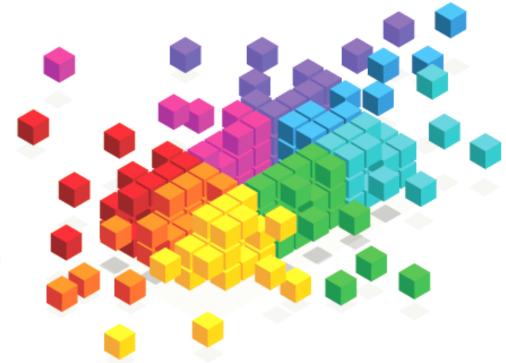
Putting Content to Work ECM UserNet 2011





## Does ECM still matter?

Craig Rhinehart and Phillip Jones, IBM Enterprise Content Management Team



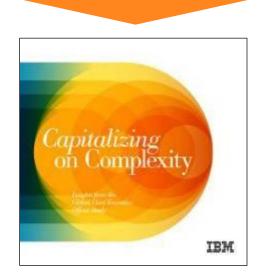


# Change, change and still more change

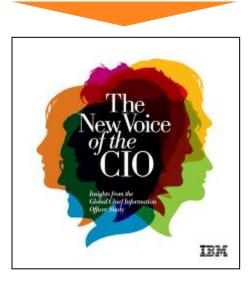
- Organizations were undergoing fundamental changes well before the financial crisis started
- Pressures in the global economy continue to drive new business models
- The pace of change is increasing the challenges are becoming more... challenging
- How are business leaders dealing with all of this?



**CFO** study 2010 1,900 interviews



**CEO** study 2010 1,500 interviews



**CIO** study 2009 2,600 interviews



# What are your executives focused on?

# Become more creative and innovative



- Creativity is the top leadership quality
- Drive change to stay ahead of market
- Expand our communication channels
- Break with status quo (industry, business and revenue models)

Increase our responsiveness and flexibility

- Simplify operations and products
- Shift to iterative approaches (make quicker decisions - execute with speed)
- Increase agility by integrating globally and exploit partnering

Reinvent our Customer relationships

- Get closer to customers (top theme)
- Better understand our what customers need
- Deliver unprecedented customer service



## CIOs of high-growth organizations focus on innovation

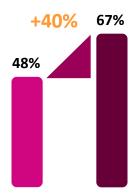
## Using IT as a competitive weapon

- Integrate business and IT to innovate new approaches
- Proactively reaches out to the business to co-create and champion innovation
- Has a clear view of the top technological priorities that will enhance competitiveness

"Innovation should be based on practical technology that can deliver business objectives within reasonable time and cost, which can be absorbed by the business."

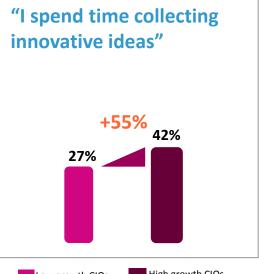
Life insurance CIO, India

"I actively reach out to the business to cocreate and champion innovation"



"One of the things we try to do is define innovation. It is the ability to generate a lot of diverse ideas to address a particular need. Then we distill it into an actionable plan that results in business improvement"

Energy and Utilities CIO, U.S.

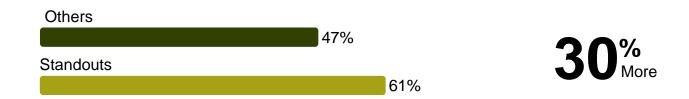


Low and high growth CIOs give reference to the context in which they operate: an environment characterized by low versus High profit before tax growth. For more information – see the CIO study 2009



# World-class companies focus on simplifying their operations and standardizing processes

## Changes to operating strategy: Simplify



"Simplification and standardization are key strategies that we have been using for several years to reduce existing and future complexity."

Brenda Barnes, CEO, Sara Lee, United States

"When things look very simple, you need to look for a competitive edge. When things are complex, you simplify to get the competitive advantage"

Graeme Liebelt, Managing Director and CEO, Orica Limited, Australia



# Organizations are using ECM to standardize and simplify in these ways



#### **SMART IS ... ELIMINATING PAPER**

A large U.S. federal agency saves more than \$1.3 billion annually by eliminating paper.



### **SMART IS ... GOVERNING AND DEFENSIBLY DISPOSING OF INFORMATION**

JM Family Enterprises saves \$2.1 million annually by reducing costs.



#### SMART IS ... IMPROVING CONTENT-CENTRIC WORKFLOWS

J.B. Hunt added \$870K annually by more accurately charging customers.



#### **SMART IS ... RAPIDLY DERIVING CONTENT INSIGHTS**

A large U.S. bank achieved ROI on content analytics in 7 months.



#### SMART IS ... LOWERING LEGAL RISK AND COST

BASF implemented more cost-effective governance.



# ECM has changed

## Smarter content management

Content in a shared services model, delivered in context to specific business users and processes, driving faster insight and action

## Traditional content management

Content locked in multiple, siloed repositories, driving uncontrolled proliferation, inconsistent access, and mounting costs and risks

Infrastructure-led approaches

Siloed, departmental management

Manual, inefficient processes

"Keep everything" governance model

"Search and hope" user experience

Business solution-led approaches

Collaborative, shared services model

Optimized, dynamic processes

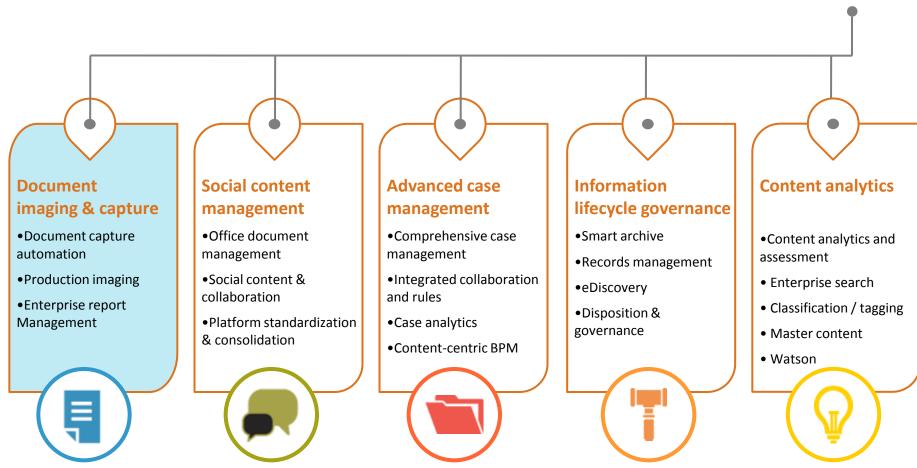
Policy-based information lifecycle

Analytics- and people-driven insight



# **IBM Enterprise Content Management**

Imaging and capture have never mattered more





## Solutions for document automation

#### Delivers real business results

- Reduce cost of transporting paper
- Reduce data entry labor costs
- Extract data from documents without manual keying
- Reduce paper sorting and document preparation
- Replace obsolete or costly legacy systems
- Reduce license fees, support and maintenance costs
- Enable case management, governance and eDiscovery

## Paper

- Labor intensive
- Inactive



## **Email**

- Regulatory control
- Policy enforcement
- Attachments



## Office documents

- Access and visibility
- Manageability





- an IBM® Company
- Best-of-breed technology for capture automation and recognition
  - Expertise in a wide variety of industries and solutions: accounts payable; explanation of benefits, tax and more



# **IBM Production Imaging Edition**



Combine the power of advanced capture and scale of ECM

### **Delivers real business results**

- Manage entire lifecycle of document images
  - -From Capture through ECM
  - Imaging-centric workflow management to
     Image viewing, annotation and redaction
  - Scale from distributed locations, at a departmental level, to enterprise wide deployments
- Perform for billions of document images, and tens of thousands of users
- Cut costs and improve productivity

"Imaging solutions represent a low-risk, high-value investment that can be extended through an enterprise."

— Forrester, 2010



# **IBM Enterprise Report Management**

Content Manager on Demand for high volume print output: e-capture and e-presentment

### **Delivers real business results**

- Improved customer responsiveness
- Web access: to print/paper documents, 24x7
- Improved customer self-service
- Reduced printing costs and paper use: go green
- Avoid storing print/paper documents
- Replacement of legacy systems

"Reduced costs for printed customer bills saving \$25 million annually. Increased small business customer satisfaction and gained \$750,000 in promise-to-pay revenue during initial six months of operation"

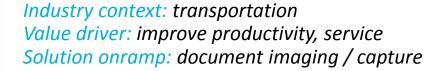
Large telco company



## **Global Logistics Company**

# Smart is: improving productivity and service

Represents the state of the art for capture today: capturing paper, fax and emails, distributed scanning from many different sites, with mar rules-driven variations.



### **Business Challenge**

150,000 documents arriving every day from every source – mail, fax, email - and piling up rapidly as company prepared customs paperwork for shipments. Customs has many requirements for complete declaration at border crossing

#### What's Smart?

Deployed seven imaging applications enabling faster order processing with fewer errors Process ~600,000 pages per day in U.S. (~3,000 users) and expect to process ~4 million pages per day (~10,000 users) globally.

#### **Smarter Business Outcomes**

Company is able to move more shipments across borders with 30% less resources with reduced lost documents and data errors while also improving cycle times and accuracy.

© 2011 IBM Corporation



# CIOs of high-growth organizations are finding new ways to communicate and collaborate

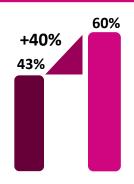
# More actively using collaboration to drive innovation



"Collaboration causes innovation."

Electronics CIO, USA

# Realize change through deployment of collaborative and communication tools



"Using higher order collaborative tools can be quite smart and lower costs — for example, collaborative planning and forecasting for retail."

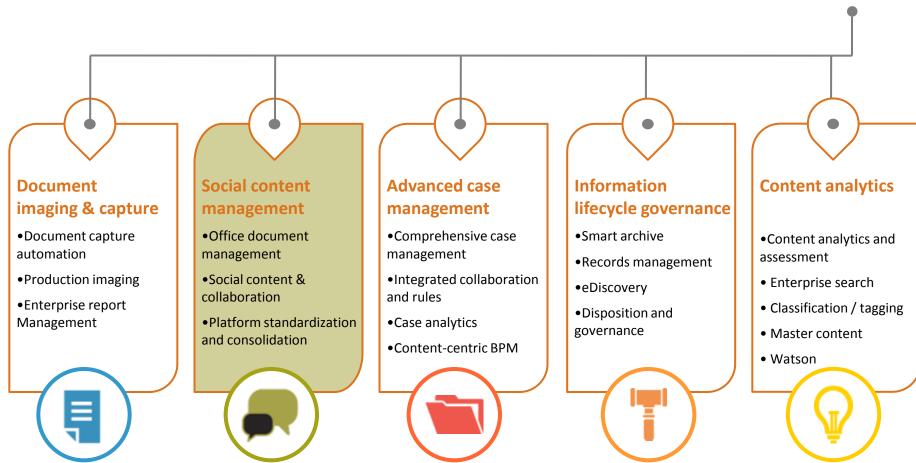
Retail Industry CIO, UK

Low growth CIOs High growth CIOs



# **IBM Enterprise Content Management**

Managing social and collaborative content is becoming a hot topic





# Organizations are looking to get value from new communities

## 500 billion impressions

annually made about products and services <sup>1</sup>

## 770 million people

worldwide visited a social networking site <sup>2</sup>

44x information growth by 2020 <sup>3</sup>

### **Public** Social Media







Conversations about quality, experience, price, value, service ...

- Forums and Newsgroups
- Wikis, Blogs and Microblogs
- Social Networks
- Social Media News Aggregators



## **Corporate** Social Business

Conversations about strategy, projects, issues, risks, outcomes ...





In addition to conversations about quality, experience, price, value, service ...

- Wikis, RSS and Forums
- Email and Collaborative Content
- Call Center Notes and Recordings
- Customer and Employee Surveys
- Reports, Minutes and Research



# Challenges of social business and content

Changes in how we communicate impact how we manage content





# What is social content management?

## **Patterns**

- Information is immediate
- Collaborative, ad-hoc processes
- Work is knowledge intensive
- Content is essential for decision making
- Outcomes are sustained
- Relies on smart people

KEY: Content awareness and action measured in hours to minutes

## **Challenges**

- Content access anywhere
- Access and security
- Workflows & business process
- Content reuse / repurposing
- Archival & records management
- Federated searching
- Content lifecycles & single sourcing

KEY: Dynamic, crossenterprise access, management and control

## **Solution**

- ECM access from business productivity tools
- Open social and contentcentric apps (CMIS, ACM)
- Putting social content under management
- Comprehensive document management options
- Social business tools with integrated ECM services

KEY: Integrated solutions to enable swift, collaborative outcomes



# IBM approach to social content management



People connect & interact

## • > Off

## Office document management

- Comprehensive options, access and control from business productivity tools
  - IBM Lotus, Microsoft Office and others

## •

## **Content collaboration**

- Integrated social and content-centric applications enable enterprise collaboration
  - IBM and Microsoft collaboration, CMIS support, advanced case management, content collection



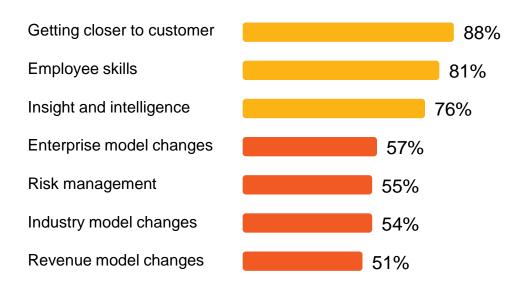
## Social business tools with shared ECM services

- Unified, secure, scalable platform (with repository of record) extends social content to enterprise
  - New in IBM Connections 3.0.1



# 'Getting closer to the customer' is THE top priority for standout organizations

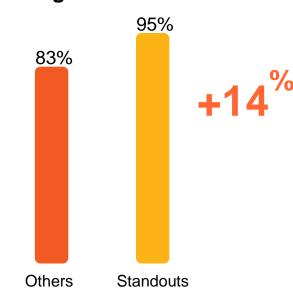
### "Where I will focus over the next 5 years"



"To surprise customers requires unexpected ideas through interactions of people with diverse perspectives."

Shukuo Ishikawa President and CEO, NAMCO BANDAI, Japan

### **Getting closer to customer**



"Our customers want personalization of services and products. It is all about the market of one."

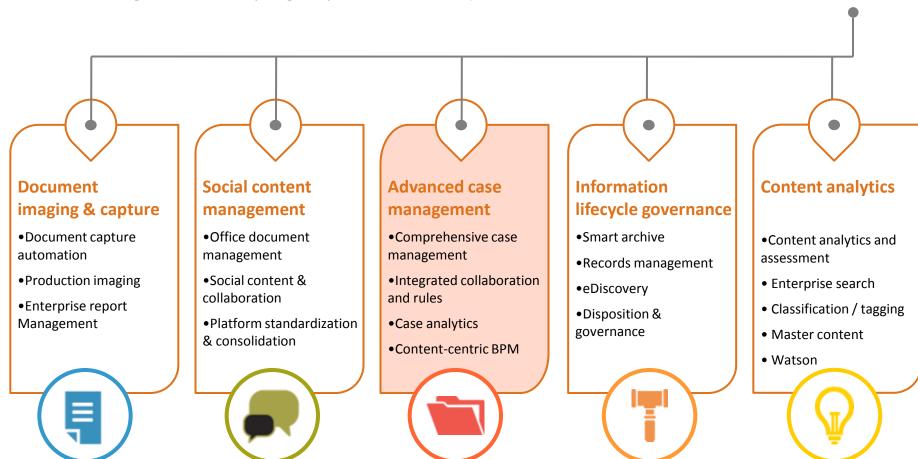
Tony Tyler CEO, Cathay Pacific Airways, Hong Kong

Source: Q13 Which of the following dimensions will you focus on more to realize your strategy in the new economic environment over the next 5 years? n=1523, n=303



# IBM Enterprise Content Management

Case management helps get you *closer to your customer* 





# Case management in every industry

Although a "case" may be expressed differently depending on your business ...



Invoice, Contract, Employee, Vendor, Customer, Project, Change Request, Complaint, Exception, Incident, Audit, Electronic Discovery, etc...

#### **Insurance**



- Policy
- Underwriting
- Claim
- Annuity

• ...

### **Banking**



- Loan
- Mortgage
- Account
- Credit Card

• ...

#### Healthcare



- Patient case
- Claim
- Member
- Provider

• ...

### Government



- Grant
- Court case
- Citizen
- Tax payer

• ...

#### **Energy & Utilities**



- Rate Case
- Permit
- Land
- Property

• ...

... a common pattern of challenges exists across all industries



# **IBM Case Manager**

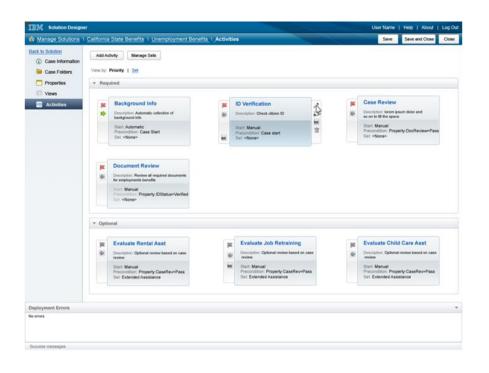
Simplifying the delivery of case-based solutions



- Optimizes case handling
- Supports dynamic, runtime work management
- Delivers trusted information to the case structured or unstructured
- Manages and governs entire case lifecycle
- Provides the line-of-business with tools to rapidly deliver case-based solutions



# Rapid application case design for the business



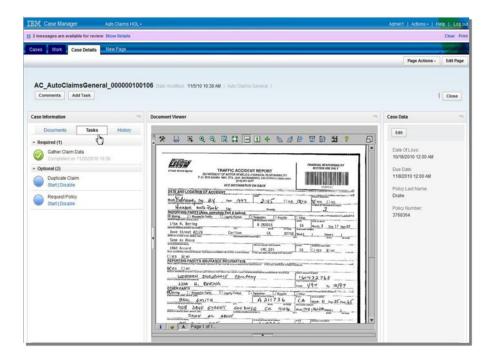
- Easy to use, "Interview Mode" (wizard-driven)
  - Case designer allows a business user to very quickly build a solution
- Comprehensive across case assets
   Case designer can provide 360° view of case
- Leverage templates for a fast start Represent industry best practices
- Significantly shortens time-to-value for case-style applications

#### **Bottom line:**

Deliver end users the solution in a fraction of time of other approaches



# Case worker user experience



- Role-based and personalized
   End user gets exactly the information
   they need to progress the case
- Flexible and extensible
   Can be configured to meet unique business requirements
- Provides deep context for case work No more disjointed jumping between application

Brings people, process and information together to drive case progression and better outcomes

#### **Bottom line:**

A case worker has all the information they need to improve case outcomes



# Powerful analytics for better case outcomes



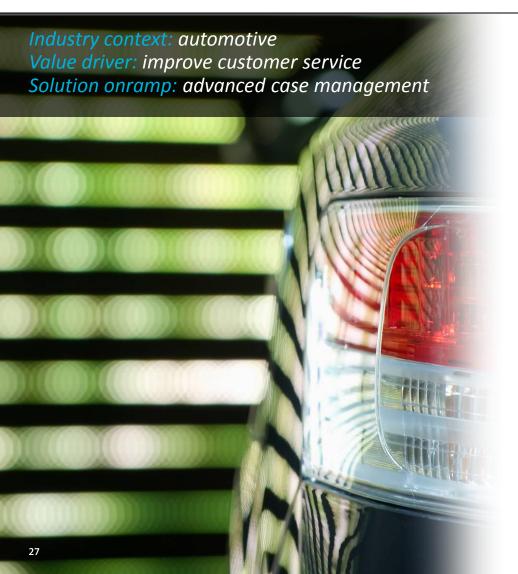
- Comprehensive reporting and analysis
   Gives case managers visibility across
   all information types to assess and act
   quickly
- Real-time dashboards
   Understand issues before they become a problem
- Unique content analytics for discovering deeper case insight

#### **Bottom line:**

Case managers need insight in order to impact results.



# Smart is: improving customer service



## **JM Family**

"The major business objectives in our organization are excellence in customer service and increased productivity of our associates. IBM ECM is a key enabler of these objectives."

— Keith Tempinski, Director, Enterprise Content Group, JM Family Enterprises, Inc.

#### **Business Challenge**

Lack of visibility into customer service interactions around automobile loans and leases Bottlenecks due to many audits in approval steps

#### What's Smart?

Customer service associates focused on exception-based processes, with greater knowledge sharing across departments

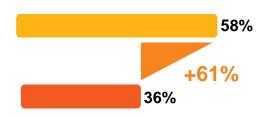
#### **Smarter Business Outcomes**

\$2.1 million annual call center labor savings. Processes cut from days to just minutes. Handle more loans with current resources. Eliminated annual printing of 168k pages for cost savings and environmental benefits.



# CIOs of high-growth businesses are looking to implement a strong information governance model

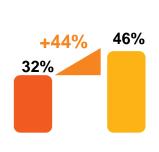
## High growth CIOs proactively craft data into actionable information



"We do recognize the strategic advantage of using data to support improved decision making. We are not as strong as we would like to be, but this is a key plank of our strategy moving forward."

Consumer products CIO, Ireland

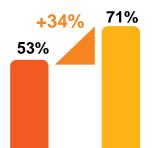
## High growth CIOs add value by having a strong data governance model in place



"Having a strong data governance model is a strategic area on the roadmap; Having a single view of the truth through accurate data is a strategic imperative."

Financial Markets, CIO, U.S.

## High growth CIOs add value by proactively suggesting better ways to use data



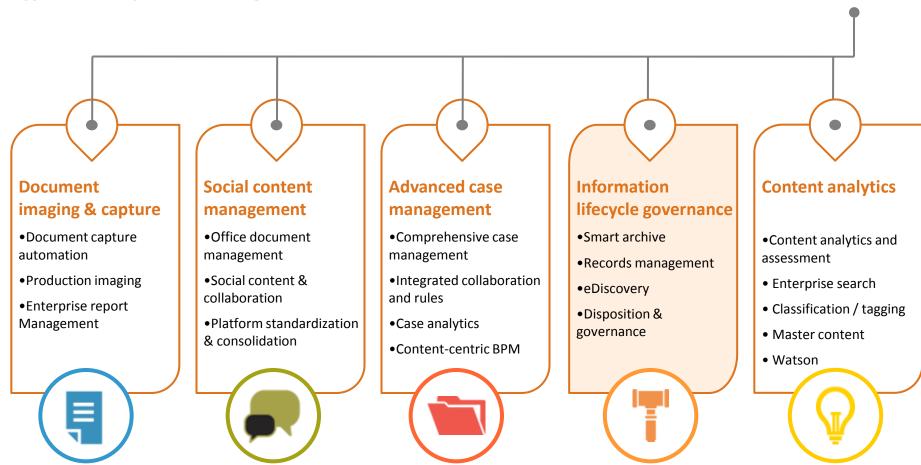
"The implementation of BIO's (Business Info. Officers) within the business units are improving the use of data as there is a natural interface within the business units towards central IT."

CIO, Sweden



# IBM Enterprise Content Management

Effective information governance has never mattered more





# Why is information governance a problem?

98%

Companies that cite defensible disposal as key driver behind their governance programs

22%

Companies that can defensibly dispose today

\$3M

Average cost to collect, cull and review information per legal case<sup>1</sup>

70%

Portion of information unnecessarily retained<sup>2</sup>

17%

Amount of IT budget spent on storage<sup>3</sup>

44x

Projected information growth, 2009-2020<sup>4</sup>



# Information has an important lifespan requiring governance

Frequency of **Access and Use** 95% **Expires** Almost all has a retention policy ... very little should be kept forever **Born Digital** Almost all is born digital ... and the rest should become digital



# **IBM** Information Lifecycle Governance

- IBM ILG includes solution sets for legal, IT and RIM stakeholders:
  - Smart Archive solution for IT
  - eDiscovery Management solution for Legal
  - Records and Retention
     Management solution for
     Records and Information
     Managers
  - Disposal and Governance
     Management solution for the CIO





- A recognized leader in legal information governance and legal holds pioneer
- IBM now delivers the industry's most comprehensive solution to information lifecycle governance



## Thomas Miller Group

# Smart is: reducing storage space by 60%

"IBM's e-mail management offerings provided us with the stability and functionality that we needed to address and meet our e-mail archiving, retention and compliance regulatory requirements."

> — Rashid Mahmood, Lotus Notes Systems Manager, Thomas Miller Group



Industry context: insurance
Value driver: improve process efficiency
Solution onramp: info. lifecycle governance

#### **Business Challenge**

Industry and government regulations and legal discovery drove the need for a more effective method of managing, retaining and producing electronic information in a timely manner.

#### What's Smart?

IBM Smart Archive solutions provide e-mail archiving and retrieval, and manages growth for any Notes database or server platform. IBM Content Manager manages all e-mail content across multiple platforms, databases and applications

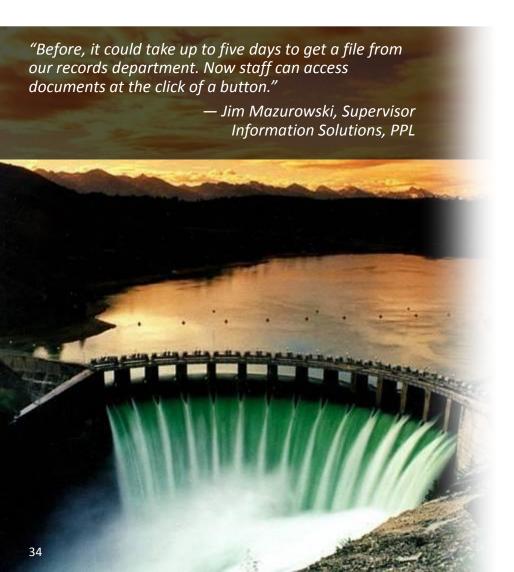
#### **Smarter Business Outcomes**

- About 30,000 daily emails and attachments are indexed and archived for rapid retrieval, including 23 million emails retroactively archived and eDiscovery ready.
- Deep compression and single instance storage functionality reduced storage space by 60%.
- Users benefit from unlimited mailbox management portation



## **PPL Corporation**

# Smart is: knowing what to keep



Industry context: energy and utilities
Value driver: reduce costs, improve compliance
Solution onramp: info. lifecycle governance

#### **Business Challenge**

PPL wanted to minimize the risk and costs associated with records, plus improve document retention for regulatory compliance and information governance.

#### What's Smart?

PPL addressed their e-mail and records retention requirements by properly capturing, consolidating, storing and managing content across its lifecycle, enabling compliance staff to find trusted, contextually relevant information in a single retention record.

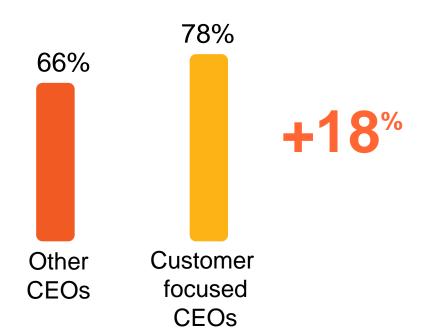
#### **Smarter Business Outcomes**

The IBM solution reduced time to access records from up to five days to just seconds, enabled a 75% decrease in time to compile information for new projects, and helped staff retain critical documents to meet regulatory requirements.



# CEOs want to exploit the information explosion to better understand and serve customers

Focus on deriving new insights and intelligence from information to help realize strategy



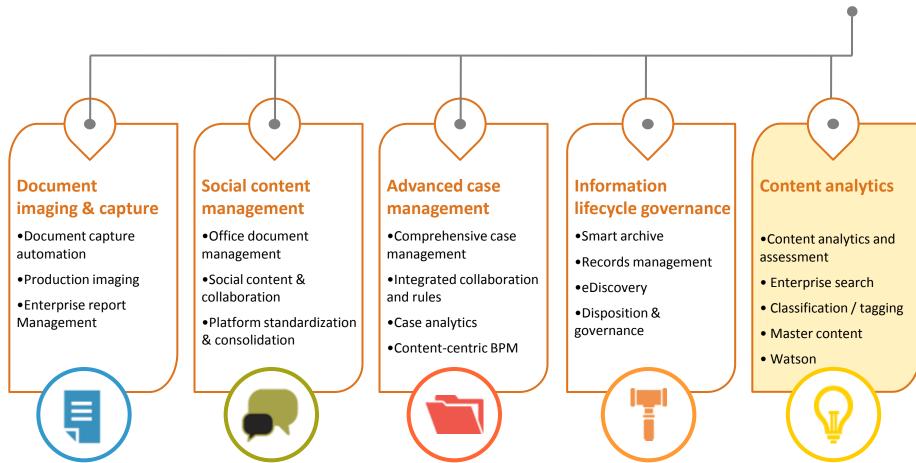
"Insight and foresight are linked with leadership. It's insight that helps to capture opportunity."

> Zhou Ming, Executive VP and Secretary General, China Council for Int'l Investment Protection China



# IBM Enterprise Content Management

Content analytics is helping make sense of business information





## The Next Grand Challenge





### Content analytics and Watson

- Natural Language Processing (NLP) is the cornerstone to translate interactions between computers and human (natural) languages
  - Watson uses IBM Content Analytics to perform critical NLP functions
- Unstructured Information Management Architecture (UIMA) is an open framework for processing text and building analytic solutions
  - Several IBM ECM products leverage UIMA text analytics processing:
    - IBM Content Analytics
    - OmniFind Enterprise Edition
    - IBM Classification Module
    - IBM eDiscovery Analyzer





### Unlock valuable insight from content

What our clients are doing with Content Analytics

Understand what customers want before they ask.



Detect fraudulent claims before they are paid.



Dynamically deploy resources to the areas of greatest threat.



Save lives by quickly identifying critical safety defects



Are you unlocking the value of your unstructured content?



### Going from raw information to rapid insight

Uncover business insight through unique visual-based approach

## Aggregate and extract from multiple sources

... to form large **text**-based collections from multiple internal and external sources (and types), including ECM repositories, structured data, social media and more.

## Organize, analyze and visualize

... enterprise **content** (and data) by identifying trends, patterns, correlations, anomalies and business context from collections.

## Search and explore to derive insight

... from collections to confirm what is suspected or uncover something new without being forced to build models or deploy complex systems.





IBM Content Analytics is a platform to derive

new insights

- Transform raw information into business insights without building models or deploying complex systems.
- Derive insight in hours or days ... not weeks or months.
- Easy to use for all knowledge workers to search and explore content.
- Flexible and extensible for deeper insights.



External and Internal Content (and Data) Sources including Social Media and More



### **NTT Docomo**

## Smart is: reducing customer churn

"Insight into customer interaction logs is an information gold mine for us."

— General Manager Japan Business



Industry context: telecommunications Value driver: improve customer service Solution onramp: content analytics

### **Business Challenge**

Adopt a customer-oriented business strategy to offer highly satisfying products and services based on real voice of customers (VoC).

### What's Smart?

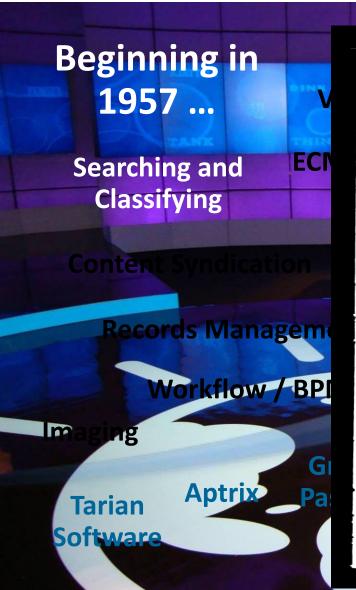
They process call center notes and customer emails to detect likely candidates for customer churn. A rules-based text analysis engine in IBM Content Analyzer detects the customer churn candidates. An alerting engine then automatically sends reports to a department that deals specifically with customer churn situations.

#### **Smarter Business Outcomes**

Improved rates for model and service upgrades to loyal customers. Started new Premium Club points program based on VoC. Set initial parameters of mobile phones based on VoC.



### **IBM at 100:** ECM Innovation for Over 50 Years



### eo Content

H. P. Luhr

A Statistical Approach to Mechanized Encoding and Searching of Literary Information\*

ECN Standards

Abstract: Written communication of ideas is carried out on the basis of statistical probability in that a writer chooses that level of subject specificity and that combination of words which he feels will convey the most meaning. Since this process varies among individuals and since similar ideas are therefore relayed at different levels of specificity and by means of different words, the problem of literature searching by machines still presents major difficulties. A statistical approach to this problem will be outlined and the various steps of a system based on this approach will be described. Steps include the statistical analysis of a collection of documents in a field of interest, the establishment of a set of "notions" and the vacabulary by which they are expressed, the compilation of a thesaurus-type dictionary and index, the automatic encoding of documents by machine with the aid of such a dictionary, the encoding of topological notations (such as branched structures), the recording of the coded information, the establishment of a searching pottern for finding pertinent information, and the programming of appropriate machines to carry out a search.

#### 1. Introduction

basec

The essential purpose of literature searching is to find those documents within a collection which have a bearing on a given topic. Many of the systems and devices, such as classifications and subject-heading lists, that have been developed in the past to solve the problems encountered in this searching process are proving inadequate. The need for new solutions is at present being intensified by the rapid growth of literature and the demand for higher levels of searching efficiency.

Specialists in the literature searching field are optimistic about the future application of powerful electronic devices in obtaining more satisfactory results. A successful mechanical solution is unlikely, however, if such modern devices are to be viewed merely as agents for accelerating systems heretofore fitted to human capabilities. The ultimate benefits of mechanization will be realized only if the characteristics of machines are better understood and systems are developed which exploit these characteristics to the fullest. Rather than subfilire the arful classificatory schemes now in use, new systems, woul be found in automation, there is a real danger that the demand for professional talent will become too great to fill. In view of the foreseeable strain, the most efficient use of talent will have to be made even by automatic systems. The operating requirements of these systems will, above all, have to be well adapted to the degree of education and experience of generally available personnel.

Language difficulties, too, will have to be met. The problems stemming from the mere volumes of literature to be searched are being continually aggravated by the increasing accession of foreign-language documents that rate consideration on an equal level with domestic material. To be of real value, future automatic systems will have to provide a workable means of overcoming the language barrier.

Complexity levels of information systems

The general terms in which the problem of literature searching has been treated might indicate the possibility of a general, or universal, solution. It would be unreal-

IBM JOURNAL • OCTOBER 1957

\*Presented at American Chemical Society meeting in Miami, April 8, 1957.

appropriately different techniques to their mechanization. The following list of six information systems in order of

Production **Imaging** 2011 **Datacap** :Net ver \$14B nvested nce 2006

IBM JOURNAL \* OCTOBER 1957



### IBM is reinventing customer relationships

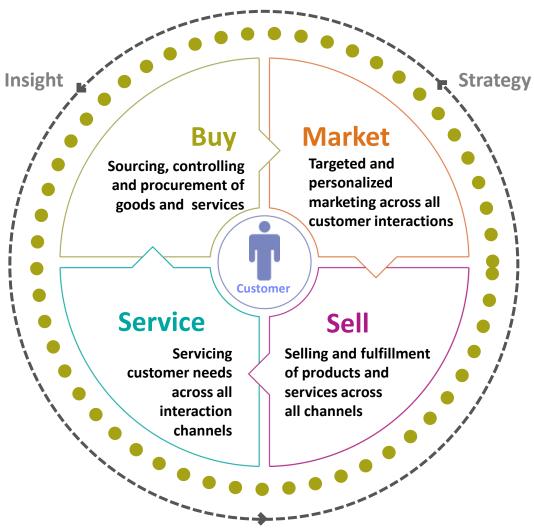
### **IBM Smarter Commerce**

Chief Sourcing & Procurement Officer

"Right Product, Right Place, Right Time, Right Price"

> VP of Customer Loyalty

"Happy, Loyal, Recurring Shoppers"



## Chief Marketing Officer (CMO)

"Brand consistency and enhanced brand experience across all customer interaction channels"

VP of Commerce, Stores & Operations

"Efficient, low-cost order to cash processes and improved store sales"



### ECM helps enable Smarter Commerce



Document imaging & capture



Social content management



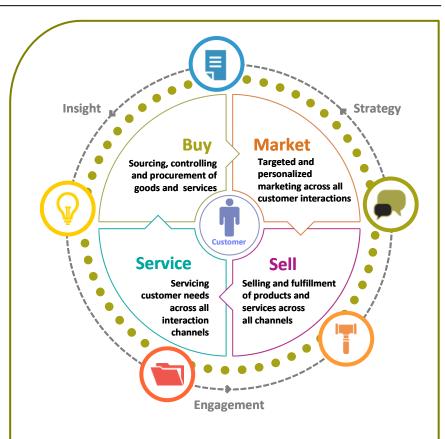
Advanced case management



Information lifecycle governance



**Content analytics** 



Smarter Commerce is a smarter way for companies to buy, market, and sell their products, while serving their customers at the center of the value chain, enhanced by technologies such as ECM



## Why IBM?



IBM has the experience, solutions and roadmap to help governments become smarter. We deliver:

- A commitment to progress and a century's worth of proven solutions
- •Solutions that deliver value and address today's challenges and goals while creating a foundation for tomorrow
- •Leadership that helps build smarter governments and a smarter planet
- A strong ECM portfolio with complementary partners that address public sector needs

56 of the top 58 government organizations use ECM solutions from IBM.\*



### ECM has never been more relevant

# Become more creative and innovative

- Creativity is the top leadership quality
- Drive change to stay ahead of market
- Expand our communication channels
- Break with status quo (industry, business and revenue models)

# Increase our responsiveness and flexibility



- Shift to iterative approaches (make quicker decisions - execute with speed)
- Increase agility by integrating globally and exploit partnering

Reinvent our Customer relationships

- Get closer to customers (top theme)
- Better understand our what customers need
- Deliver unprecedented customer service

Putting Content to Work ECM UserNet 2011

