IBM SCORE

An architecture for a new generation of document management systems

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Investments in Content Management are Driven by Four Principal Business Challenges

Increase Employee Productivity

Enhance Business Processes

Address Risk and Compliance

Improve Operational Efficiency

Enhancing Workforce Effectiveness
through collaboration, communication and information sharing

Transforming Business Processes
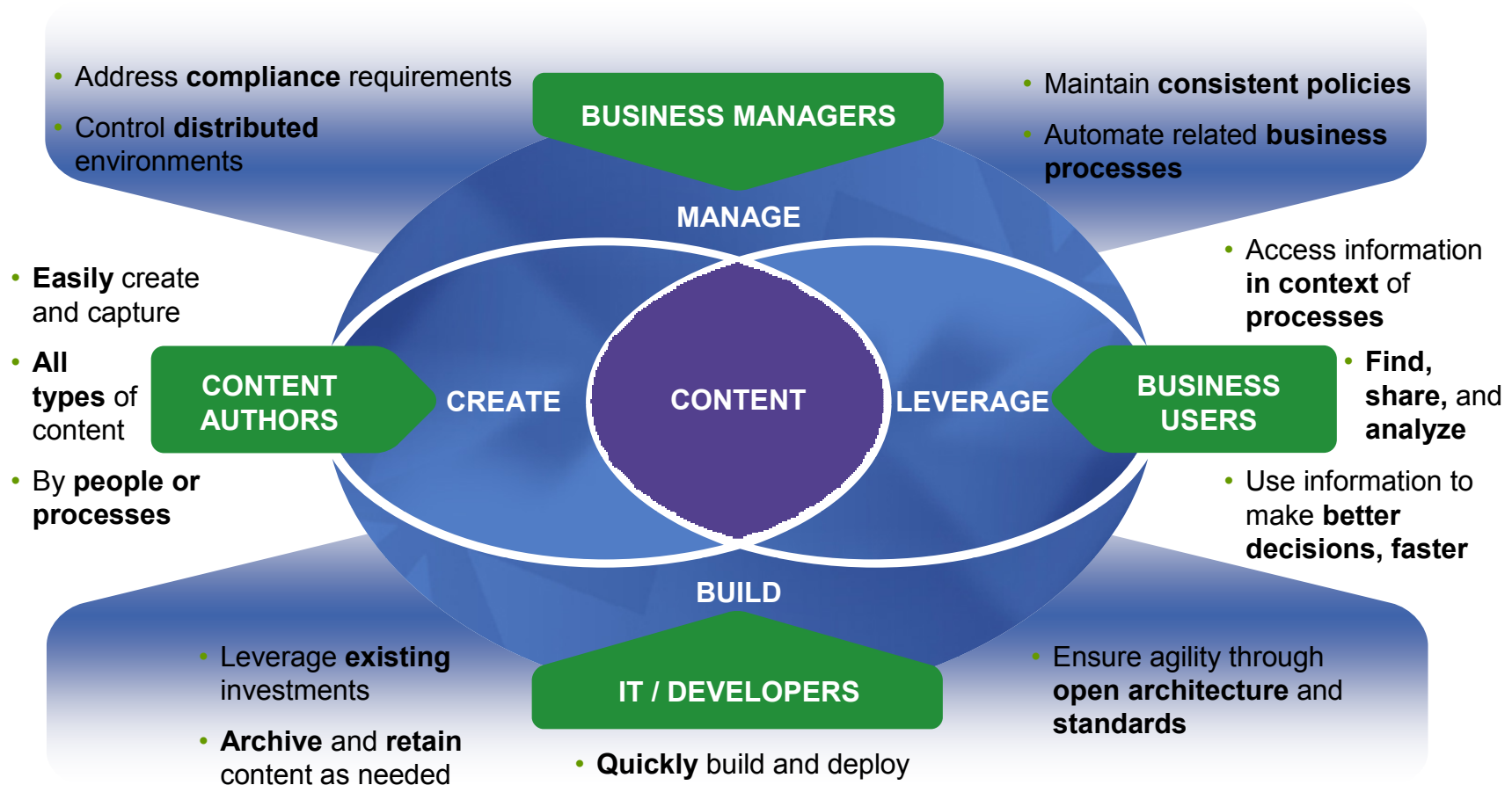*through integration of content and automation of related processes*

Optimizing Infrastructure for Content & Compliance
through capture, archiving, retention, discovery and retrieval

* INNOVATIVE ORGANIZATIONS DRIVE GREATER VALUE FROM THEIR CONTENT

A broad spectrum of ECM capabilities required in 2007 to address the needs of 4 key groups of constituents

- Address **compliance** requirements
- Control **distributed** environments

BUSINESS MANAGERS

- Maintain **consistent policies**
- Automate related **business processes**

MANAGE

- **Easily** create and capture
- **All types** of content
- By **people or processes**

CONTENT AUTHORS

CREATE

CONTENT

LEVERAGE

BUSINESS USERS

- Access information **in context** of **processes**
- **Find, share,** and **analyze**
- Use information to make **better decisions, faster**

BUILD

- Leverage **existing** investments
- **Archive** and **retain** content as needed

IT / DEVELOPERS

- **Quickly** build and deploy

- Ensure agility through **open architecture** and **standards**

Top ECM Business Drivers are clear

Forrester:

- Compliance / Manage Unstructured Content
- Governance
- Process Efficiency

Gartner:

- Manage Unstructured Content / Compliance
- Automate Processes
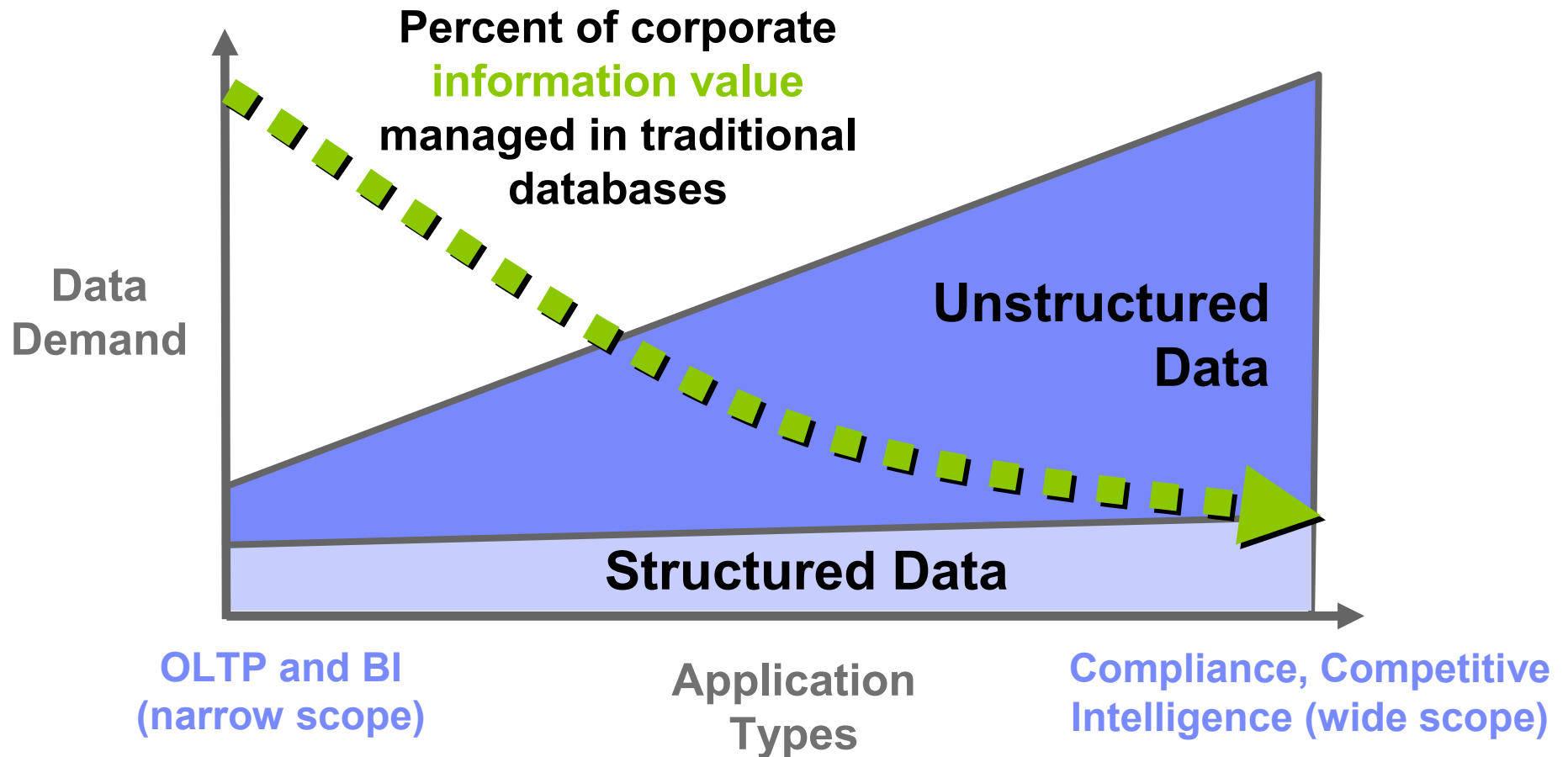- Increase Efficiency

IDC:

- Manage Content
- Compliance / Manage Risk
- Integrate Content with Business Process

Ovum:

- Manage Unstructured Content
- Efficiency / Service
- Govt. / Corp Governance

Sources: Forrester, Gartner, IDC, Ovum reports 2005-2006

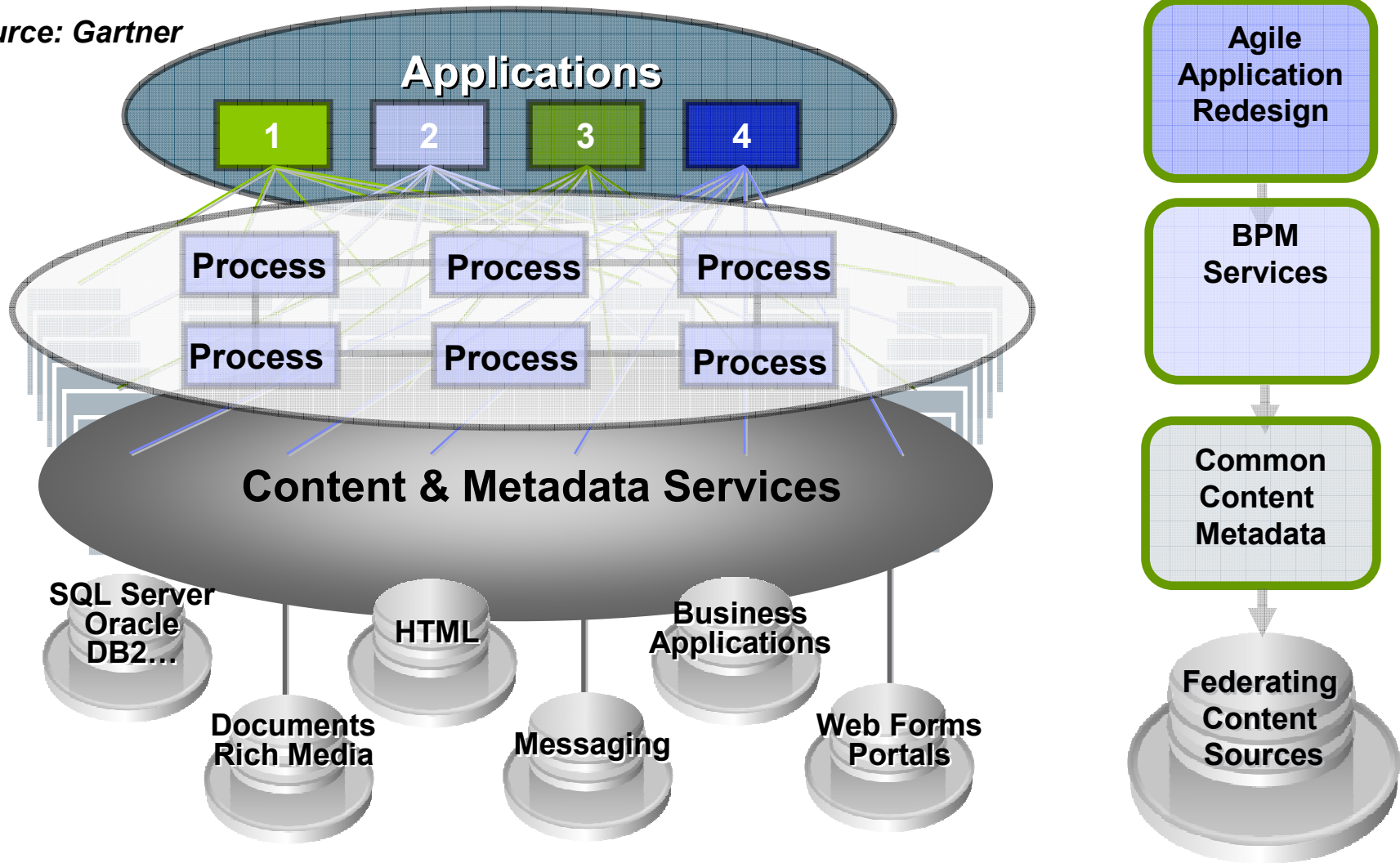# **Unstructured** Information is Becoming the Dominant Information Type in Large Companies

Percent of corporate information value managed in traditional databases

Data Demand

Unstructured Data

Structured Data

OLTP and BI (narrow scope)

Application Types

Compliance, Competitive Intelligence (wide scope)

Source: Gartner

Organizations reuse Content in multiple processes
Integrated Content-centric BPM increases value

Source: Gartner

Applications

1 2 3 4

Process   Process   Process

Process   Process   Process

Content & Metadata Services

SQL Server Oracle DB2…

HTML

Business Applications

Documents Rich Media

Messaging

Web Forms Portals

Agile Application Redesign

BPM Services

Common Content Metadata

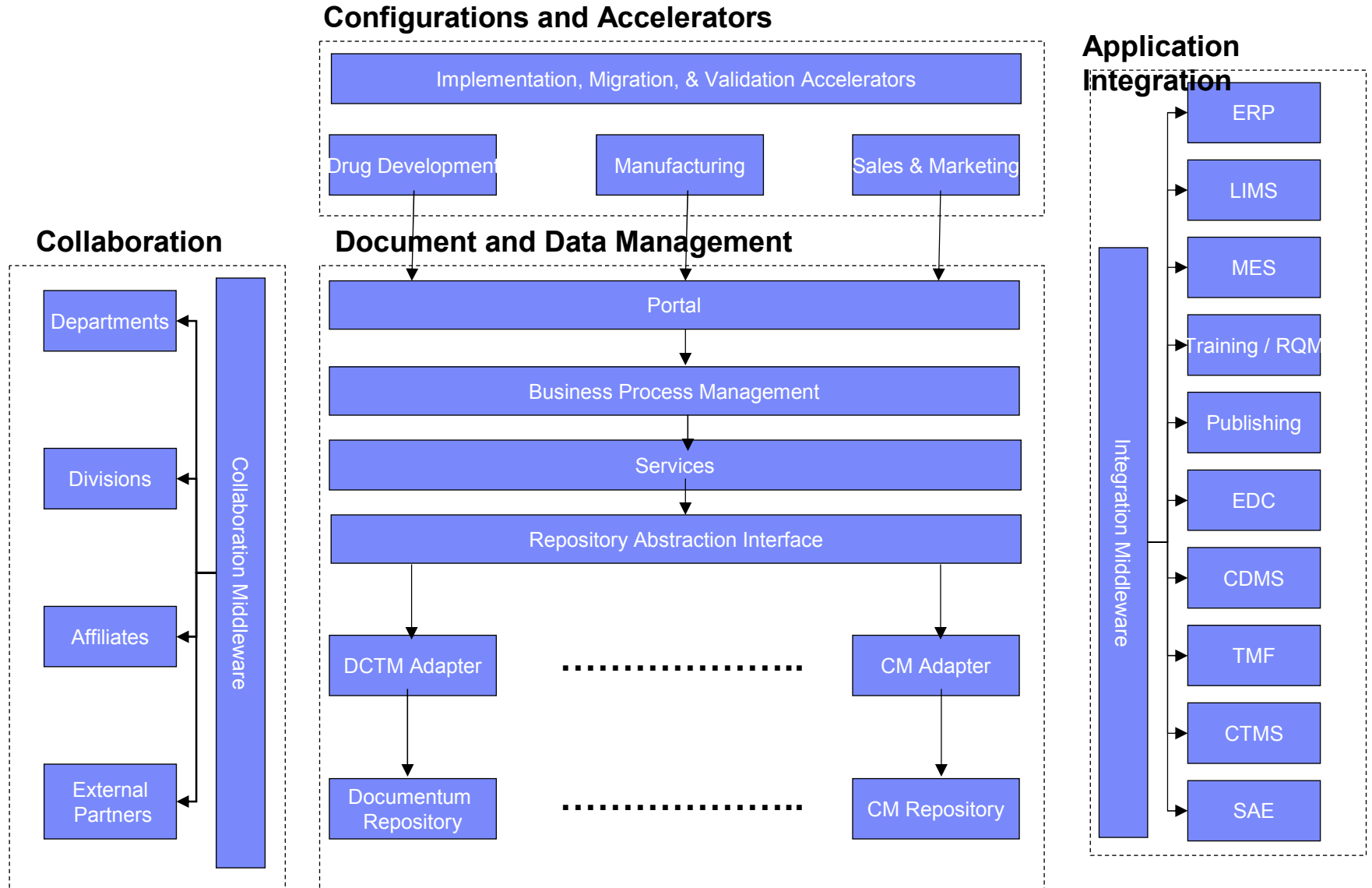**Federating Content Sources**

An Integrated Next Generation Architecture

- For compliance systems the technical architecture must support:
  - Interactions between documents, dossiers and other business systems
  - Structured and unstructured data information
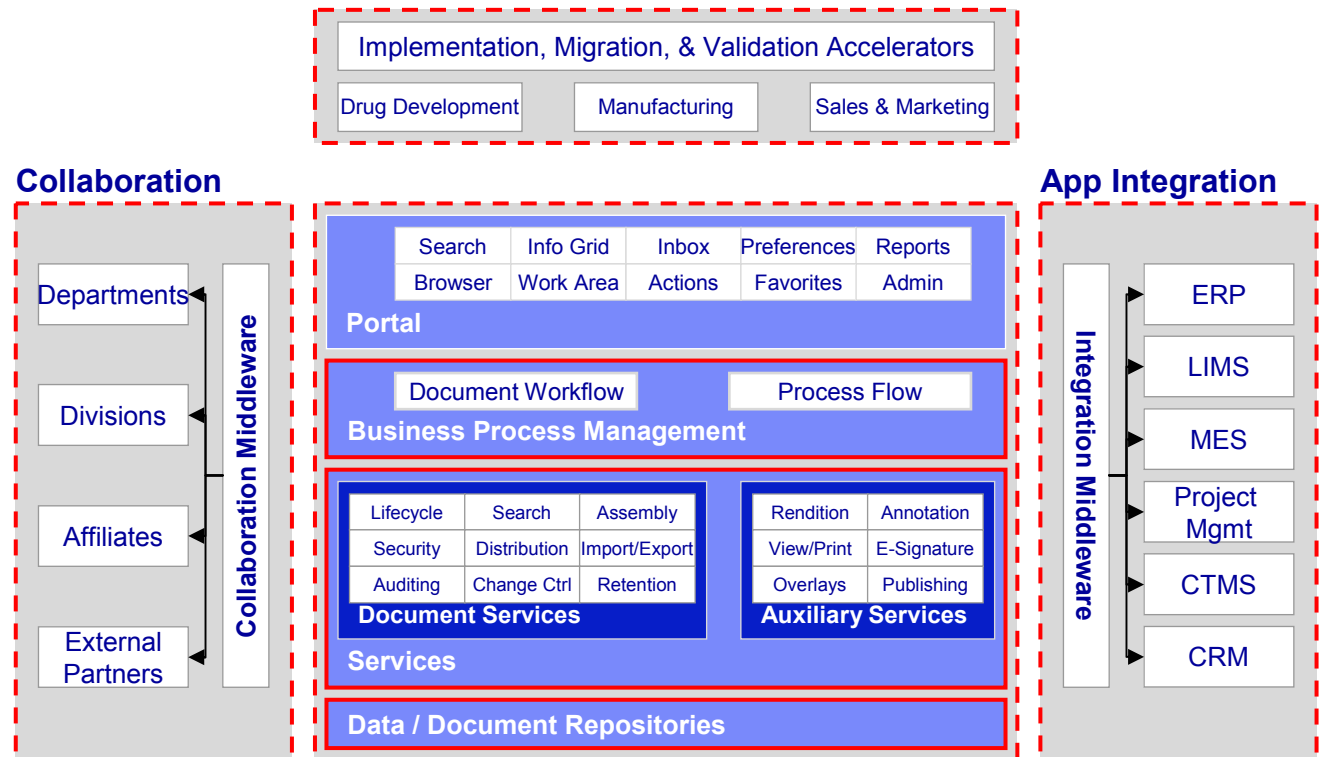 - Active and inactive states of the information

Layer		Description	Attributes
Interaction Layer		**Universal Access / Portals**	*Users & Roles Channels Presentation*
Integration Layer		**Business Processes**	*Workflow, Collaboration Business Process Management Compliance*
Service Layer		**Services**	*Serving the Business Processes Infrastructure Services*
Application Layer	EDC ERP MES ECM CRM	**Systems / Applications**	*Functional & Business Rules Engines*
Data Layer		**Data**	*Persistency Records Retention*
Infrastructure Layer		**Infrastructure & Organization**	*Technology & Deployment Authentication, Authorization…*

IBM SCORE Solution Architecture

Configurations and Accelerators

Application Integration

Implementation, Migration, & Validation Accelerators

Drug Development

Manufacturing

Sales & Marketing

Collaboration

Document and Data Management

Departments

Divisions

Affiliates

External Partners

Collaboration Middleware

Portal

Business Process Management

Services

Repository Abstraction Interface

DCTM Adapter

. . . .

CM Adapter

Documentum Repository

. . . .

CM Repository

Integration Middleware

ERP

LIMS

MES

Training / RQM

Publishing

EDC

CDMS

TMF

CTMS

SAE

SCORE - Solution for Compliance in a Regulated Environment
Next Generation Compliance Architecture

Fundamental Capabilities

- ✓ Enterprise Document & Data Management
- ✓ Document / Data & Submissions Lifecycle Management
- ✓ Process, not content, centric workflow capabilities
- ✓ Fine grained, roles based security
- ✓ Compliant logging and auditing
- ✓ Open Standards

Implementation, Migration, & Validation Accelerators

Drug Development	Manufacturing	Sales & Marketing

Collaboration

	Collaboration Middleware
Departments	
Divisions	
Affiliates	
External Partners	

Portal

Search	Info Grid	Inbox	Preferences	Reports
Browser	Work Area	Actions	Favorites	Admin

Business Process Management

Document Workflow	Process Flow

Services

Document Services

Lifecycle	Search	Assembly
Security	Distribution	Import/Export
Auditing	Change Ctrl	Retention

Auxiliary Services

Rendition	Annotation
View/Print	E-Signature
Overlays	Publishing

Data / Document Repositories

App Integration

Integration Middleware	
	ERP
	LIMS
	MES
	Project Mgmt
	CTMS
	CRM

SCORE includes essential core functionality and provides a platform that simplifies Application integration, Business process management, Collaboration, Document and Data Management, and ECTD

IBM SCORE Product Vision

- To be the #1 regulated information management solution for the industry

- To provide differentiated end-to-end compliant lifecycle management

- To be the preferred industry platform for compliance

The IBM Commitment
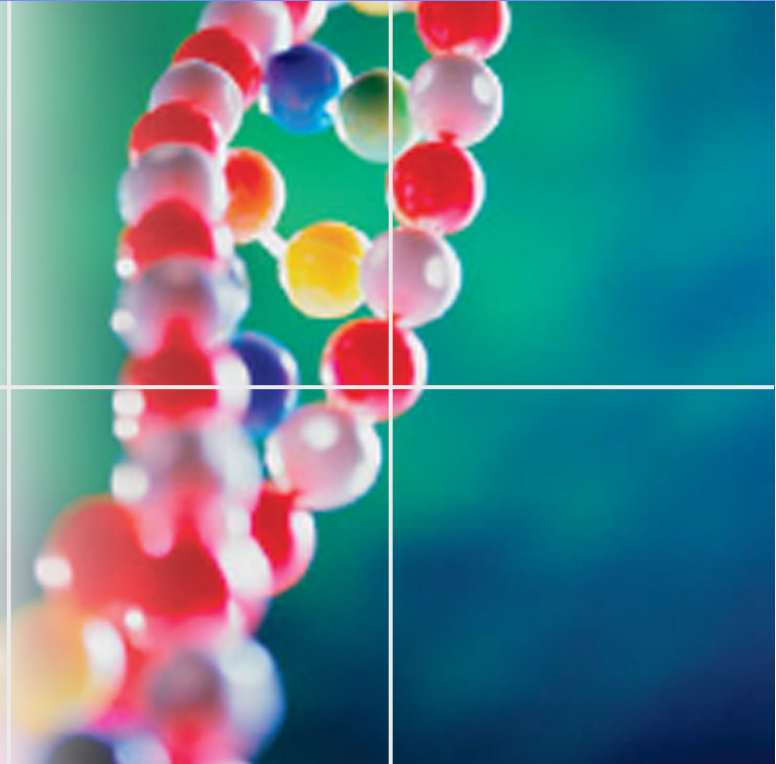
An overview of IBM Life Sciences

- IBM provides an unparalleled breadth and depth of consulting capabilities on a global basis, and access to deep solution delivery expertise.

Management support delivered by over 1,000 lifesciences consultants worldwide

Partnerships and alliances with major LS vendors including Oracle, Phase Forward, Documentum and Pharsight.
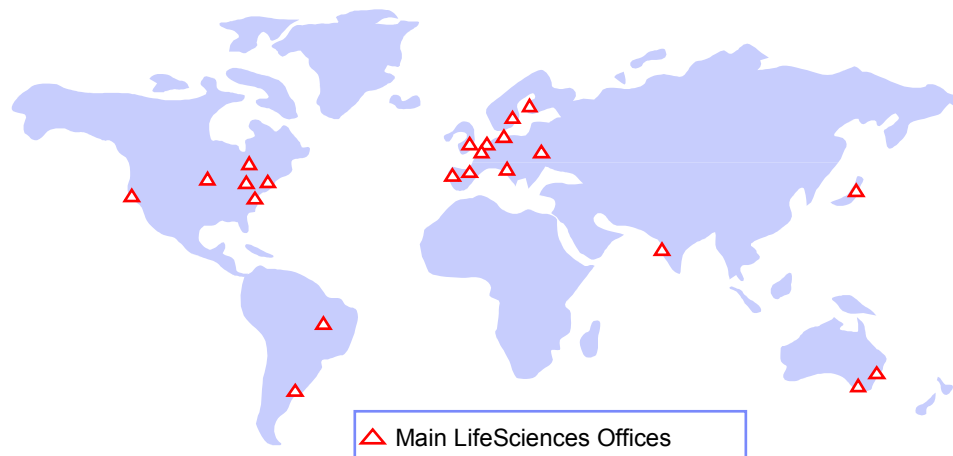
Over 750 client assignments conducted in the LS sector in the last seven years covering all areas of lifescience value chain

Consulting services delivered to 30 of the top 40 Western majors - more than any other professional services firm. Many of these relationships have existed for the past decade

△ Main LifeSciences Offices

- IBM has committed itself to the Pharma and the Life Sciences industry with a $100million, multi year investment, dedicated to serving all aspects of Pharma, Biotech and Academia.
- IBM has performed comprehensive and highly acclaimed industry research:
  - "The *Pharma 2010 series... (is) seen deservedly as one of the most cogent and sophisticated analyses of the industry to date." -- George Poste*
  - *Pharma 2010: The Threshold of Innovation recently launched.*

SCORE Development
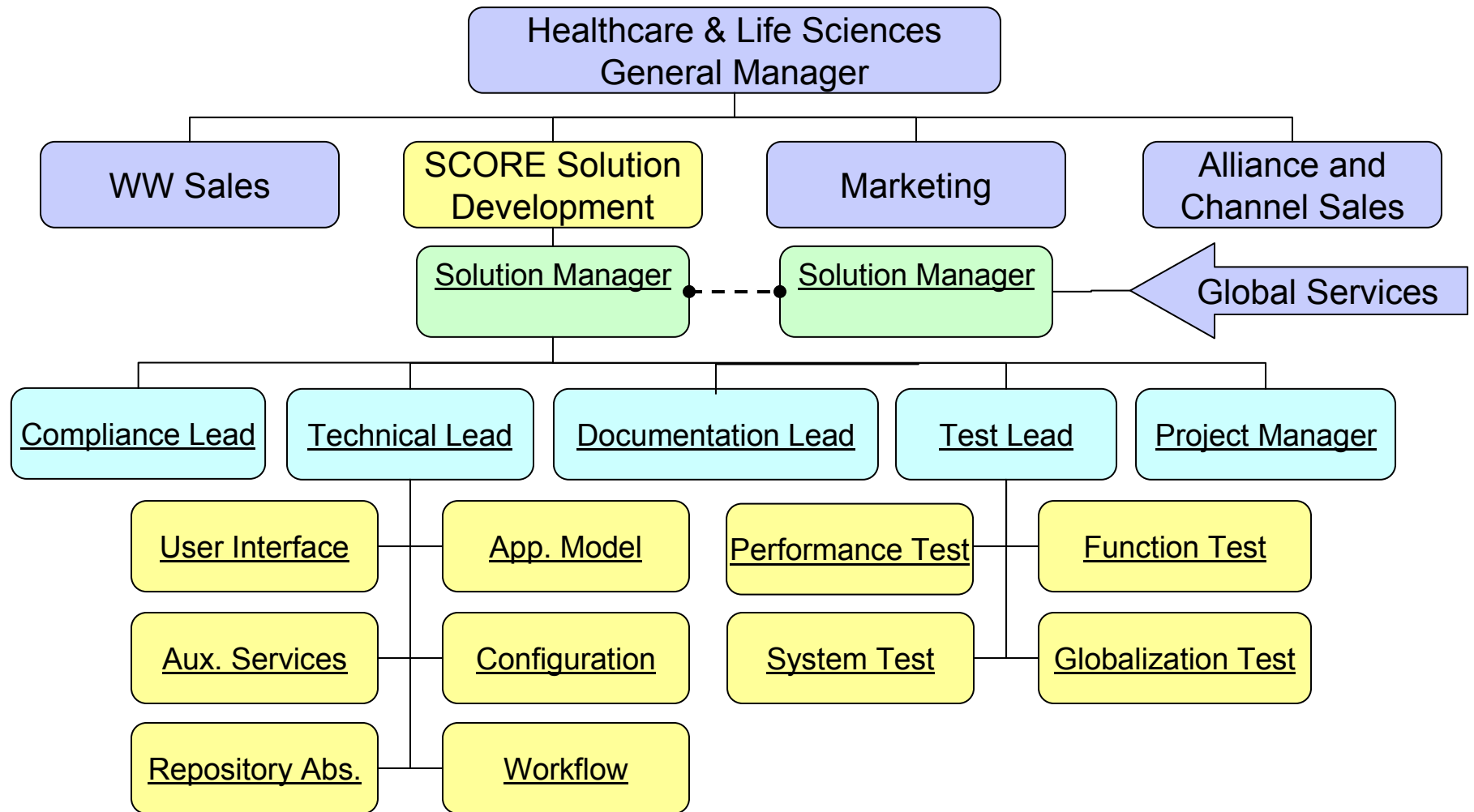
IBM Global Business Services - the Life Sciences Practice

IBM GBS'' Global Life Sciences Consulting Practice is well known by all major agencies and acknowledged as the preferred partner in serving the life sciences industry.

- IBM GBS delivers services with over 1.000 dedicated life sciences consultants worldwide.
  - We conducted over 100 client assignments in the life sciences sector in the last year covering all areas of the value chain

- Solutions for the Life Sciences industry:
  - Discovery transformation/R&D services
  - Clinical transformation/Patient relationship
  - Customer Relationship Management consulting
  - Value Driven Compliance solution
  - IBM SCORE

- approx. 250 skilled Document Management Consultant

Where and how is SCORE used today

- IBM is unique in the breadth and depth of its relationship with document and content management solution providers for the Life Sciences and other industries
- 25+ customers on GXPharma
- Some of our References today:

IBM SCORE Guiding Principles

- Product Direction driven by GBS Industry Points of View (e.g., Pharma 2010, Healthcare 2015)

- Enable Global Regulatory Capabilities

- Voice of the Customer is a key Building Block

- Cross Value Chain Support - Build Once, Use Many

- Leverage IBM Software Base Platform Investment (e.g., $1B in Websphere)

- Embrace and drive Industry and Technical Standards

धन्यवाद
Hindi

多謝
Traditional Chinese

ขอบคุณ
Thai

Спасибо
Russian

Gracias
Spanish

شكراً
Arabic

Thank You

Obrigado
Brazilian Portuguese

Grazie
Italian

Danke
German

Merci
French

நன்றி
Tamil

多谢
Simplified Chinese

감사합니다
Korean

ありがとうございました
Japanese