
- Importance of metadata
- Strategic intent



- No custom code
- Convergence complete
- Service orientation
- Strategic deployments



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Overview: Evolution of Information Management

1990s 2000s 2010s

ETL/DQ Tools

Single purpose tools

Environment: tactical projects
Challenge: inefficiencies, redundancies

Data Integration Suite

Integrated stack

Environment: rise of cross project usage Challenge: single version of truth

Information Management

Enterprise-wide leverage Collaboration with the business

Environment: strategic deployments
Challenge: complexity

Traditional DI/DQ

- Data integration and data quality primarily responsibility of IT
- Data Integration primarily focused on BI and data warehousing needs
- Mostly tactical projects with little reuse and enterprise-wide standards

Key Business Drivers

Globalization

Short product cycles

Global competition

Mergers and acquisitions

Innovation

Engine for success

Competitive differentiator

Culture of flexibility

Efficiency

High number of decisions

Increased responsibilities

Compliance and transparency

Information Management

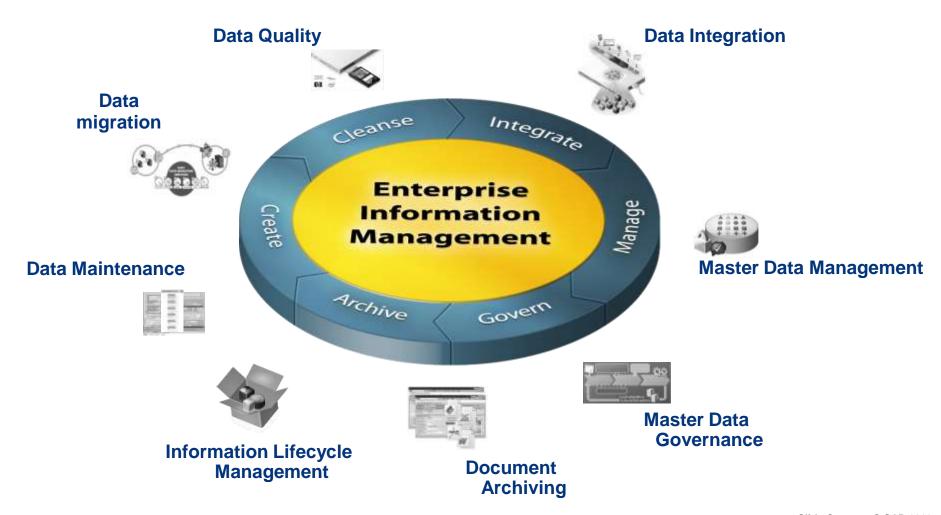
- All information (structured and unstructured) is managed as a strategic organizational asset
- Information management involves both business and IT ownership
 - Business defines requirements. monitors and improves information
 - IT supports business requirements and provides greater access to business
- Information governance is key

Slide Content: © SAP 2009





One of SAP's perspective on EIM: Bringing together more technology pieces in a bigger landscape







Enterprise Information Management can help you manage information as a strategic asset

Affects all information assets used by an organization

Improves information consistency, transparency for enterprise wide use



Enables operational and analytical initiatives such as:

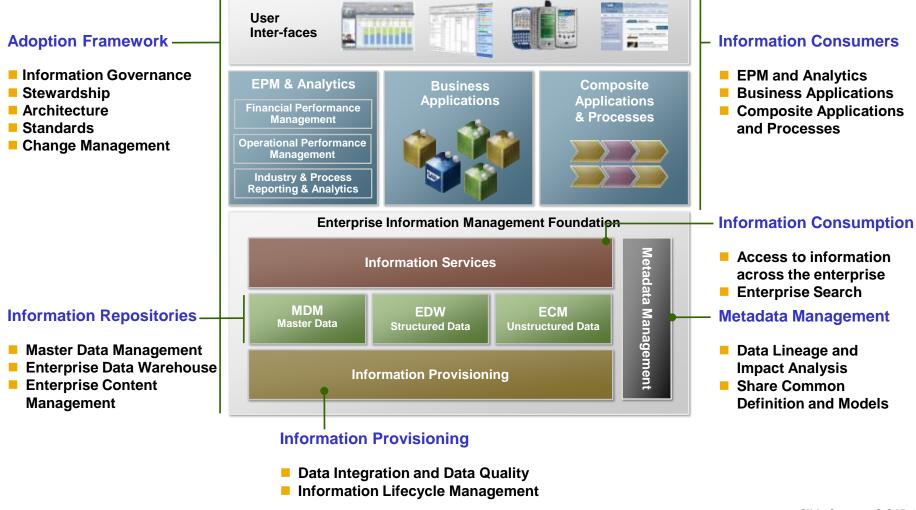
- Business transaction processing
- Information governance
- Master data management
- Data migration

- Business intelligence
- Performance Management
- Data warehousing
- Data Quality Management

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The EIM Foundation is essential for all system landscapes







What has changed with the Financial Crises?

CHANGING ENVIRONMENT



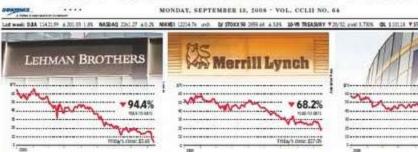
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And then September 2008...

THE WALL STREET JOURNAL.

THE WALL STREET JOURN



Crisis on Wall Street as Lehman To Merrill Is Sold, AIG Seeks to Raise

Fed Will Expand Its Lending Arsenal in a Bid to Calm Markets; Moves Cap a Momentous Weekend for Amer

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By Carries Multimiums wante Grafe, Serona Ng and Amon Lucchets

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Bailout Plan Rejected, Markets Plunge, Forcing New Scramble to Solve Crisis

House members

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Down 777.68 points The tale of the Dow's largest point loss on record

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By Sarah Louck, Damia n Palistya And Geed Hoty

WASHINGTON-The Bouse of Representatives defeated the White House's Simort: \$700 Hb thim financial-renorm package - a contains term of everys that year the stock market time a cattento end added to concerns that the Till, faves a terologged revention the legislation isn's partied. The Dew Jones Industrial As-

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Market flatified down U.N.
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also were down. The 215-205 yets, which do died a full-yours press from the predictor and the Treatury sector cary, marked a dark moment to a est that has shaken the fibury dail mesum to be one and forced. her measures to there up conflletter bullead presings the sale of while the Federal Renews kined

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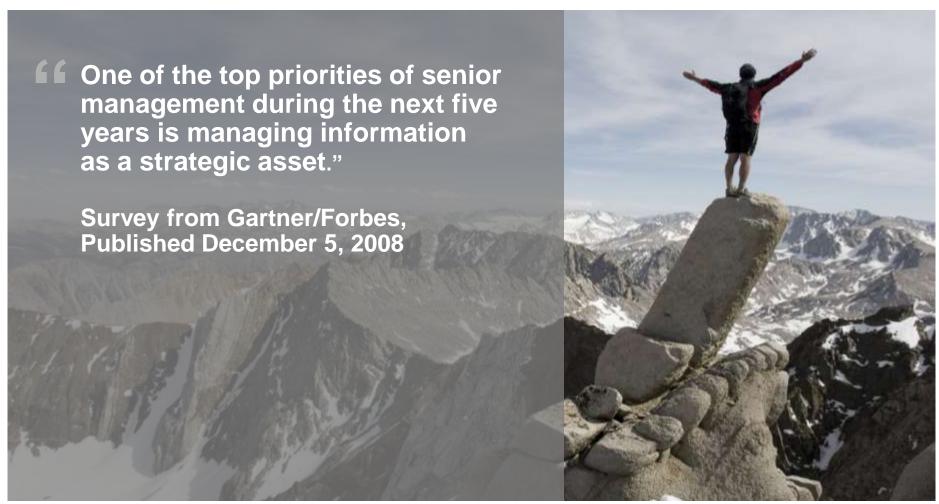
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Take action to survive and thrive





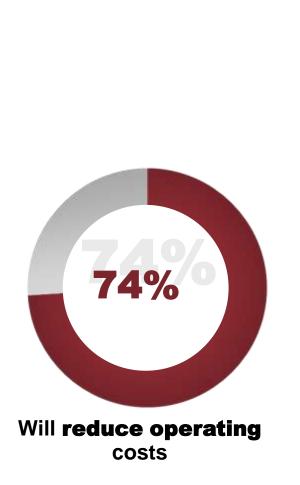


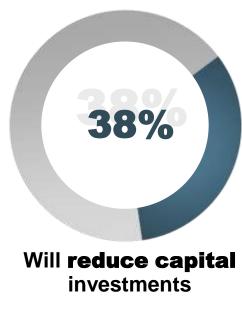


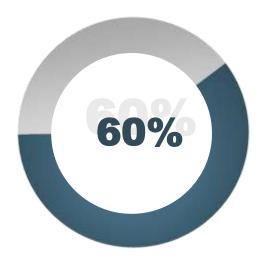




How do you lead through challenging times? Focus on the basics, cut costs







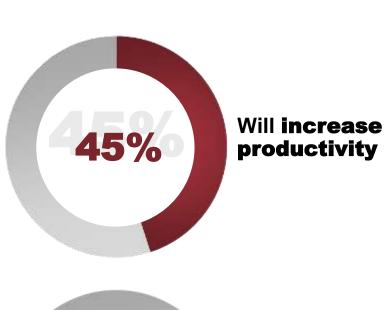
Had layoffs in 2008, >50% plan layoffs in 2009

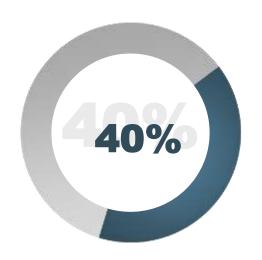
Source: CFO magazine global CFO survey Feb 2009





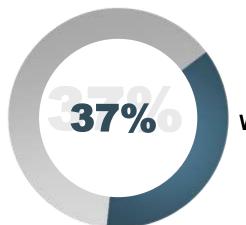
How do you lead through challenging times? Innovate the business model



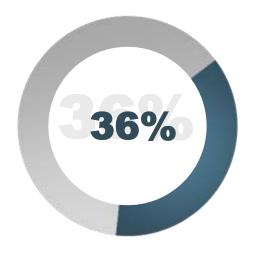


Will change their enterprise model to be more collaborative

Source: IBM global CEO study 'the enterprise of the future' 2008



Will restructure



Will introduce new Products/
Services to gain market share





Question on Economics and EIM: Stop or Continue?



- Stop all investment
- Reduce cost wherever possible
- Focus investment on direct operational income



- Data and Information are still a valuable asset
- Decisions need to be made faster and closer adapted to market

→ "If not now, when then?"





How can organizations react on changing environment and continue being successful?

LEAN & AGILE ENTERPRISE INFORMATION MANAGEMENT





Questions from Market: How to achieve the strategic agility? Enable insight, efficiency, and flexibility

How can your company help us to develop effective business strategies?



How can your company help us to navigate through economic challenges?



How does your company enable us to support the quickly changing needs of the business?







Focus on three business driver for EIM initiatives



Ensure trust in data to be complete, accurate and accessible

Increased efficiency from high quality information for BI and operations



Accelerate access to all essential business information

Optimized business performance through superior decision making



Manage operational information throughout its lifecycle

Enhanced governance and compliance via policy-based data management PEOPLE

PROCESS

TECHNOLOGY

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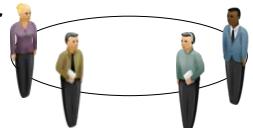
Be aware of different dimensions for EIM implementations

Enterprise Information Management

People, process, and technology that controls information management functions across the enterprise

Executive Sponsor

Line of Business



IT Data Steward

Define

Manage

Monitor

Data Integration & Quality Management

Owners

Data Warehouse Management

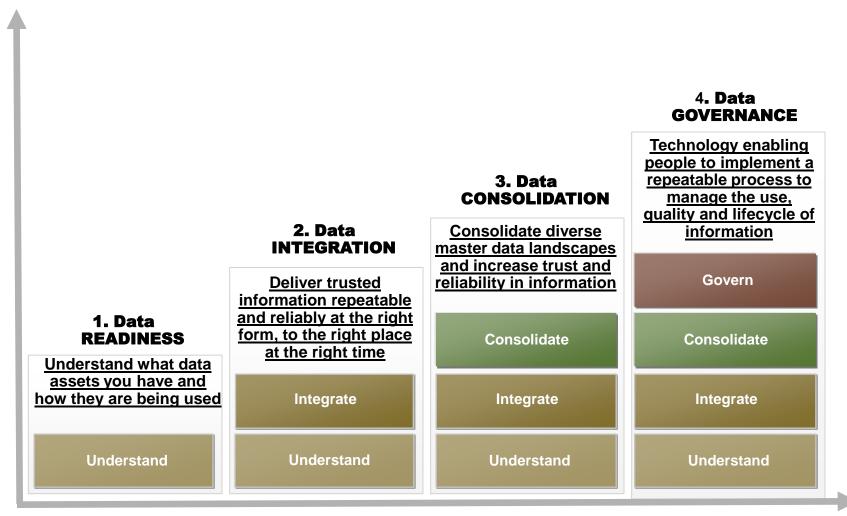
Master Data Management Content & Information Life-Cycle Management

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A general roadmap for Enterprise Information Management



People & Process Maturity

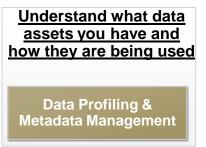




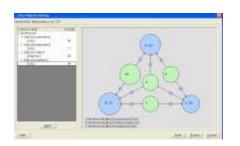
Phase 1: Understand Content and Usage of your Data Data Profiling

- Inspecting the data for compliance to business rules
- Comparing heterogeneous data sources
- Discovering any defects
- Measuring their impact on your business
- Communicating business rules to be used in cleansing
- Automated profiling and referential integrity testing
- Scheduled analysis, with threshold notifications
- Trend analysis and continuous monitoring

1. Data READINESS









- Clear Insight into individual systems and processes
- Decide about next data assets and processes / applications





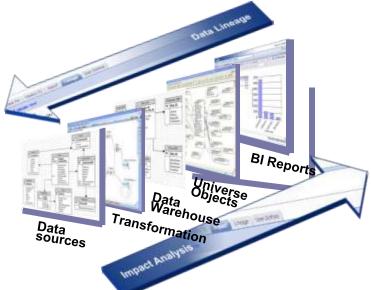
Phase 1: Understand Content and Usage of your Data Metadata Management

- Impact and data lineage analysis
- Create an encyclopedia that translates metadata into business definitions
- Lower your TCO by tracking usage of data and reports

1. Data READINESS

Understand what data assets you have and how they are being used

Data Profiling & Metadata Management



- Clear Insight into individual systems and processes
- Decide about next data assets and processes / applications

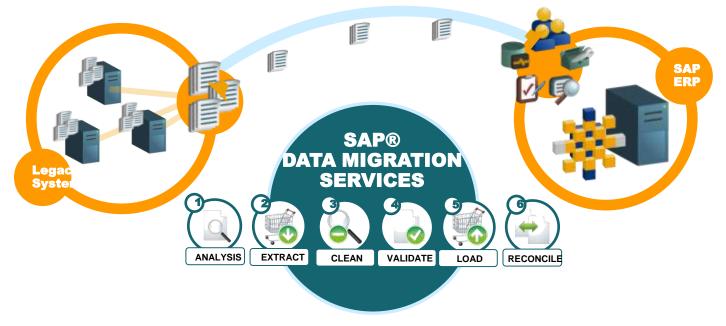




Phase 2: Integrate and Timely Deliver your Data from Different Sources to any Data Consumer

2. Data INTEGRATION





Provide a framework, templates, methodology, tools and expertise to migrate legacy data into a target environment.

- Necessary processes established to move data into single target
- Decide about next data assets and processes / applications





Phase 2: Integrate and Timely Deliver your Data from Different Sources to any Data Consumer

Data Integration

- Access, transform, cleanse, and deliver any type of data from anywhere at any frequency
- Establish repeatable processes for moving and transferring the data
- Prepare the separated data and improve the quality of the data

Structured Data Unstructured Data ERP DW RDBMS OLAP Email Docs Notes Web Office Adobe

2. Data INTEGRATION

Deliver trusted information repeatable and reliably at the right form, to the right place at the right time

Data Migration & Integration

Data Profiling & Metadata Management

- Necessary processes established to collect data from multiple sources
- Decide about next data assets and processes / applications





Phase 3: Consolidate Data from Different Sources and Produce Valuable Information Across the Systems

3. Data CONSOLIDATION

Consolidate diverse
master data landscapes
and increase trust and
reliability in information

Master Data
Management

Data Migration &
Integration

Data Profiling &
Metadata Management

Consolidate and Harmonize Your Master Data

- Extract, load and de-duplicate master data from several systems
- Provide key mapping information and align key data across the entire organization

Build Processes on Consistent Master Data

 Create and maintain master data to support key business process and decision making

Increase Data Quality

- Use single data target as master and propagate back to sources
- Decide about next data assets and processes / applications





Phase 4: Enable Your Employees to Manage Usage, Quality and Complete Lifecycle of your Data

4. Data GOVERNANCE

Technology enabling people to implement a repeatable process to manage the use, quality and lifecycle of information

Data Governance

Master Data Management

Data Migration & Integration

Data Profiling & Metadata Management

Data Governance

- Govern Data centrally across the enterprise using process-centric applications
- Leverage consolidated data
- Eliminates manual maintenance of data in multiple systems, but allows for controlled de-central adaptations
- Enables compliance and transparency through integrated staging, approval and central audit trail
- Delivers consistent definition, authorization and replication to corporate systems.
- Established all necessary business processes to actively manage your data along the complete production process



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Lean and Agile: Navigating your EIM project

- Know where you are
- Define your ultimate EIM target as a vision
- Generate rough path, follow high-level milestones
- Start detail planning for initial step
- Adjust your path when you reach a milestone







Conclusion

- Mature methodologies and tools for establishing an Enterprise-wide Information Management have been developed and proven success at several organizations
- Adoptions of those "full" models are generated to fit into scalable demands of the market
- Lean processes and methods allow step by step implementation, focusing initially on the most efficient components
- Short planning cycles allow flexibility and agility to reach given Milestones quickly with success and continue with the next most important step.



Ready to go ON

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Thank You!

