Enterprise Information Management and the Emergence of the Information-centric Infrastructure

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Failed Methods Turn Information Assets Into Information Liabilities

"We are drowning in information"

INFOGLUT

You are here. You will stay here.

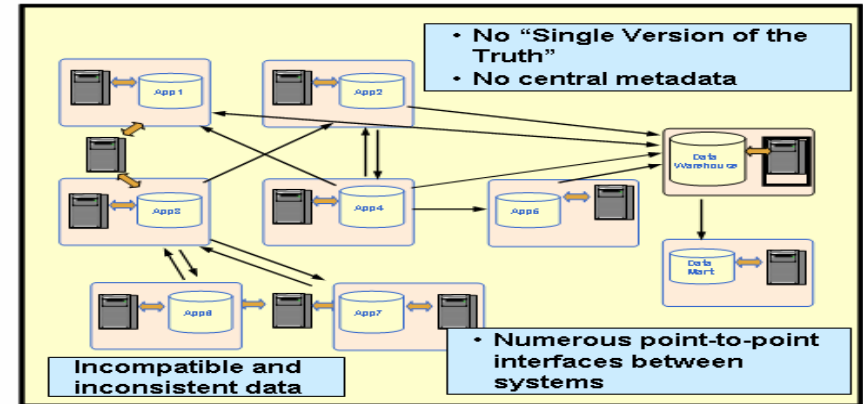## Current Information Management Strategies Add Risk, Cost and Complexity

- No "Single Version of the Truth"
- No central metadata

Incompatible and inconsistent data

- Numerous point-to-point interfaces between systems

30–40% of IT budget for information integration

Data Accuracy and Quality Problems

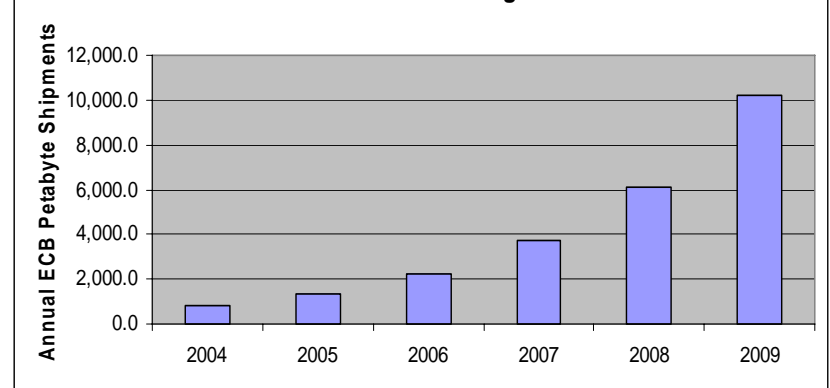Multiple sources of the same product content across structured and unstructured formats

Inconsistent description formats, abbreviations, and order

Ambiguous meaning of Brand and Model

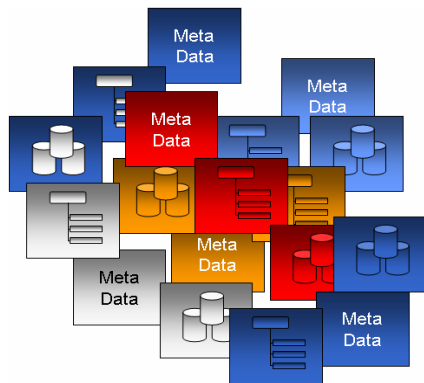Brand disparity between Applications

Worldwide Petabyte Forecast for External Controller-Based Disk Storage

Year	Annual ECB Petabyte Shipments
2004	~800
2005	~1,300
2006	~2,200
2007	~3,700
2008	~6,100
2009	~10,200

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Current Methods Add Cost, Risk and Complexity to Integration Efforts

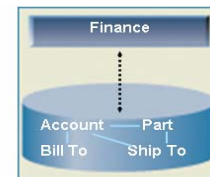## Information Overload and Context

- **Find-ability**
- **Transparency**
- **Abundance**

Metadata

No "Single Version of the Truth"

- **Consolidation**
- **Re-use**
- **Federation**

Master Data

Mismatch in Composition & Abstraction

Before
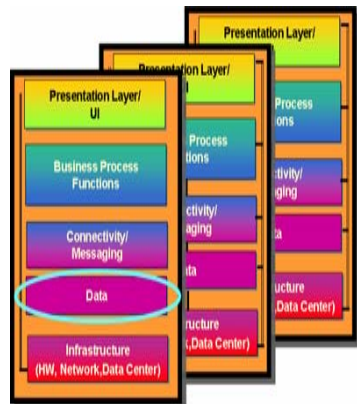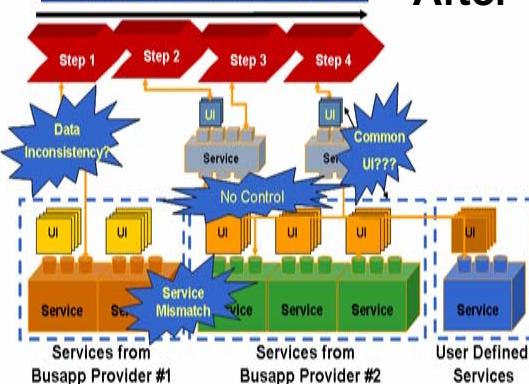
After

"Information as a Service"

Lack of Quality and Consistency

Multiple sources of the same product content across structured and unstructured formats

Inconsistent description formats, abbreviations, and order

Ambiguous meaning of Brand and Model

Brand disparity between Applications

Data Quality and Stewardship

Disruption From the Top

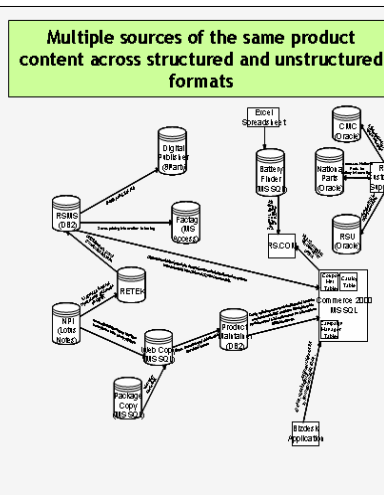The technology systems — **77%** / **82%**

Managing service providers who operate the technology systems — **73%** / **69%**

Exploitation of information as a strategic asset — **41%** / **Milk that *data!***

Managing business process change — **36%** / **42%**

Business model innovation — **25%** / **4?%**

Make *people* effective!

Knowledge work productivity improvement — **30%** / **51%**

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

☐ Which functions is your CIO responsible for today?

☐ Which functions will your CIO be responsible for in 5 years?

Gartner/Forbes September 2006 Executive Survey, Large Company CEOs, N = 74

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Managing Information as a Strategic Asset Delivers Value

Efficiency

Process Simplification

Promote reuse and data quality

Compliance

Transparency of information

"Infoglut"

Manage expanding volumes

Vendor Consolidation

Spend less on same technology

M&A

Reduce integration burdens

Across the Enterprise

Enterprise

Trx.   Customers   Employees   Partners

Information

Products   Orgs.

E-Mail   Reports   Financials   Web Content

Databases   Documents   Media

Management

Across All Content

Differentiation

Enterprise Agility

Sense and respond

Continuous Flow

Real Time

Closed-loop analytics

Single View

Consistent and holistic view across all channels

Relationship management

Revenue Optimization

Support top-line growth on cross-sell/upsell

Leverage global purchasing power

# Defining Enterprise Information Management

Enterprise Information Management (EIM) is an organizational commitment to structure, secure and improve the accuracy, accessibility and integrity of information assets, solve semantic inconsistencies across boundaries, and support the technical, operational and business objectives within the organization's enterprise architecture strategy.
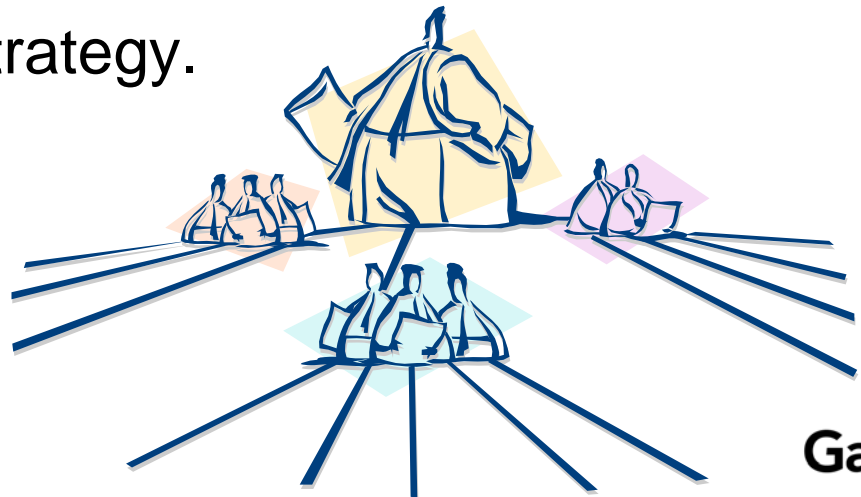
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EIM Is a Comprehensive Program, Not a Technology

Gartner's Essential Building Blocks for EIM

| Vision |
| Strategy |
| Governance / Organization |
| Process |
| Enabling Infrastructure |
| Metrics |
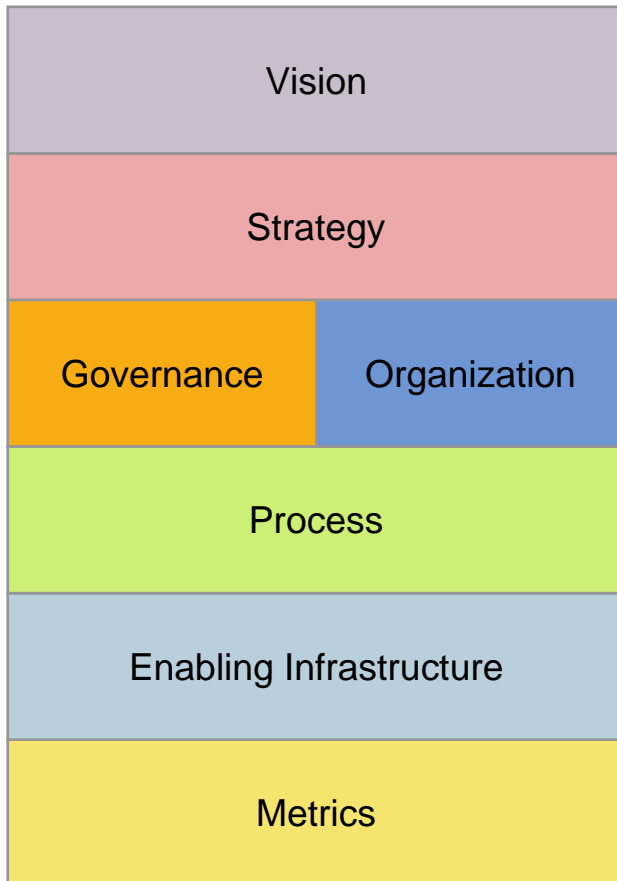
Vision: **How is information perceived and valued in the organization? Is it a bi-product, a shareable resource or source of differentiation?**

Strategy: **How is information currently managed? Is it ad-hoc, departmental, or is there an enterprise focus?**

Governance: **What decision rights and controls exist for managing information as an asset and who is involved?**
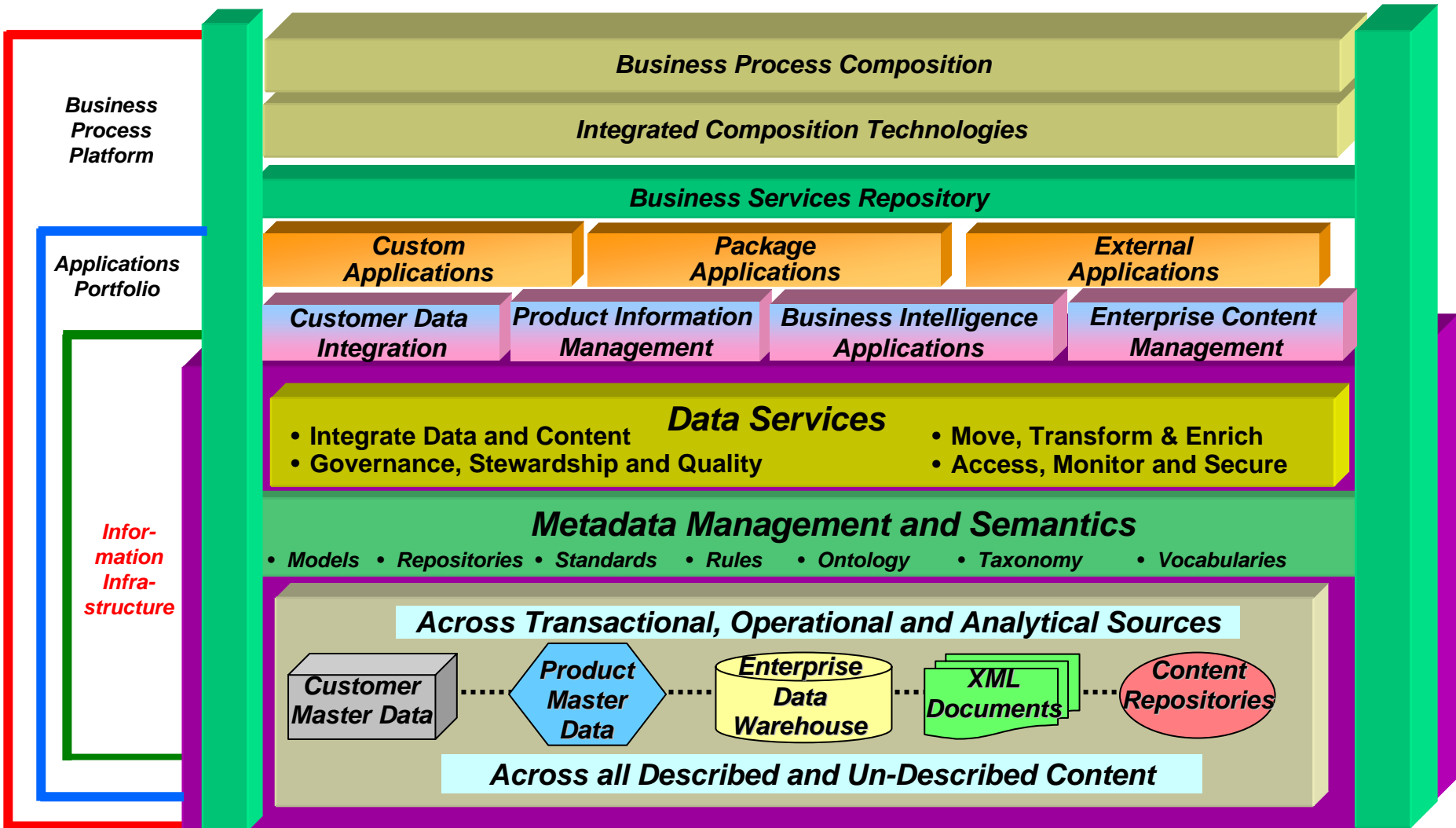
Organization: **What information-centric roles exist and where are they located?**

Process: **Are there practices (such as stewardship) and standards around the information lifecycle?**

Enabling infrastructure: **How well do information management technologies support current and future needs?**
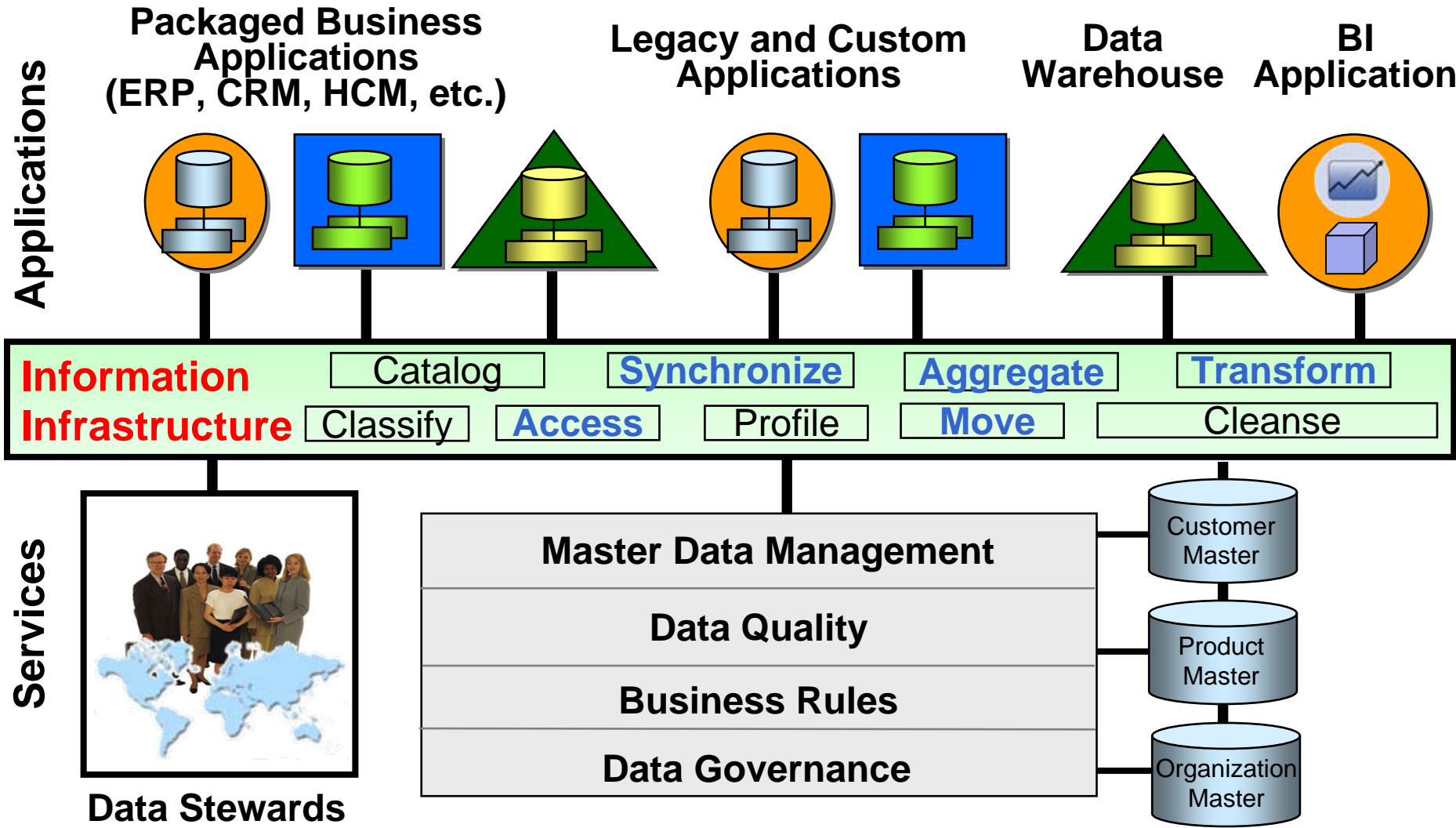
Metrics: **How much is spent managing information? How much information is redundant? How much poor quality information exists and what impact does it have on the business?**
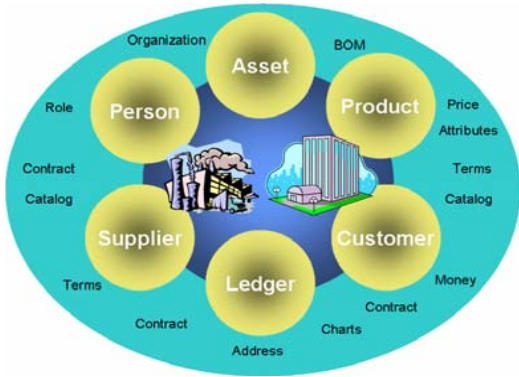
EIM Supports SOA

Information Infrastructure: Delivering "Information As A Service"

Applications

Packaged Business Applications (ERP, CRM, HCM, etc.)

Legacy and Custom Applications

Data Warehouse

BI Application

Information Infrastructure

| Catalog | Synchronize | Aggregate | Transform |
| Classify | Access | Profile | Move | Cleanse |

Services

Data Stewards

| Master Data Management |
| Data Quality |
| Business Rules |
| Data Governance |

Customer Master

Product Master
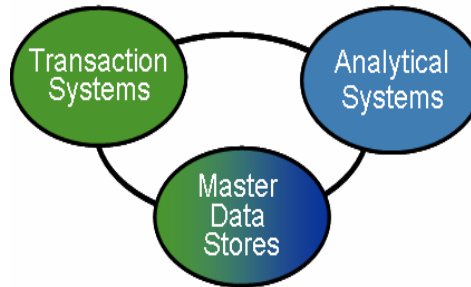
Organization Master

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The Role of Technology in EIM
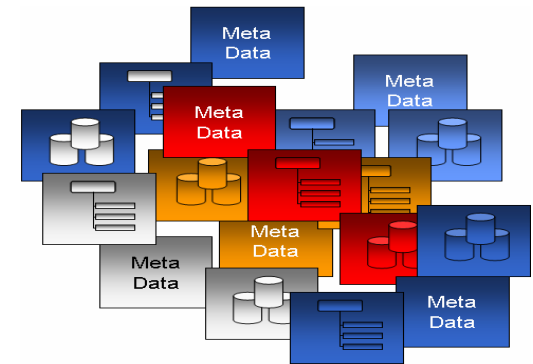
Integrated Subject Areas
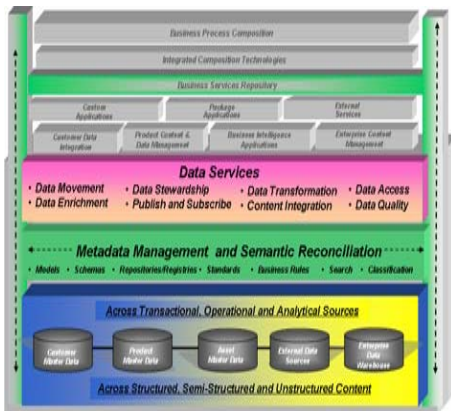

Continuous Flow
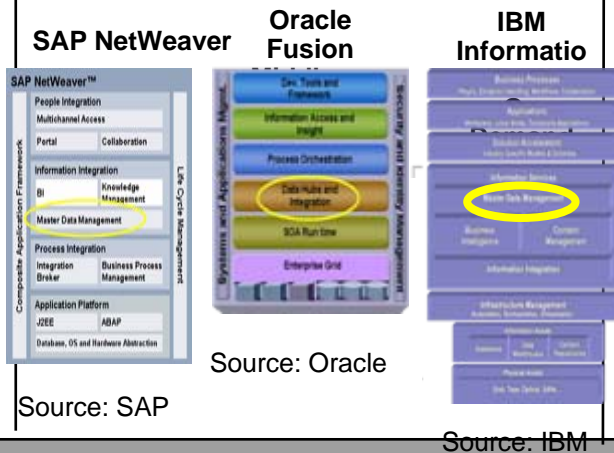
Continuous, Seamless and Immediate Information Flows

Metadata and Semantics

Data Integration

Master Data Management

SAP NetWeaver **Oracle Fusion** **IBM Informatio**

Source: Oracle

Source: SAP

Source: IBM

Enterprise Content Management

Collaborative Facilities		
Doc./Content Management	Content Integration	Metadata Management
Search/Classification		
Business Process Management		
Policy Management		
Records Management		
Repository/Archive Services		

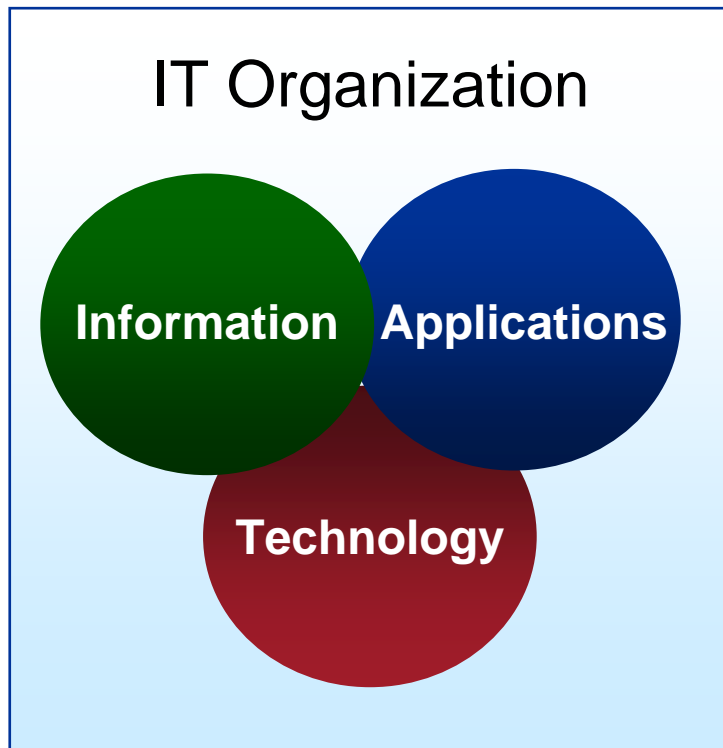Gartner
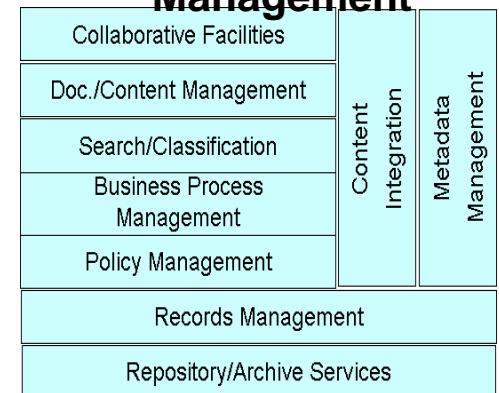
EIM Requires Organizational Commitment

A commitment to EIM is recognition that **information** in the enterprise is as important as **process** (application development) and **infrastructure** (technology)

IT Organization

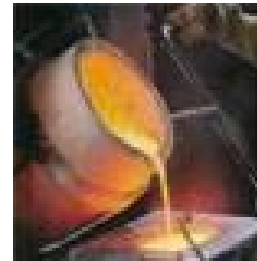Information

Applications

Technology

- EIM is operationalized as a program with a defined budget, charter, staff and project plan

- The commitment to EIM may be contentious in some organizations — politics and turf issues

- Application development or business units typically believe they "own the data"

- Other motivators: "Separation of duties" for compliance

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It Can Be Done: Anglo Platinum Information Value Chain

Map the Processes to Manage Information to the Platinum Value Chain

The Platinum Value Chain

Mine	Concentrate	Smelt	Refine	Sell	Use
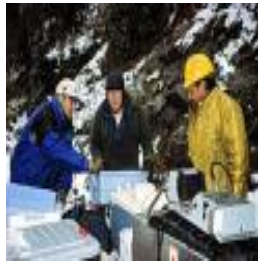
Information in Anglo Platinum also follows a value chain, from the point of generating (creating) the information and then "refining" it to the point where decisions are taken that will assist the business to achieve its objectives.

Generate	Collect and Store	Transform	Manipulate	Present	Use
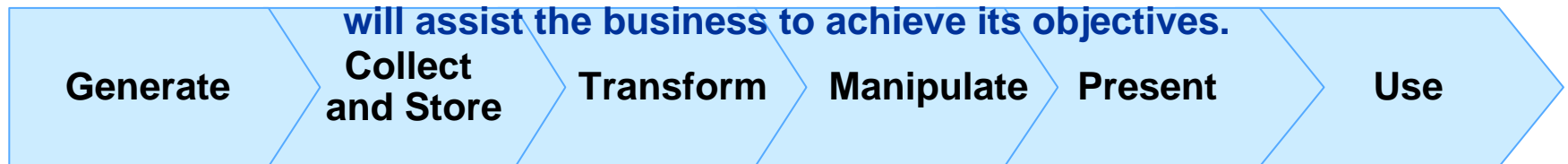
The Information Value Chain

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Summary

1. **Identify opportunities where information creates value in your organization**

2. **Build the business case for EIM**

3. **Align EIM with enterprise architecture initiative**

4. **Use building blocks to identify work-streams**

5. **Establish EIM Infrastructure to support SOA and other technology requirements**

6. **Use metadata and XML to manage and converge all content**

7. **Assign Information Architects to all major projects**

8. **Get the message out, build the brand and establish marketing campaign**

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