How to Build SharePoint Knowledge Portals that People Love to Use

November 17, 2015

Paul Wlodarczyk
Earley Information Science

Jeff Fried
BAInsight

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Today's Agenda

- **Welcome & Housekeeping**
  - Session duration & questions
  - Session recording & materials
  - Take the survey!
- **How to Build SharePoint Knowledge Portals that People Love to Use**
  - Paul Wlodarczyk, VP, Client Services, Earley Information Science (@twitcontentguy)
  - Jeff Fried, CTO, BAInsight (@jefffried)
- **Questions & Answers**
- **Join the conversation: #eiswebinar**

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Today's Speakers

Paul Wlodarczyk
VP, Client Services
Earley Information Science

Leads enterprise digital transformation projects

30 years' experience in unstructured content lifecycle and related technologies

paul@earley.com

@twitcontentguy

Jeff Fried
Chief Technology Officer
BA Insight

Long time Search nerd

Passionate about search, SharePoint, search-driven applications

Jeff.fried@bainsight

@jefffried

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Earley Information Science helps organizations establish a strong information architecture and content management foundation

Realize your digital transformation vision with EIS.

Earley Information Science (EIS)

Information Architects for the Digital Age

Founded – 1994

Headquarters – Boston, MA

www.earley.com

For more info contact:

Dave.Zwicker@earley.com

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About BA Insight

- BA Insight provides software to accelerate implementation of SharePoint based intranets/portals and provide Internet-like user experiences, including search
- Hundreds of successful implementations at Global 5000 companies:

Case Study: Applied Materials
Field Service Information Access

- Global leader in semiconductor manufacturing equipment needed better information access for Technicians who troubleshoot & repair products in customer's cleanrooms.
- Previously deployed multiple Knowledge Portals – which failed for one reason or another.
- Had information access challenges that could be true for any of us:

Challenge 1: Hard to find answers in a sea of legacy content

Challenge 2: Complicated IP & security concerns

Challenge 3: Numerous disconnected information sources

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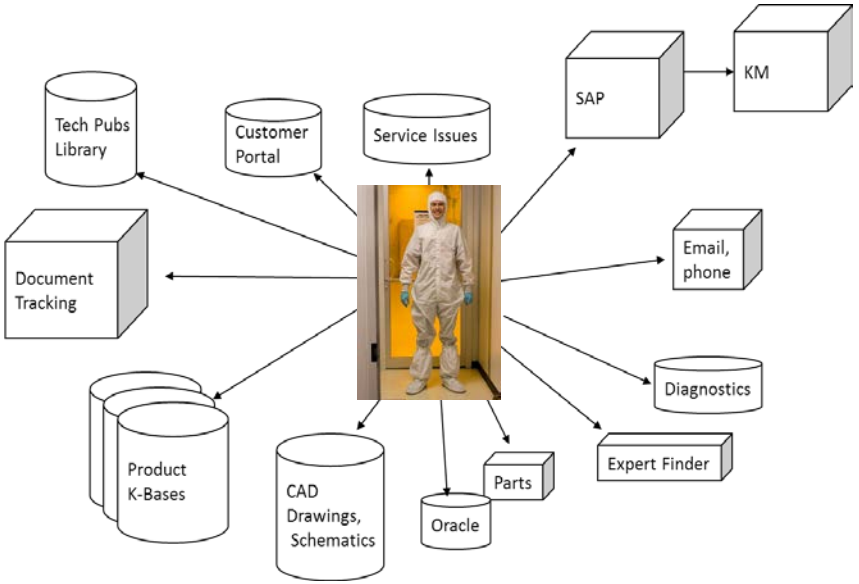
Challenge 1: Loads of content vs. answers

- **Decades of content:**
  - PDFs – manuals, drawings, scans
  - Communities – forums, shared drives, bulletin boards, email, chat
  - Knowledge Management – tips, Best Known Methods
- **Issues:**
  - Content located in 17 different systems
  - Most important content is hard to find
  - Too much time spent searching
  - Obsolete content
  - Don't trust all of the content
- **How to find answers vs finding documents?**



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Challenge 2: Complicated Security

Technicians can inadvertently leak trade secrets:

- **Protecting Customer IP**
  - Be sure that when a technician collaborates they aren't exposing customer IP to competitors
- **Protecting Company Product IP**
  - Prevent piracy / reverse engineering of Applied Materials products, parts
- **Preserving Company Services IP**
  - Assure that customers pay for value-added services
  - Secure service methods from competitive service providers

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Challenge 3: Too Many Systems

We don’t need anther system….

Technicians had dozens of systems and repositories

– too many places to hunt for content

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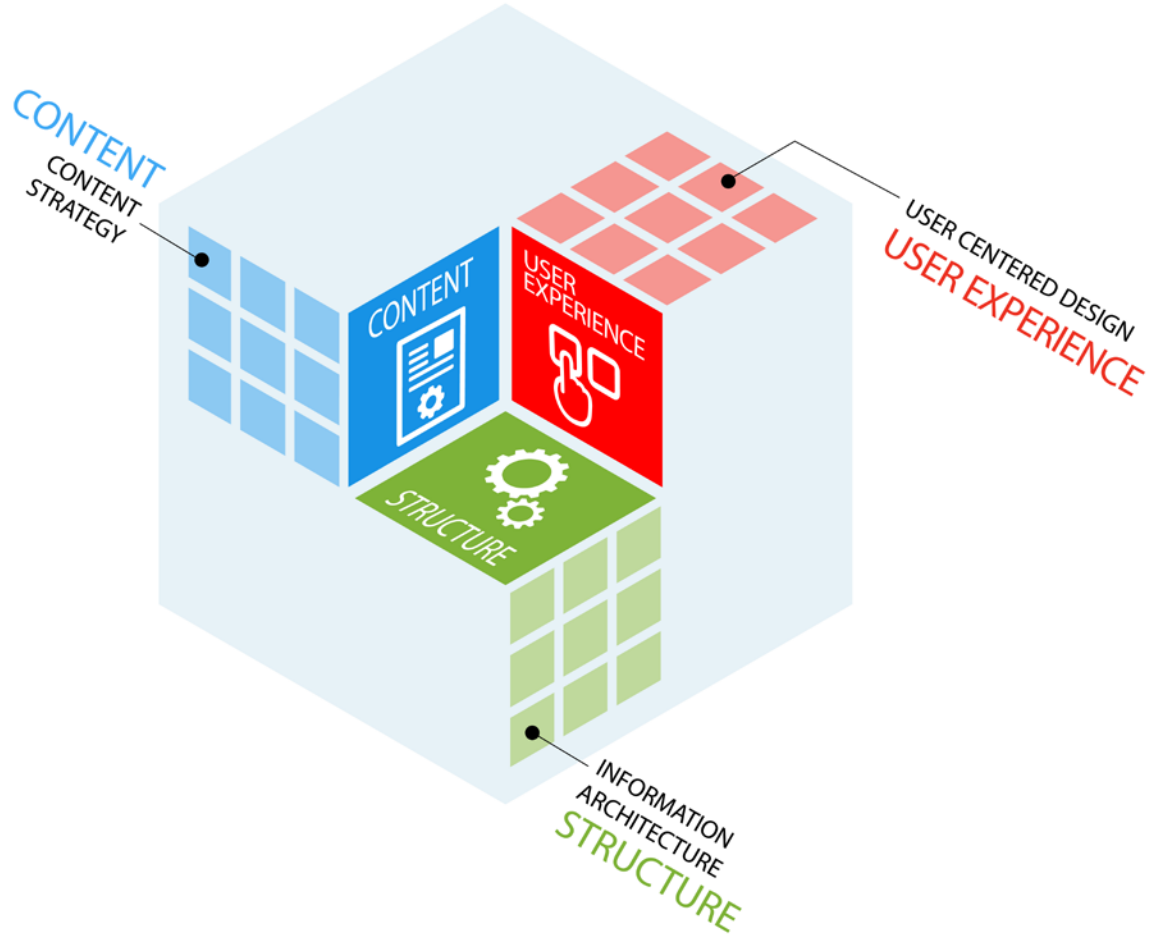

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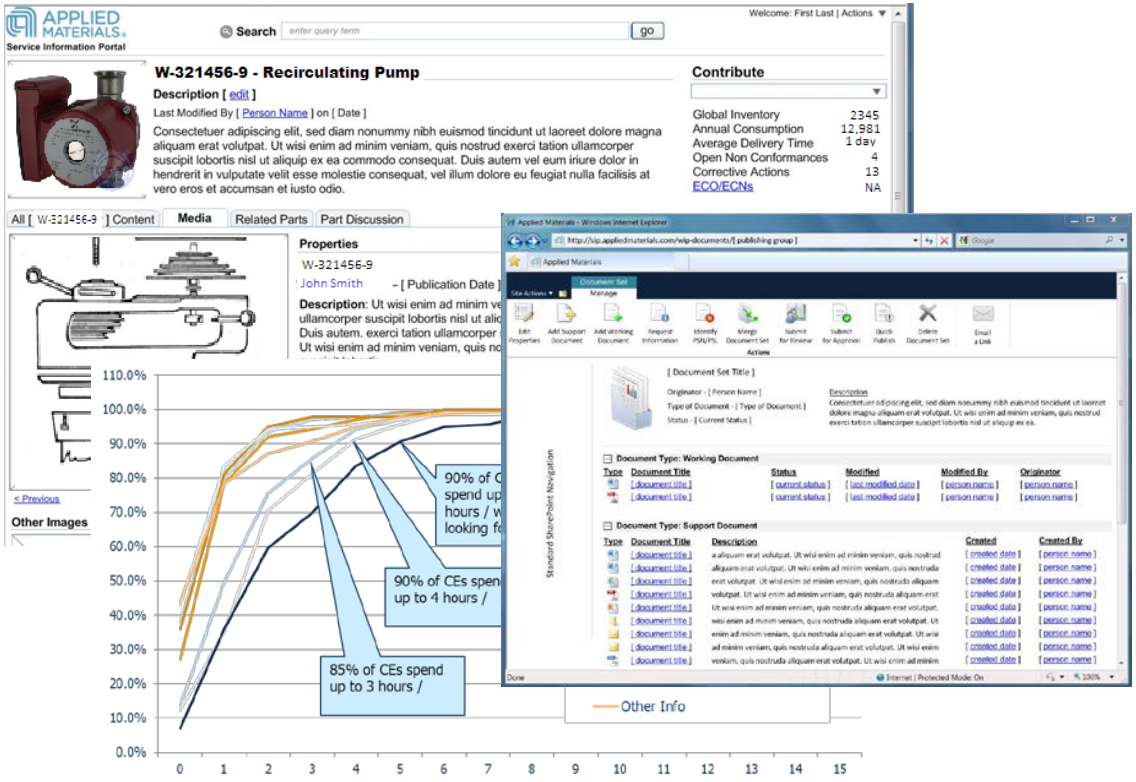
User Centered Design

UCD helped us design a solution people would use:

- **DITL of technicians**
- **Surveyed 20% of techs**
- **21 interviews with publishers & stakeholders**
- **What works, what doesn't**
- **Define success**

Designed & tested a User Experience – then built it

- **Mock-ups before prototype**



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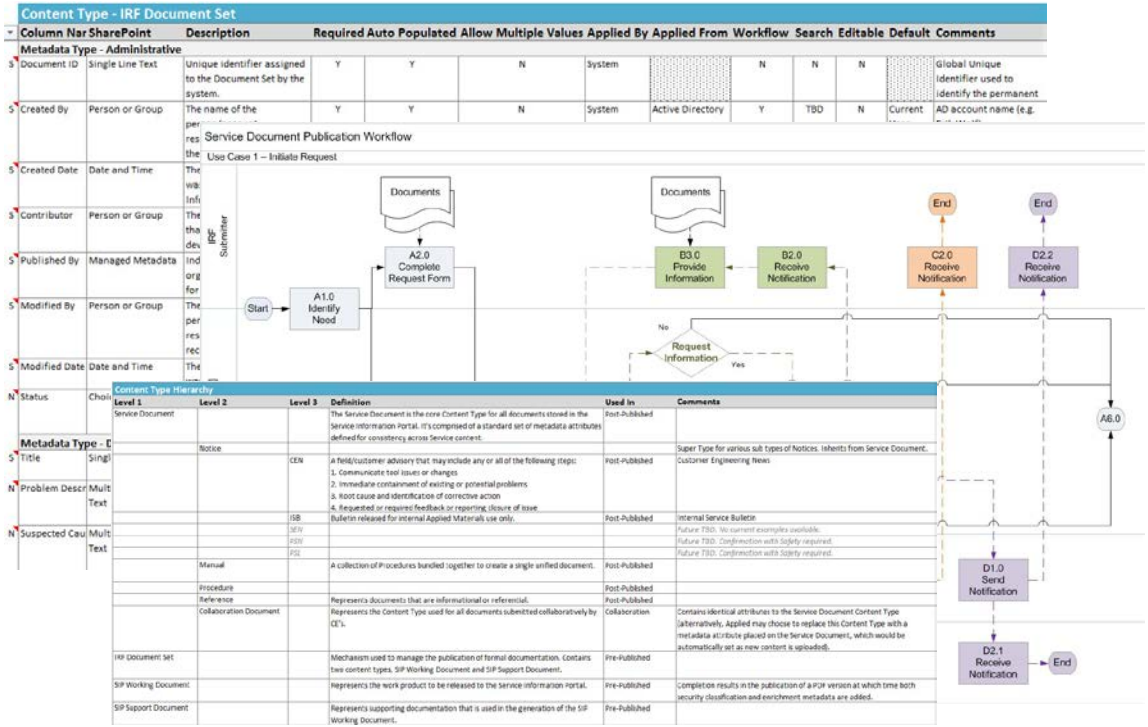
Information Architecture

IA included SharePoint

- **Taxonomy**
- **Content Types**
- **Metadata**
- **Workflow**
- **Site Structure**

Everything we needed to power the User Experience and Search



Content Type - IRF Document Set

Column Nar	SharePoint	Description	Required	Auto Populated	Allow Multiple Values	Applied By	Applied From	Workflow	Search	Editable	Default	Comments
Metadata Type - Administrative												
Document ID	Single Line Text	Unique identifier assigned to the Document Set by the system.	Y	Y	N	System		N	N	N		Global Unique Identifier used to identify the permanent
Created By	Person or Group	The name of the per res the	Y	Y	N	System	Active Directory	Y	TBD	N	Current	AD account name (e.g.
Created Date	Date and Time	The wa Inf										
Contributor	Person or Group	The tha dev										
Published By	Managed Metadata	Ind org for										
Modified By	Person or Group	The per res rec										
Modified Date	Date and Time	The										
Status	Choi											
Metadata Type - C												
Title	Singl											
Problem Descr	Mult Text											
Suspected Cau	Mult Text											

Service Document Publication Workflow

Use Case 1 – Initiate Request

Content Type Hierarchy

Level 1	Level 2	Level 3	Definition	Used in	Comments
Service Document			The Service Document is the core Content Type for all documents stored in the Service Information Portal. It's comprised of a standard set of metadata attributes defined for consistency across Service content.	Post-Published	
	Notice				Super Type for various sub types of Notices. Inherits from Service Document.
		CEN	A field/customer advisory that may include any or all of the following steps: 1. Communicate tool issues or changes 2. Immediate containment of existing or potential problems 3. Root cause and identification of corrective action 4. Requested or required feedback or reporting closure of issue.	Post-Published	Customer Engineering News
		ISB	Bulletin released for internal Applied Materials use only.	Post-Published	Internal Service Bulletin
		SEN			Future TBD. No current examples available.
		FSN			Future TBD. Confirmation with Safety required.
		FSL			Future TBD. Confirmation with Safety required.
	Manual		A collection of Procedures bundled together to create a single unified document.	Post-Published	
	Procedure			Post-Published	
	Reference		Represents documents that are informational or referencial.	Post-Published	
	Collaboration Document		Represents the Content Type used for all documents submitted collaboratively by CE's.	Collaboration	Contains identical attributes to the Service Document Content Type (alternatively, Applied may choose to replace this Content Type with a metadata attribute placed on the Service Document, which would be automatically set as new content is uploaded).
IRF Document Set			Mechanism used to manage the publication of formal documentation. Contains two content types, SIP Working Document and SIP Support Document.	Pre-Published	
SIP Working Document			Represents the work product to be released to the Service Information Portal.	Pre-Published	Completion results in the publication of a PDF version at which time both security classification and enrichment metadata are added.
SIP Support Document			Represents supporting documentation that is used in the generation of the SIP Working Document.	Pre-Published	

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Content Strategy

Content Strategy focused on unifying access to content in order to **answer questions**:

- Continue **publishing** content the way we have – with better curation
- **Search-based application** with Product, Document, & Part views
- Combine **collaboration** (tips, forums, photos) & published content
- Either “chunk” large legacy documents or **search inside the document**
- Need to be able to take away critical information – **“research notebook”**

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Applied Materials - After

90% reduction in time spent searching for information	10% improvement in the accuracy of search results.	Rules based document classification improved information access	Applied Rapid Knowledge (ARK) Portal
• Engineers can now easily find information about a part, preview or download part schematics, check on part availability, and see related parts and products.	• Engineers more confident in the data because it helps them find the right answers to their questions more quickly, which in turn has translated into faster and lower cost resolution of customer issues.	• Allowed Applied Materials to protect its own intellectual property and the intellectual property of its customers and partners	• Common centralized user interface eliminates need for engineers to learn 17 different search applications

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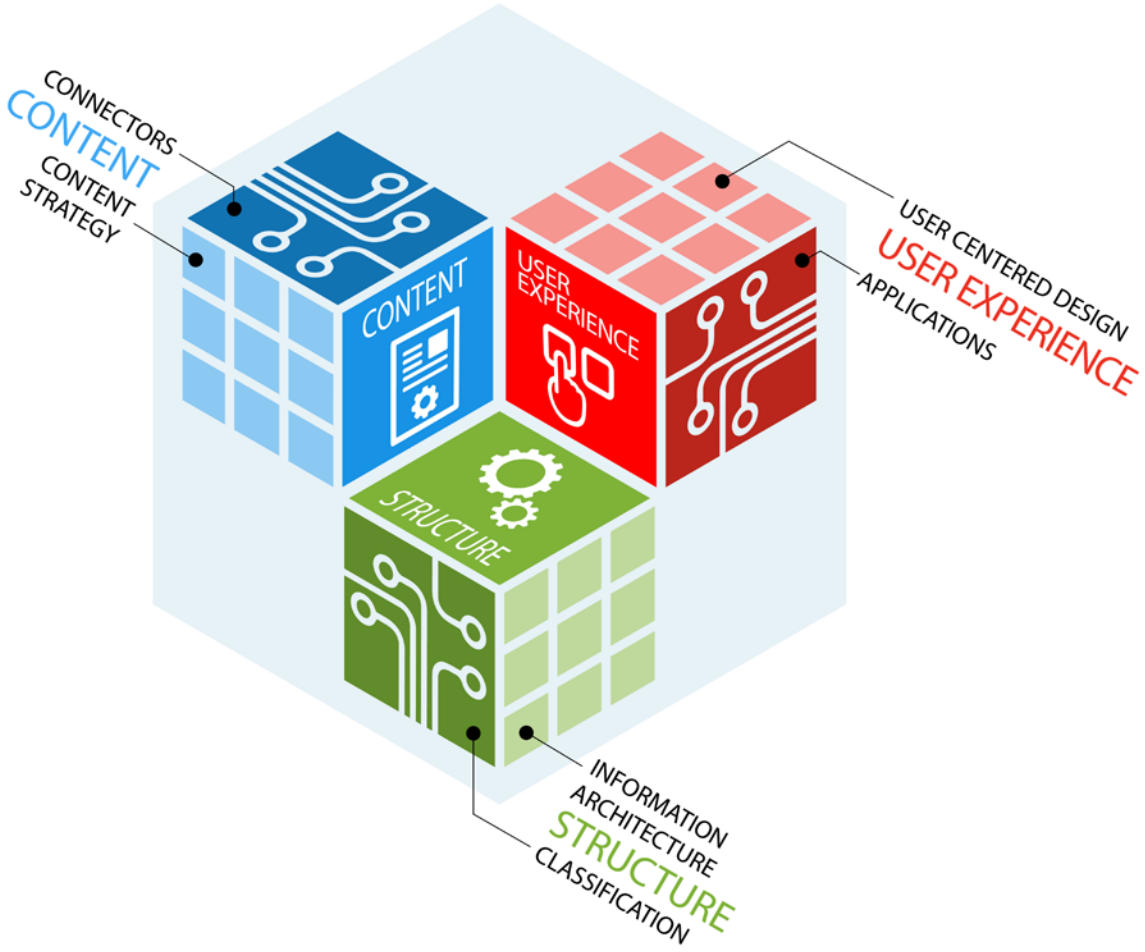

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Knowledge Portals

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Knowledge Portal

1. An integrated view of data sources including all relevant operational, historical, structured and unstructured data.
2. A contextual information architecture that organizes data, defines attributes and maps relationships to reflect the landscape of the business - its customers, products, people and processes.
3. A highly scalable platform for tagging, categorizing, finding and presenting data that has high volume, variety, and velocity while maintaining enterprise standards of governance and security.
4. A personalized digital user experience that streamlines the refinement of search results and provides a simple, intuitive approach for finding answers to complex business questions.
5. Future-proofing the implementation and simplifying upgrades with a “no customization” approach that makes it easier to support the environment over time.

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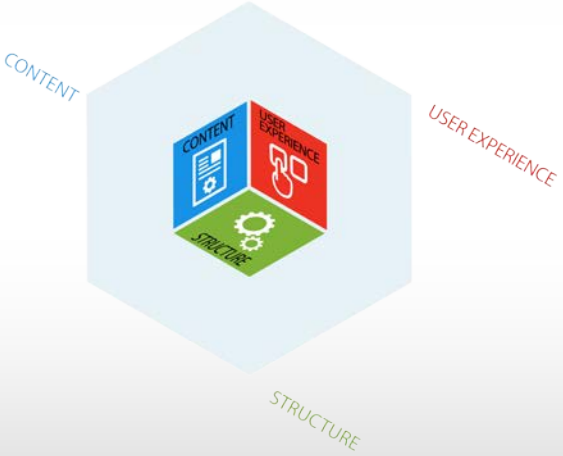
Knowledge Portals include the missing ingredients

Contextual

Personalized



Future-Proofed

Platform for Data

Integrated

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Unified View in Knowledge Portals

Seamless experience for users

- Don’t need to know where content is

Bring in content from many systems

- Tap Business Critical content where it lives
- Secure; reduces load & risk on LoB systems

Unified Index drives the experience

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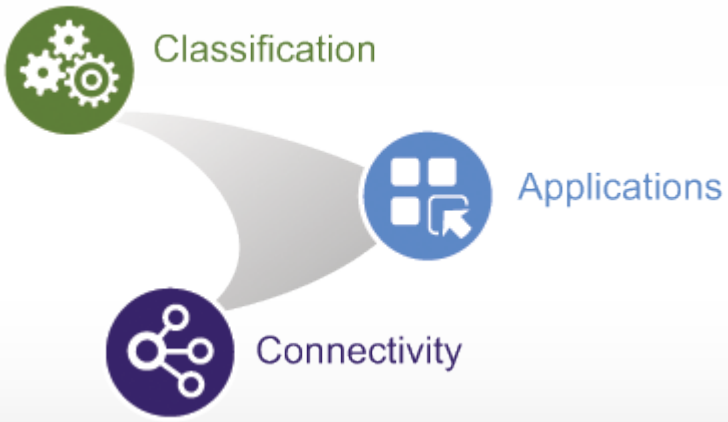
BA Insight Software Portfolio



Classification - Auto-tagging, metadata generation, and text analytics to increase findability.

Applications – Smart Preview, Smart Analytics, Expertise Finder, InfoSites, Matter Comparison help users find the right information faster for improved productivity and increased adoption.

Connectivity - Secure connectors and federation to over 50 systems on-premises and cloud, and multiple search engines, enabling unified views of all knowledge assets.

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Ingredient #1: Content

36%

of a typical knowledge worker's day is spent looking for and consolidation information spread across a variety of systems

61%

of knowledge workers regularly access 4 or more systems to get the information they need to do their jobs

15%

Regularly access 11 or more systems

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Connectivity to MANY Enterprise Systems

Content and Collaboration Systems
- EMC Documentum
- EMC eRoom
- HP Trim
- IBM Filenet F8
- IBM Content Manager
- IBM Connections
- Objective DMS
- OpenText LiveLink/RM
- OpenText Hummingbird / eDocs
- Oracle CMS/Stellent
- IBM Lotus Notes
- Xerox DocuShare
- Confluence
- Alfresco
- Jive
- CuadraSTAR

Mailbox and Archiving Systems
- Microsoft Exchange
- Microsoft Exchange Online
- IBM Lotus Notes
- Symantex Evault
- Autonomy EAS / (Zantaz)

Legal Industry Systems
- Aderant Practice Management
- Autonomy Worksite (iManage)
- Elite/3E
- KnowledgeMill OnePlace
- LegalKey
- NetDocuments
- Practical Law
- AutoElite Prolaw
- RealPractice

CRM Systems
- Salesforce.com/Force.com
- Microsoft Dynamics CRM
- LexisNexis Interaction CRM
- Any SQL Based CRM

Databases
- Microsoft SQL Server
- MySQL
- IBM DB2
- Oracle Databases

ERP and Portal Systems
- SAP Business Suite
- SAP DMS
- IBM WebSphere
- Oracle WebCenter
- Interaction (PlumTree

Search and Cloud Systems
- Microsoft SharePoint Online
- Google Drive
- SharePoint 2013, 2010, 2007, FAST Search for SharePoint
- Microsoft Search Server
- Box
- Scopus
- PharmaCircle

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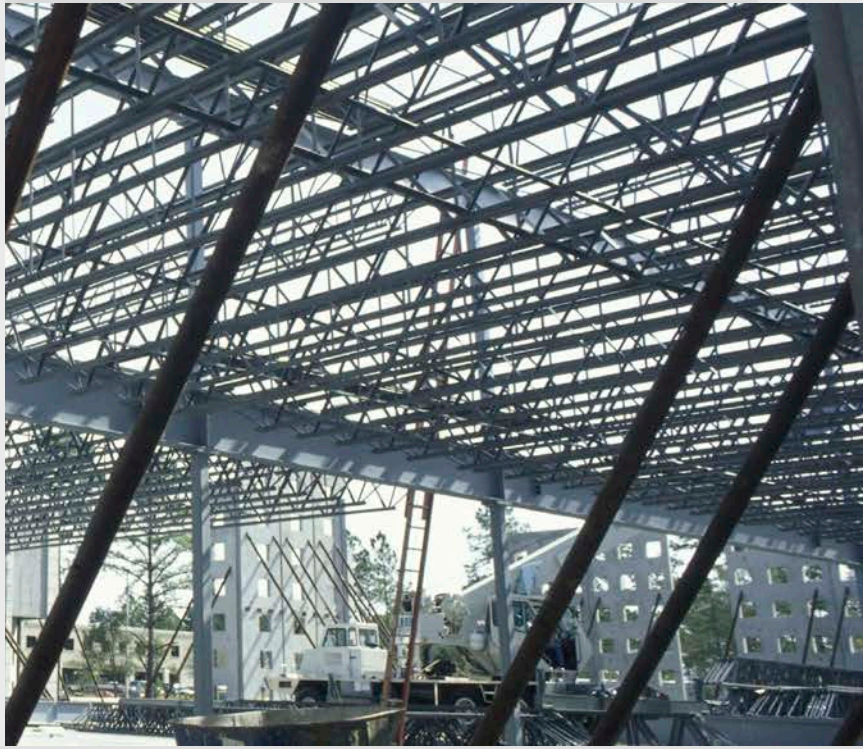
Plus a proven architecture and process for creating new connectors to complex systems

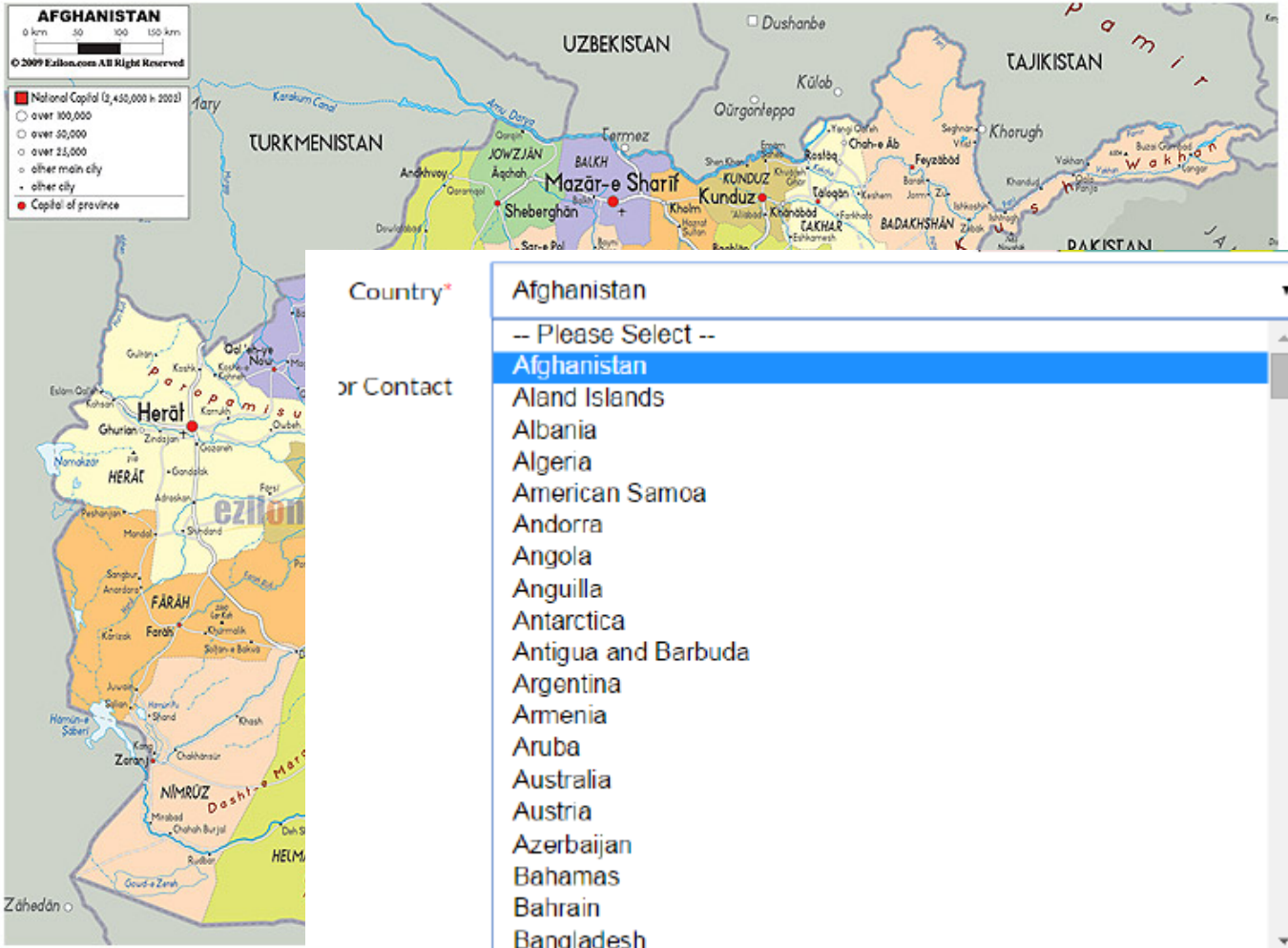
Ingredient 2: Add Structure

- Pay attention to information architecture
- Add machine generated metadata
- Bridge across structured and unstructured data

BUT don’t go overboard



The Afghanistan Effect



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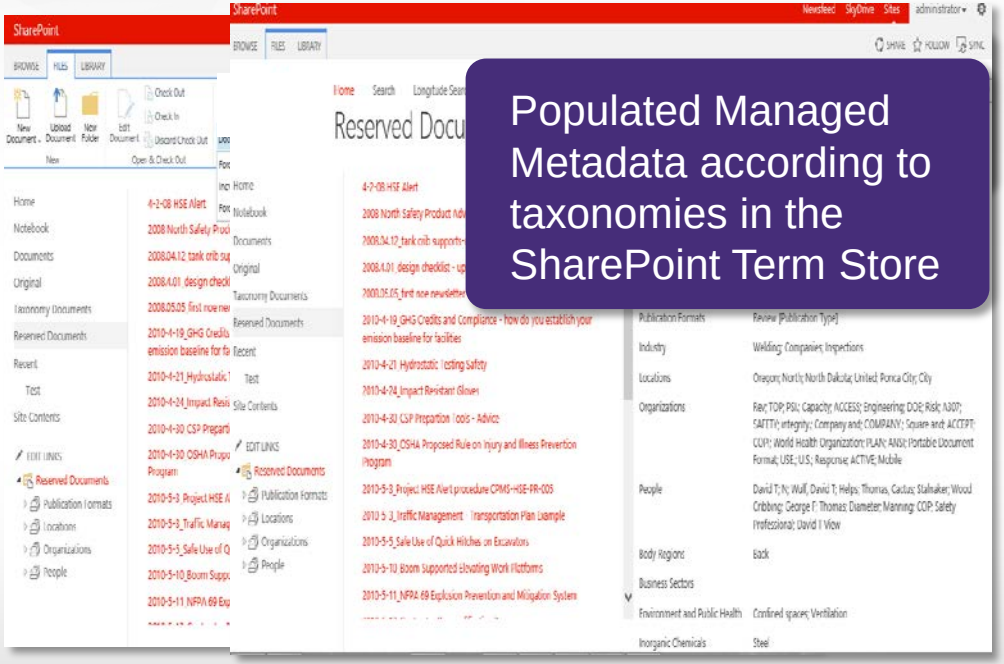
Automated Classification and Metadata Generation



SharePoint Content

- Automatically adds metadata to SharePoint Lists and Libraries

Content from Anywhere

- Metadata populated in managed properties in the search index during crawling

Rules Driven

- Total control

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Metadata drives great user experiences

Ingredient 3: Prebuilt Applications

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Pre-Built Applications
speed deployment and “future-proof” upgrades

Visual Refiners

Search for Salesforce

Smart Previews

Matter Comparison

Expertise Locator

User-Generated InfoSites

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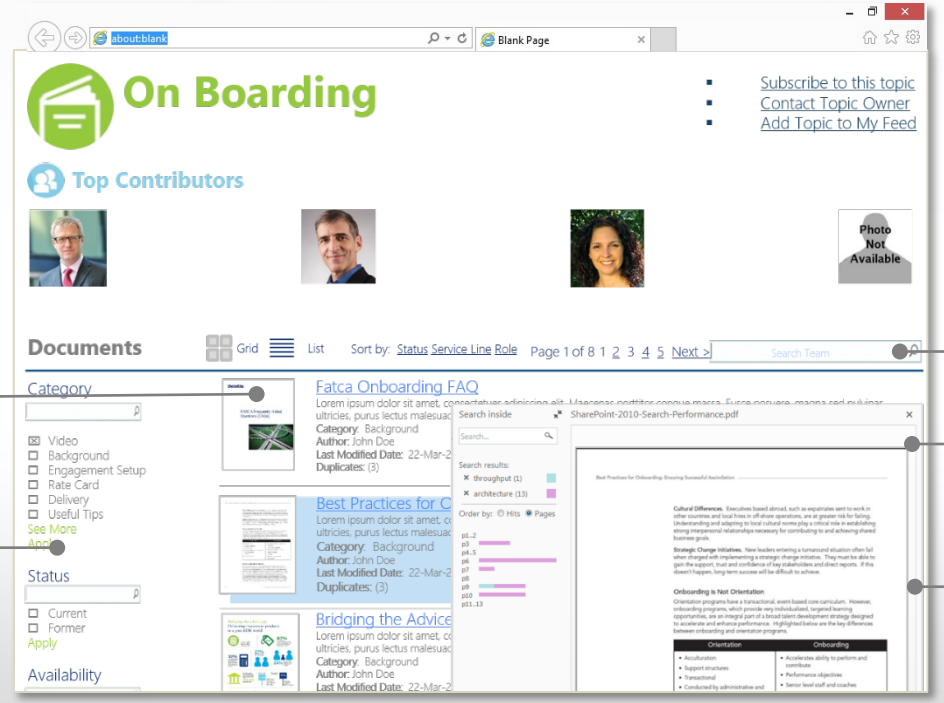
Example: Project On Boarding



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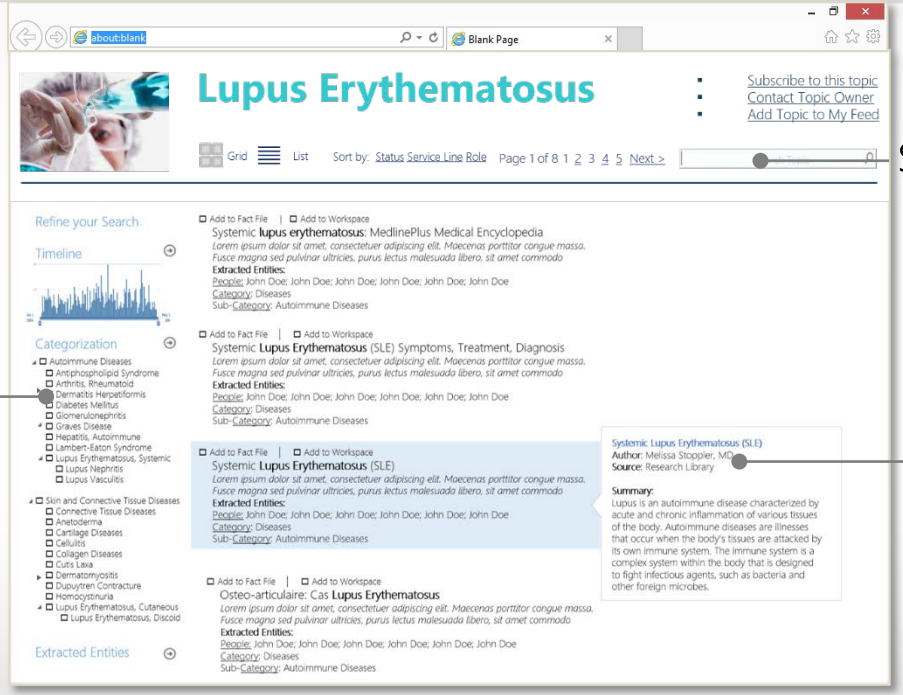
Example: Life Sciences Research



Search Within a Subject

Refinement

Hover Panel

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Apache Corporation, an independent energy company, explores for, develops, and produces natural gas, crude oil, and natural gas liquids

Challenges:

- Land lease information exists in multiple data systems.

Challenges:

- User had to look up in multiple systems to get a 360° view of a lease

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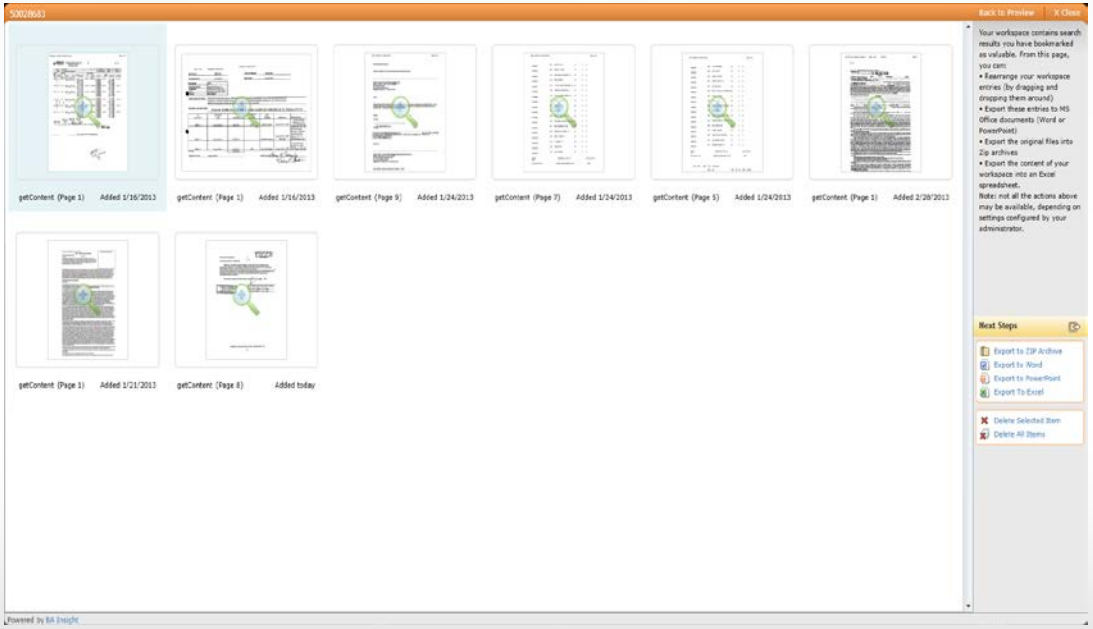
Finding and reusing content across sources



Interactive Workspace

Property Master Data from Tobin

Related Documents from FileNet

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DLA PIPER

Overview

The DLA Piper Group has a worldwide network of about 8,000 lawyers operating in Asia, Europe, the Middle East, and the US

Global Law Firm
31 Countries
77 Offices

Everything matters…

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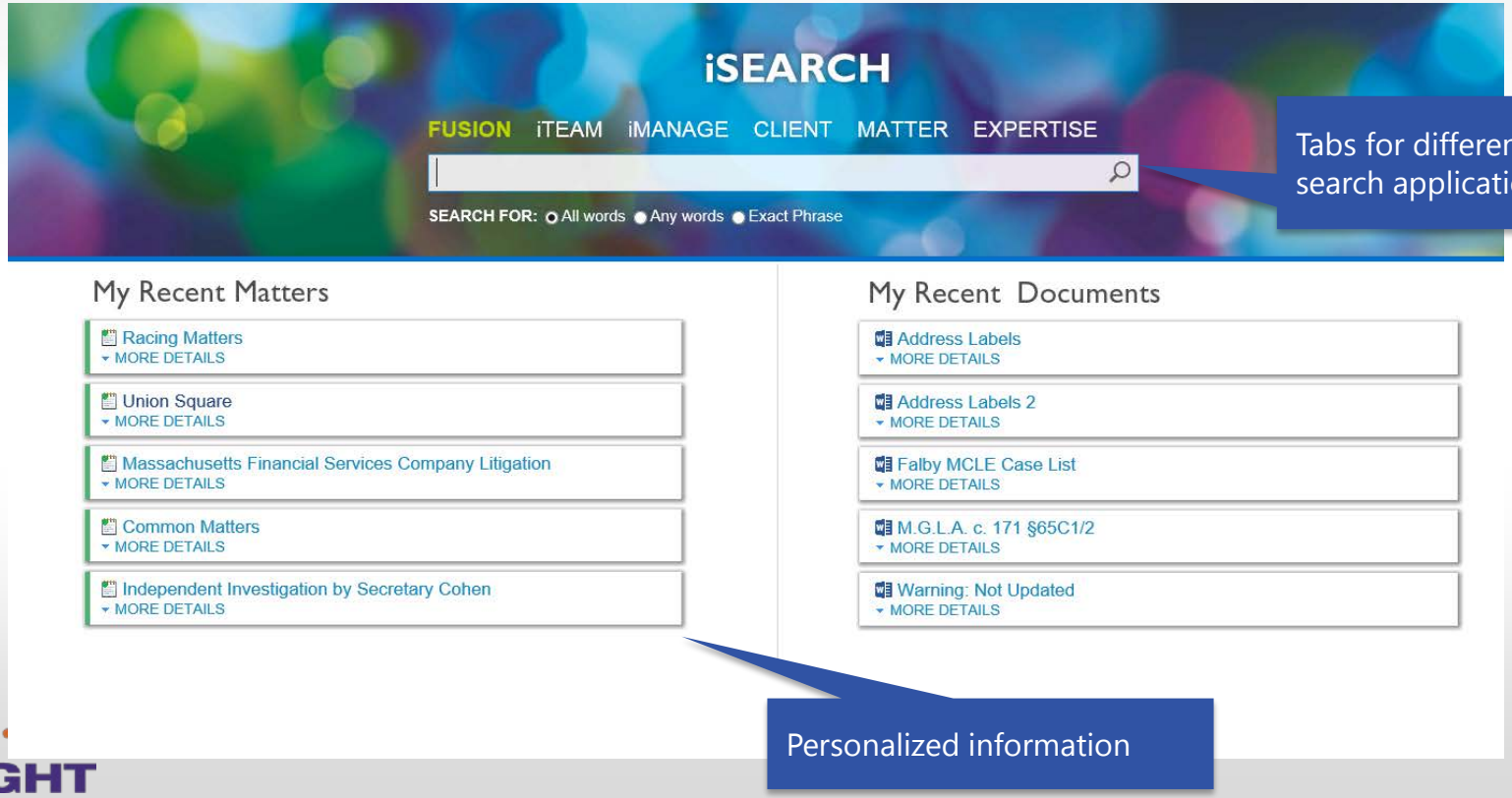
iSearch Home Page



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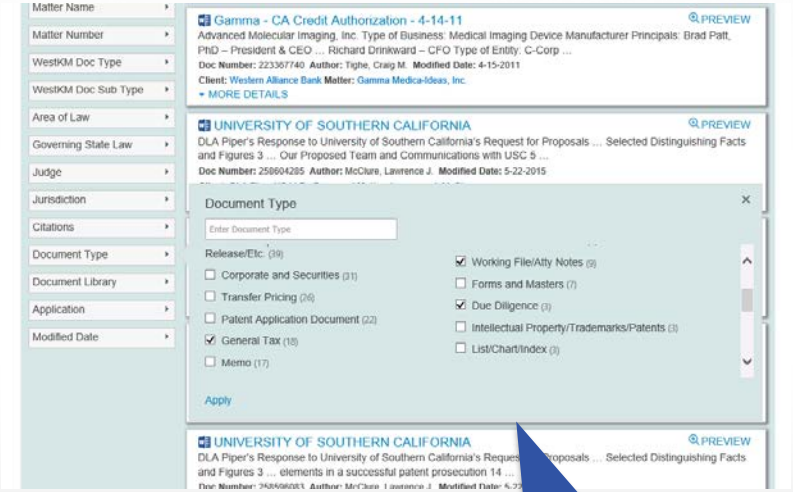
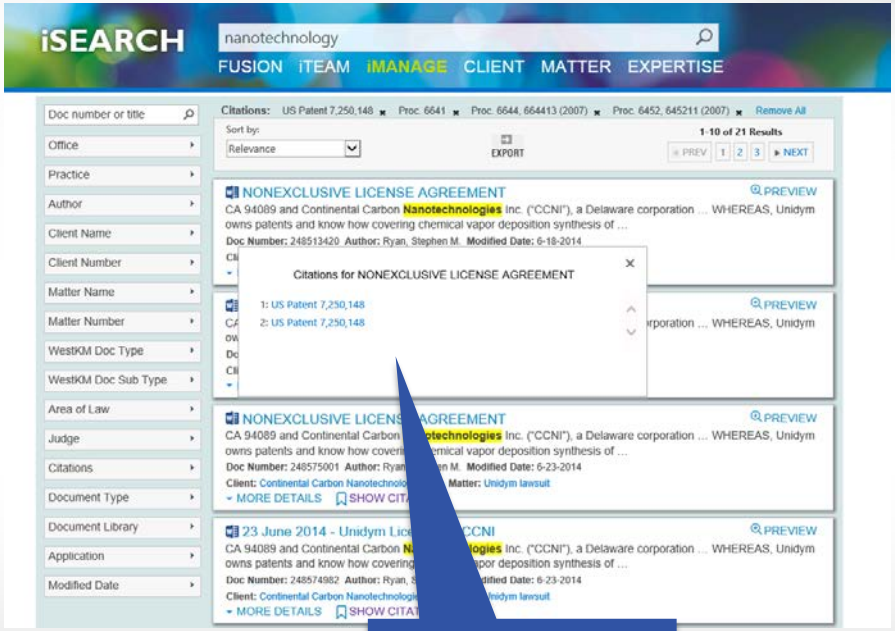
iSearch Metadata





Refinement with multiselect and search within metadata

Citations with clickthrough

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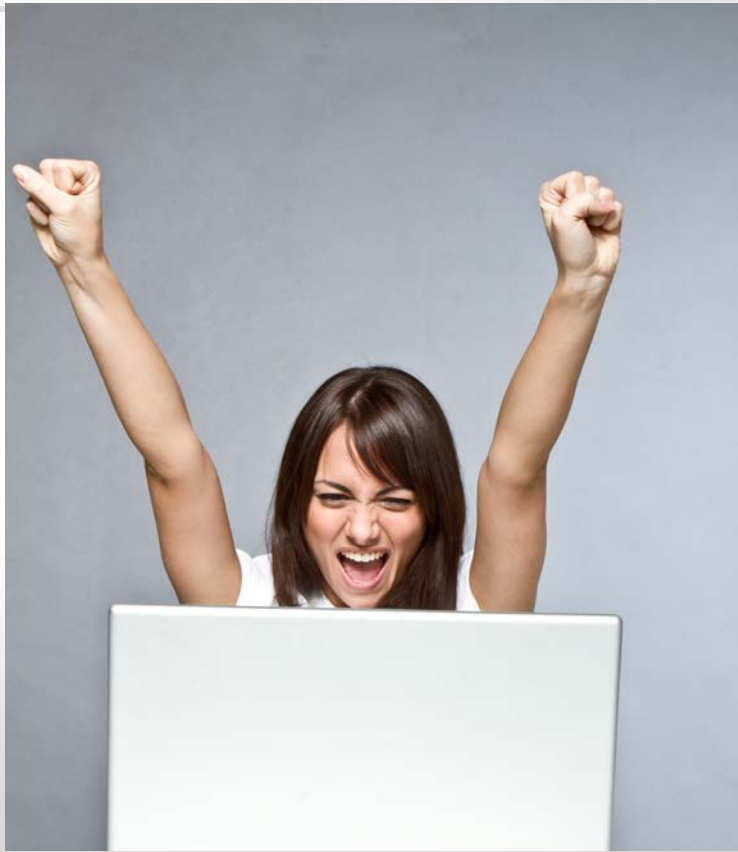
Results – User Perspective

- MUCH easier and faster to find all available knowledge in the firm
  - Easy access to LOB data
  - Eliminate download waits
  - Seamless reuse of content
- Better insight
  - Single view across data silos
  - Exploration of content
  - Direct recall of all relevant information for a client or matter
- More efficient attorney work stream
  - More time focused on client
  - Reduced gap between billable events



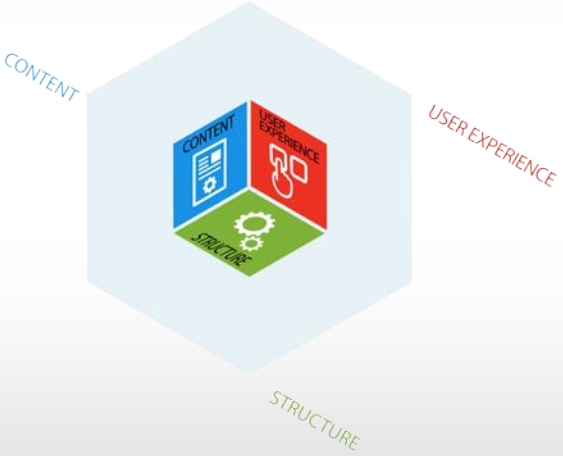
Results – Business Perspective

- Time savings
  - Efficiency and productivity
  - Quicker, more effective assembly of essential expertise for a given matter
- Improved processes
  - Accelerated staffing process
  - Better response to critical time-sensitive client queries
  - Dramatically improved business development
- Competitive advantage
  - Enhanced client service
  - More effective proposals for new work
  - Agile foundation for more search-driven applications

Knowledge Portals include the missing ingredients

Contextual

Personalized



Future-Proofed

Platform for Data

Integrated

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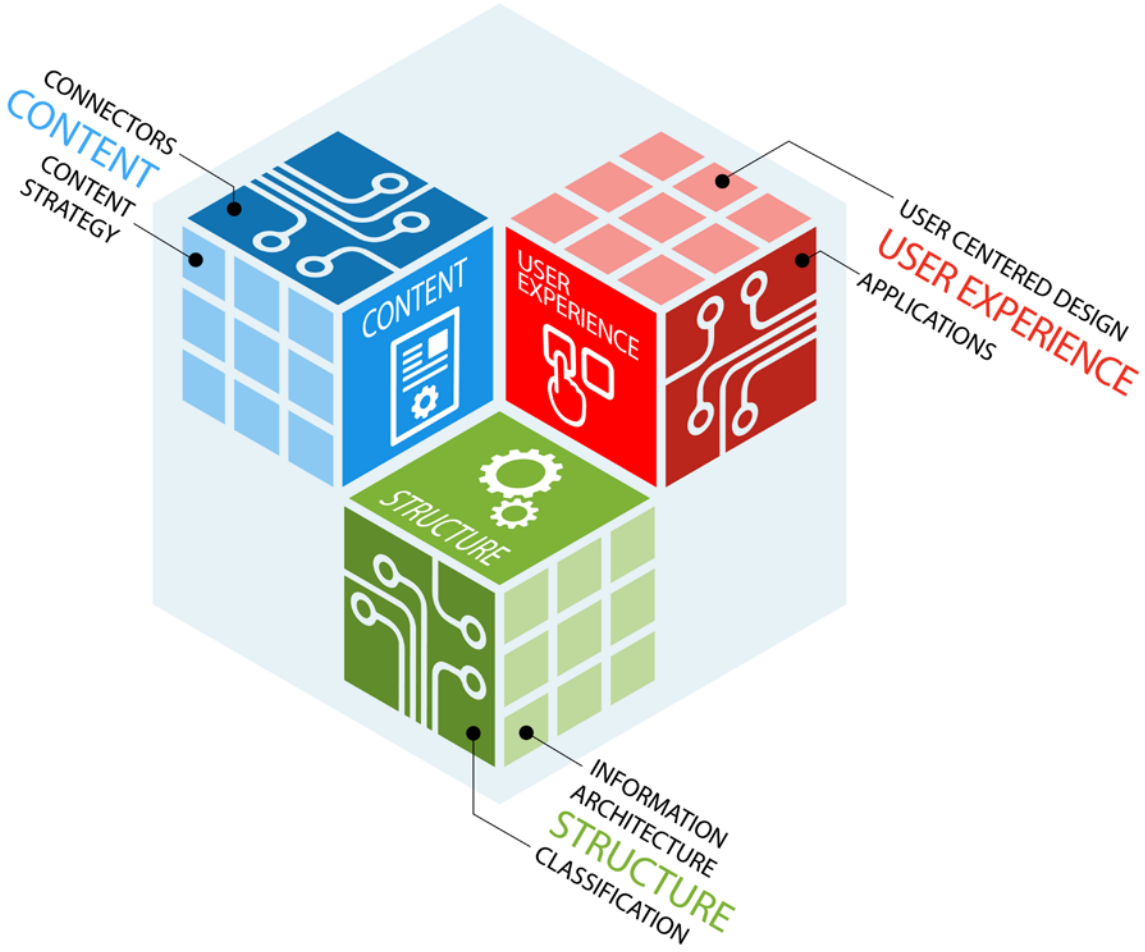

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Your Questions and Answers

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Today's Speakers

Paul Wlodarczyk
VP, Client Services
Earley Information Science

Leads enterprise digital transformation projects

30 years' experience in unstructured content lifecycle and related technologies

paul@earley.com

@twitcontentguy

Jeff Fried
Chief Technology Officer
BA Insight

Long time Search nerd

Passionate about search, SharePoint, search-driven applications

Jeff.fried@bainsight

@jefffried

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Offer – Call to Action

- **Meet the Experts (1 Hr. Q&A via con-call)**
- **Knowledge Portal Strategy Session**
- **BA Insight Product Demo**

Contact info@bainsight.com OR info@earley.com to set up a meeting.

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