



HaystackID®

Revolution or Evolution?

AI and the Changing Face of eDiscovery

The Master's Conference London

07 | 25 | 2023



| HAYSTACK®

Agenda

1. Generative AI Revolution
2. AI Beyond the Hype
3. Flavors of eDiscovery AI
4. AI and YOU
5. Ethical Considerations
6. Barriers to Adoption



Michael D. Sarlo

Chief Innovation Officer

*President of Global Investigations and Cyber Incident Response
HaystackID*



Michael Sarlo, as Chief Innovation Officer, works closely with HaystackID's software development and data science teams to deliver best-in-class data collection, eDiscovery, and review solutions that allow legal teams to act on data types typically not conducive to collection, review, or production in the context of eDiscovery. As President of Global Investigations, Michael works closely with clients on the most challenging and complex regulatory, investigative, and civil litigation matters. Michael also oversees HaystackID's Cyber Discovery and Incident Response Services division. He leads a cross-functional team of HaystackID experts that regularly assist insurers, breach coaches, and their corporate clients when a data breach occurs.

Scott Milner

Partner

Morgan, Lewis & Bockius LLP



Co-leader and one of the original attorneys in Morgan Lewis's eData practice, Scott A. Milner, counsels and advises companies in electronic discovery and information governance processes and best practices. He works with Morgan Lewis's lawyers across practice groups to tailor strategies and discovery management plans for clients around the globe in numerous industries and disciplines. Scott's practice encompasses all phases of eDiscovery, from preservation and collection to review and production of large volumes of electronically stored information (ESI).

Jenni Weaver

Counsel

Trial and Global Disputes

King & Spalding



Jenni L. Weaver is an attorney in King & Spalding's E-Discovery practice. Her practice focuses on electronic discovery issues, particularly concerning client representation in product liability and governmental investigations. Her primary focus is ensuring that her clients' European operations and electronic discovery processes comply with the General Data Protection Regulation (GDPR). Additionally, Jenni provides advice and counsel to clients to help limit the scope and cost of document review through managing data processing and proper metadata field mapping, early case assessment, search term development, efficient workflows, and workable review protocols. Jenni also works with clients to develop standardized ESI protocols, records management policies, retention schedules, and litigation hold practices.

David Simon

*Chief Executive Officer
Founder
Inonde*



David Simon is a successful entrepreneur and respected thought leader who has led commercial and federal teams in supporting clients globally. A former senior executive at a Fortune 500 company and leading expert in business transformation through implementing AI, Machine Learning, and Big Data Analytics.

David is a Board Member of several organizations across culinary lines, international policy, and cyber security.

800 Lb. Elephant in the Room

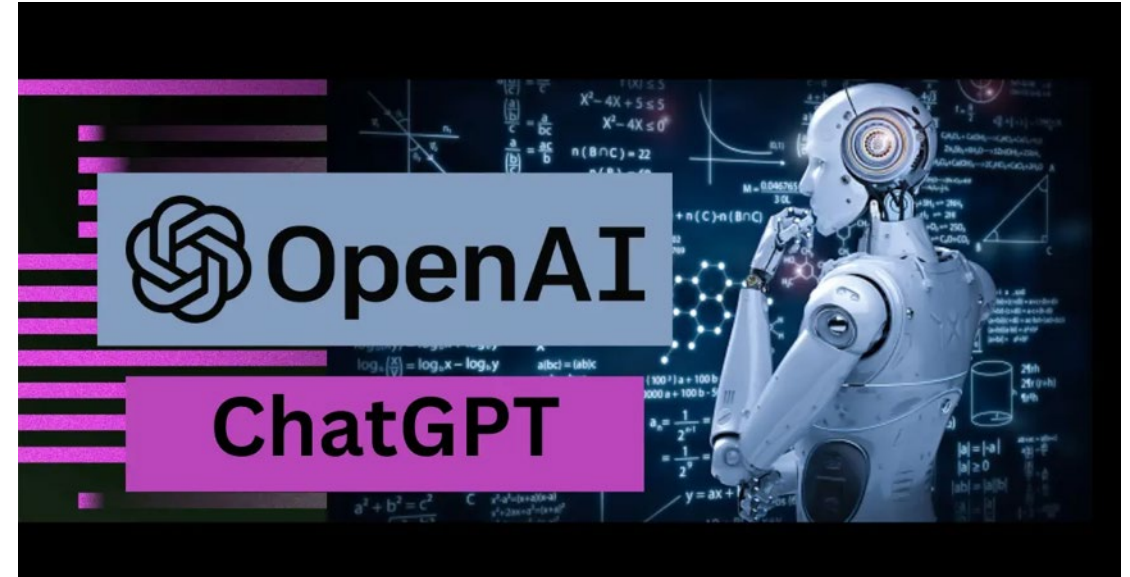
The **AI takeover** has begun...
and there is **no stopping it.**



A Day That Will Go Down In Infamy

November 30, 2022

The day **ChatGPT**
went mainstream.



What is Generative AI?



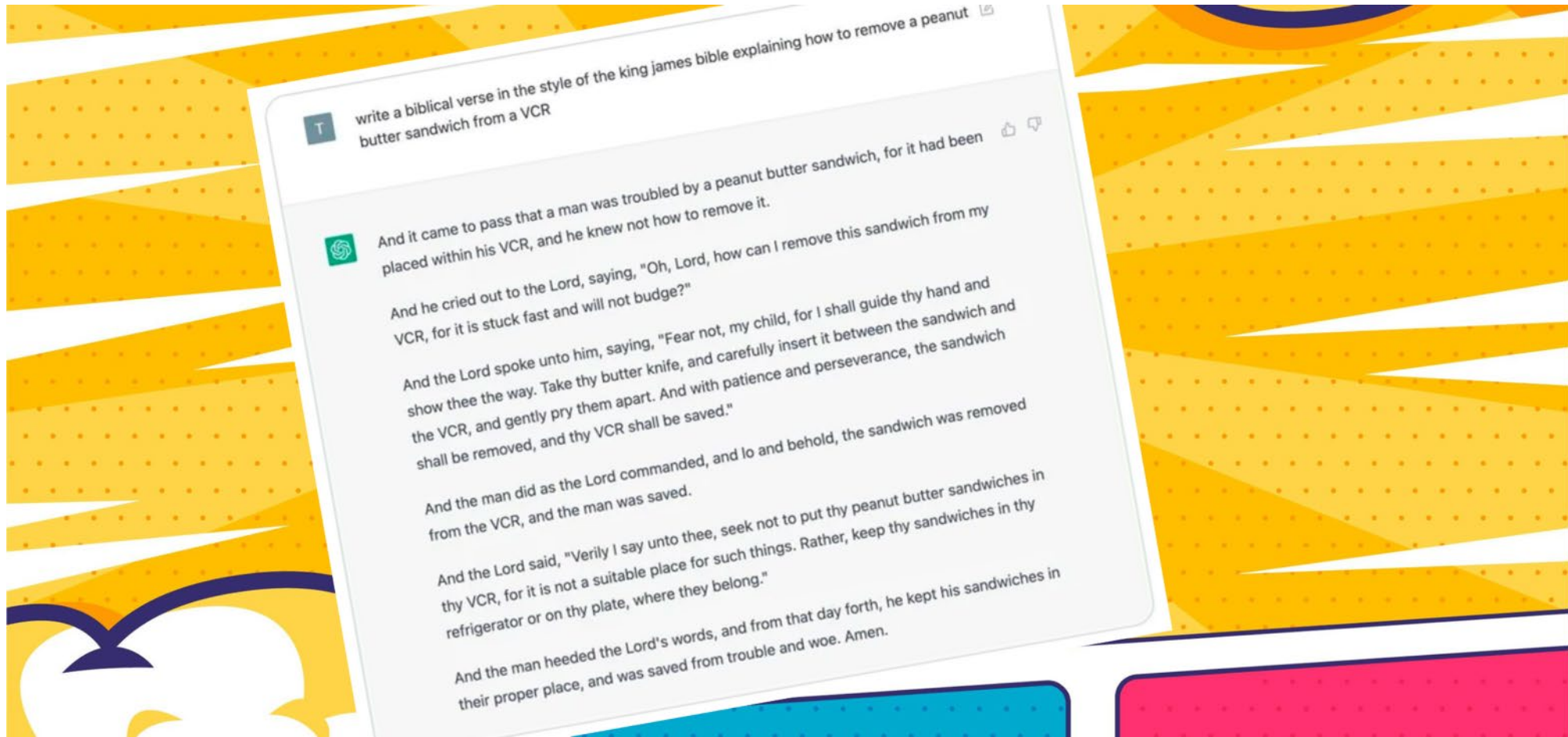
Wikipedia

Generative AI

“A type of artificial intelligence (AI) system capable of generating text, images, or other media in response to prompts.^{[1][2]} Generative AI models learn the patterns and structure of their input training data, and then generate new data that has similar characteristics.^{[3][4]}”

- GAI is trained on **patterns and structures** and thus is highly dependent on the patterns and structures in its underlying training data.
- GAI is specifically trained to **not ‘look things up’** or tell you it doesn’t know something.

ChatGPT in Action



Midjourney in Action



Generative AI is **NOT**

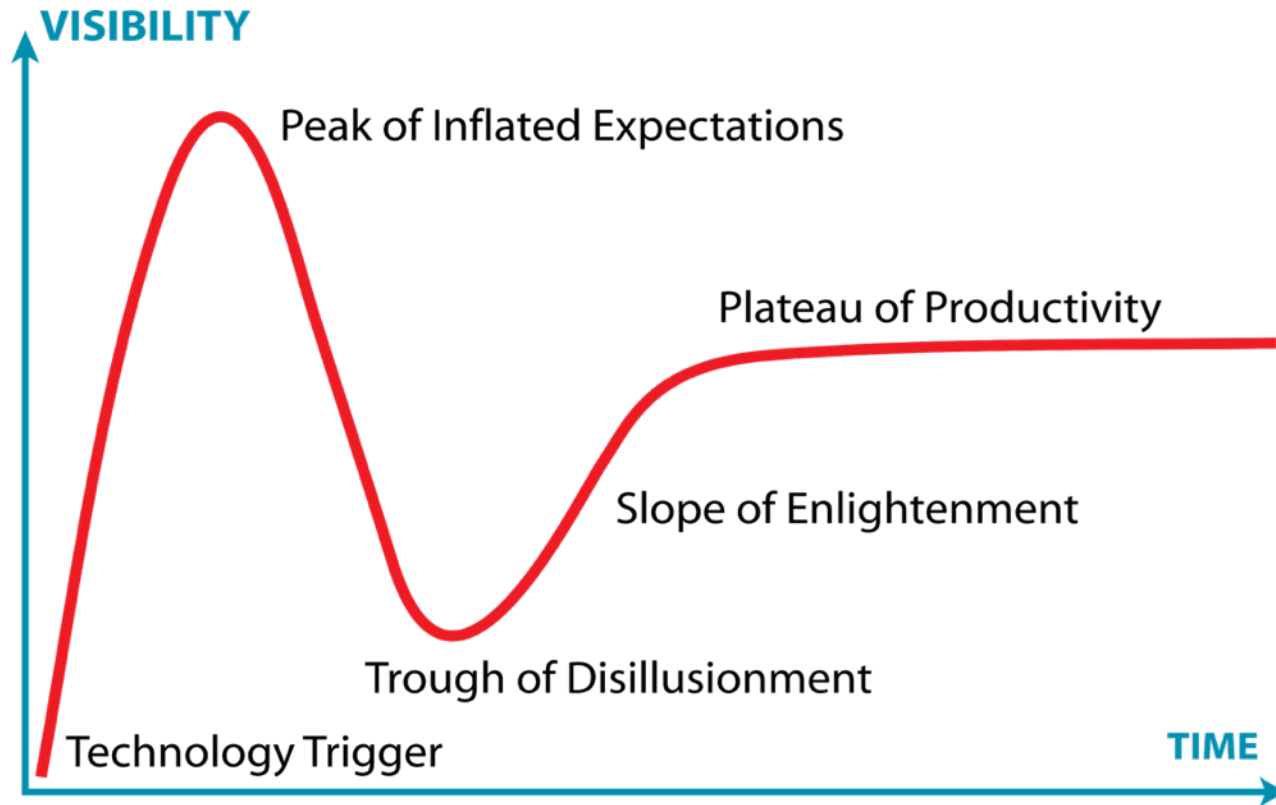
Artificial General Intelligence (AGI)

- Although a LOT of hype has been made about GAI, **GAI is NOT AGI.**
- GAI systems still fall significantly **short in adaptability** compared to human-level intelligence.

Natural Language Processing (NLP)

- GAI incorporates many NLP techniques but ultimately regenerates **language patterns and structures.**
- This is a far cry from truly “understanding” language.
- “Monkey see, Monkey do.”

AI: Beyond the Hype



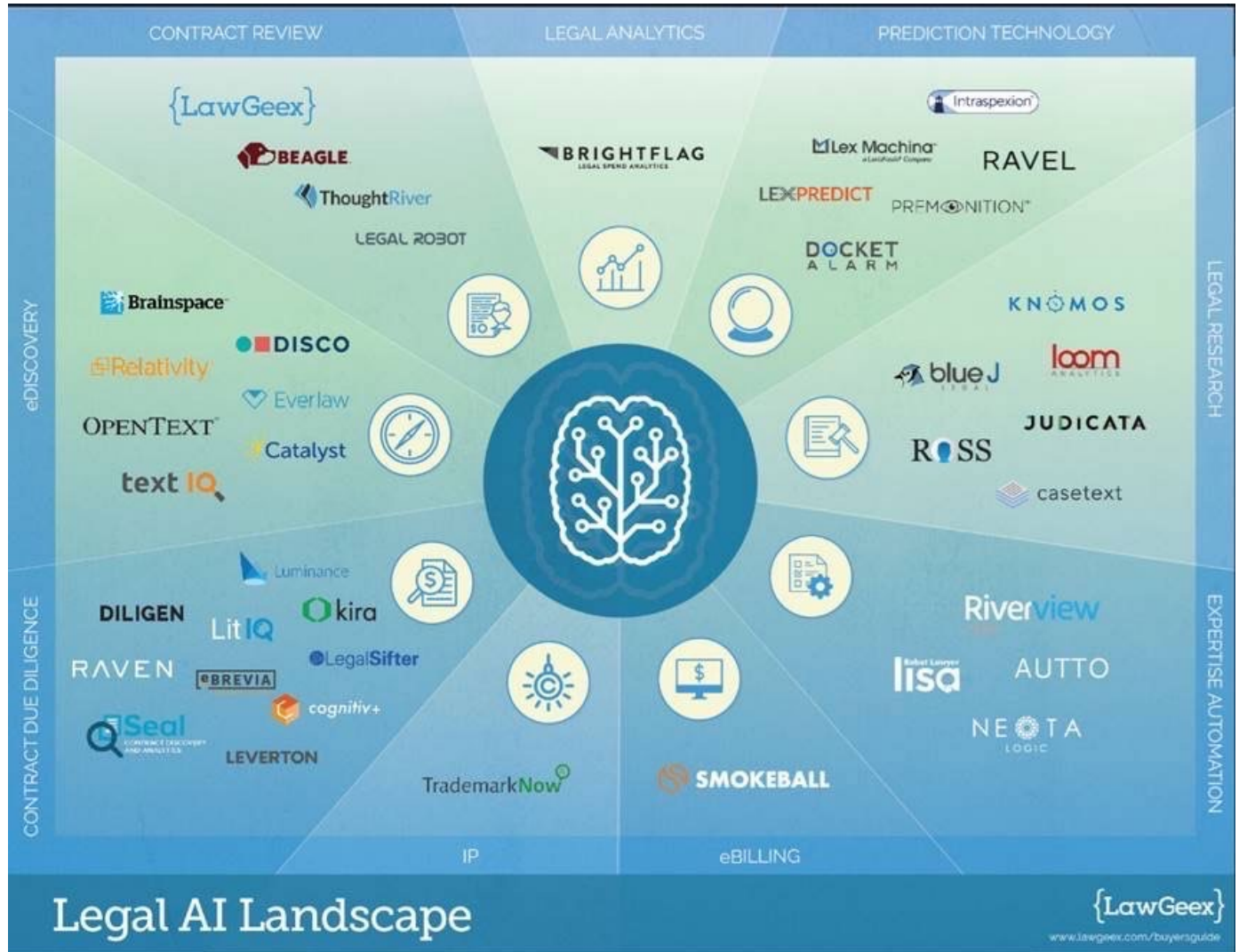
Source: Gartner Research

AI in eDiscovery Extends Far Beyond Generative AI

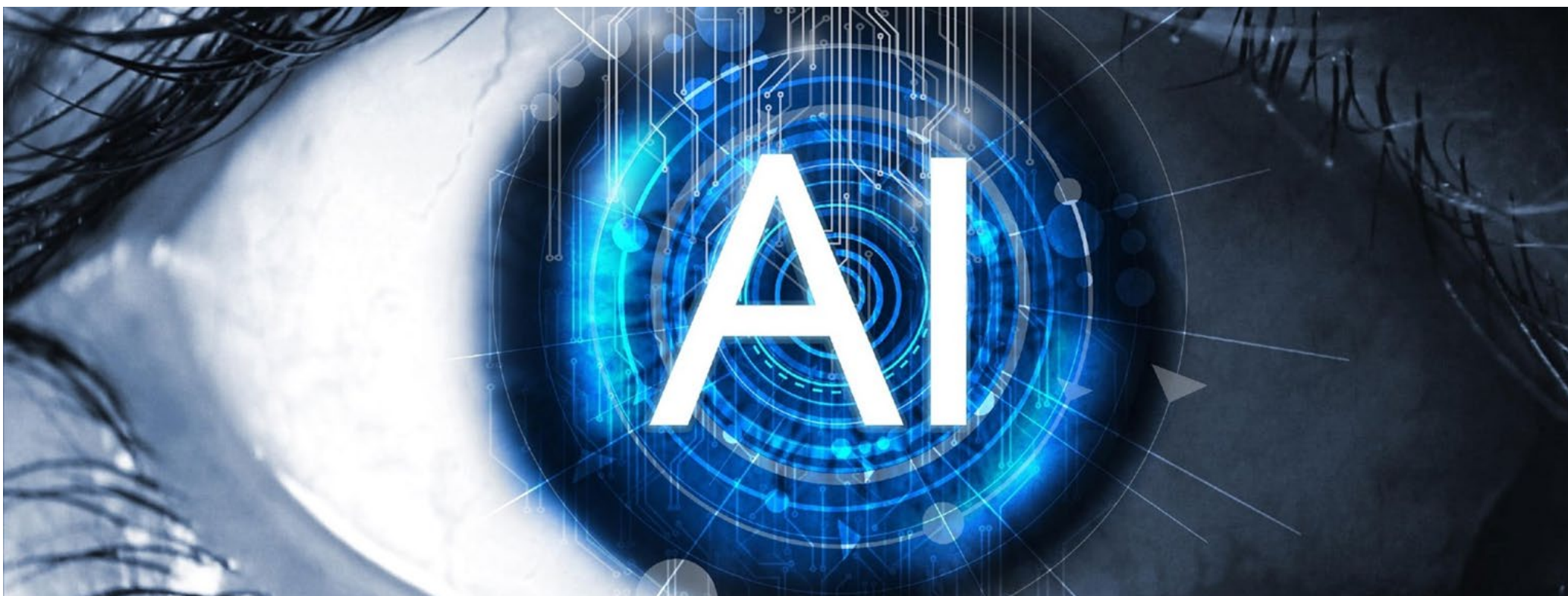


Legal AI

AI and the Law Today



Are you using AI or Augmented Intelligence?



What is AI?



Wikipedia

Artificial intelligence (AI)

“intelligence—perceiving, synthesizing, and inferring information—demonstrated by machines, as opposed to intelligence displayed by humans or by other animals.”

What is “intelligence”?

It is generally better to define AI based on its complexity and what tasks it can accomplish.



You use AI every day without knowing it!

Cell Phone Location Services

Netflix Queue

Amazon Suggestions

Pandora and Spotify

Facebook's People
You May Know

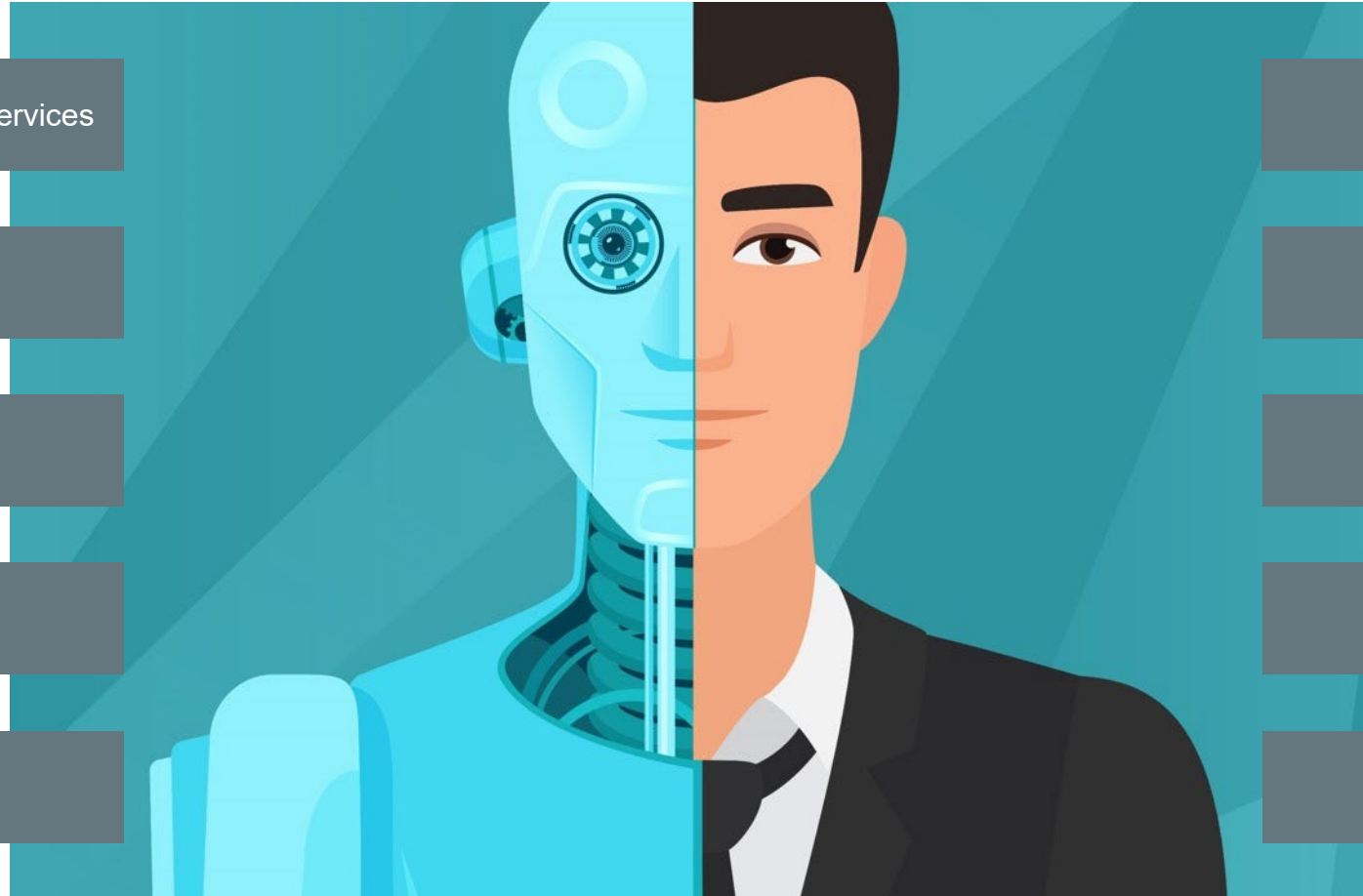
Google Search and
Email Filters

Apple iTunes

YouTube

Smart Fridge/NEST

Alexa and Siri



AI vs. Augmented Intelligence



Artificial Intelligence

- Coined more than 60 years ago.
- Defined as “the science and engineering of making machines intelligent.”
- Goal of replicating and surpassing human intelligence.

Augmented Intelligence/Old AI

- Intersection of man and machine.
- Amplifies innovation and human decision making.
- Increases focus on work that requires creativity, problem-solving, reasoning, and social collaboration.
- Goal to enhance and augment human capabilities.

Complexity Sub-Categories



Machine Learning (ML)

Trained to do one task.



Artificial Narrow Intelligence (ANI)

Trained to do a few specific related tasks.

Where we are today.



Artificial General Intelligence (AGI)

Capable of doing anything a human could do.

The realm of sci-fi.



Artificial Super Intelligence (ASI)

Capable of modifying and upgrading its own code.

Advanced beyond human understanding.

Job Categories



Discrimination

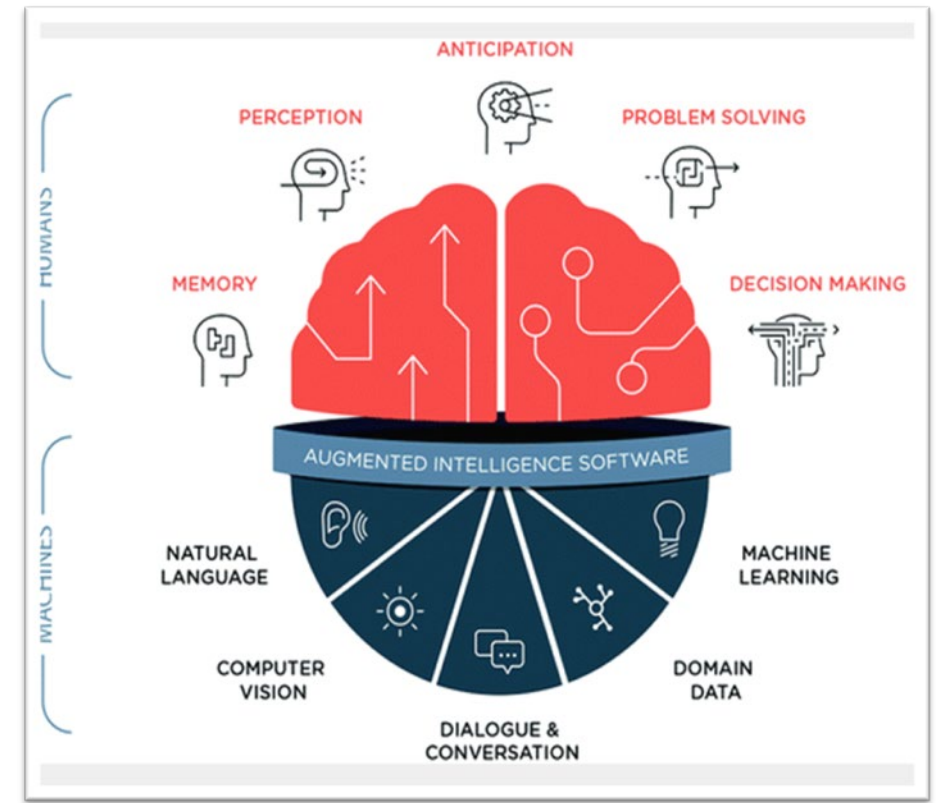
Pattern Recognition

Task Planning/Optimization

Natural Language Processing
(NLP)

Augmented Intelligence: You Amplified... Not Replaced

Using advanced machine learning and AI to handle repetitive tasks frees humans to **focus on higher-value tasks**. Technology aimed at amplifying human capability **drives efficiency and cost savings** and **creates opportunities for job growth and higher earnings** for individuals and businesses.



Flavors of eDiscovery AI



Flavors of eDiscovery

31 flavors of *AI Data Discovery*?

Sentiment Analysis

Portable AI Models

Concept Clustering

Anomaly Detection

Custom AI Models

AI Model Library



Social Network Analysis

TAR/CAL

Computer Vision

AI Translation

AI Transcription

Entity Extraction

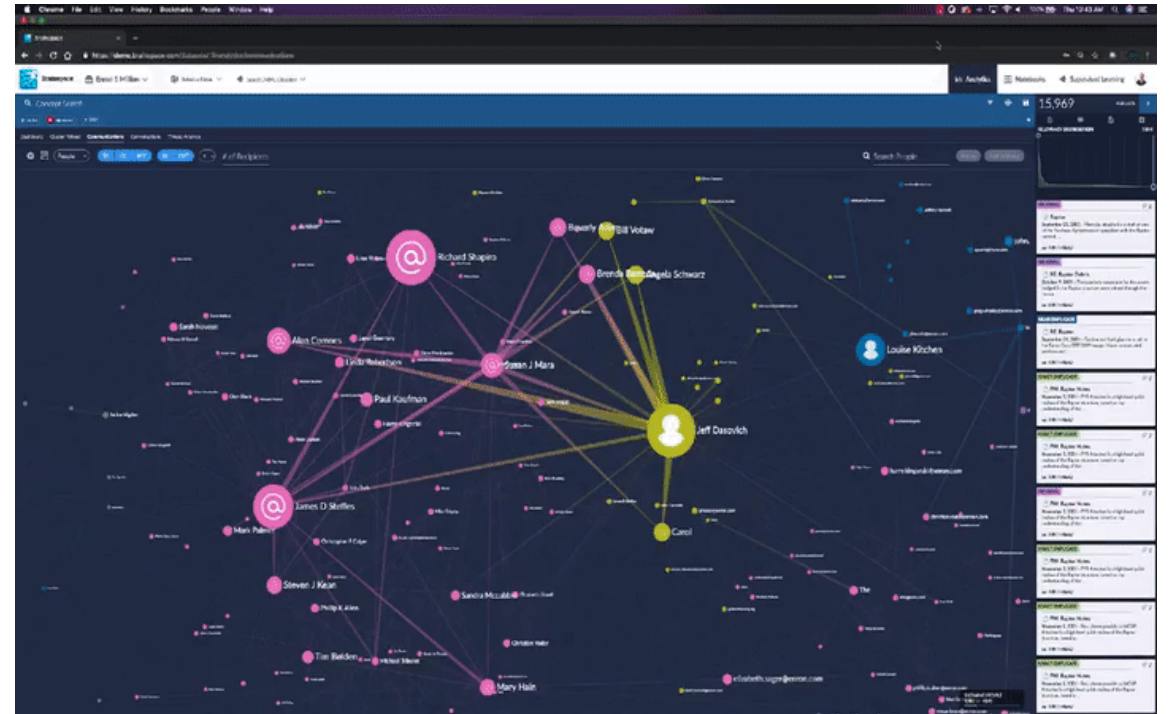
AI Connects the Dots

- **Concept Clustering:** Find concepts and critical themes in data with a concept search.
- **Use Cases**
 - Great for investigations.
 - Validating search terms.
 - Digging into a case you may not know much about.



Find the Key Players with AI

- **Social Network Analysis:** Find out who is talking to who in a case with communication mapping.
- **Use Cases**
 - Great for validating custodians.
 - Uncovering unknown key players.
 - Prioritizing analysis and review.



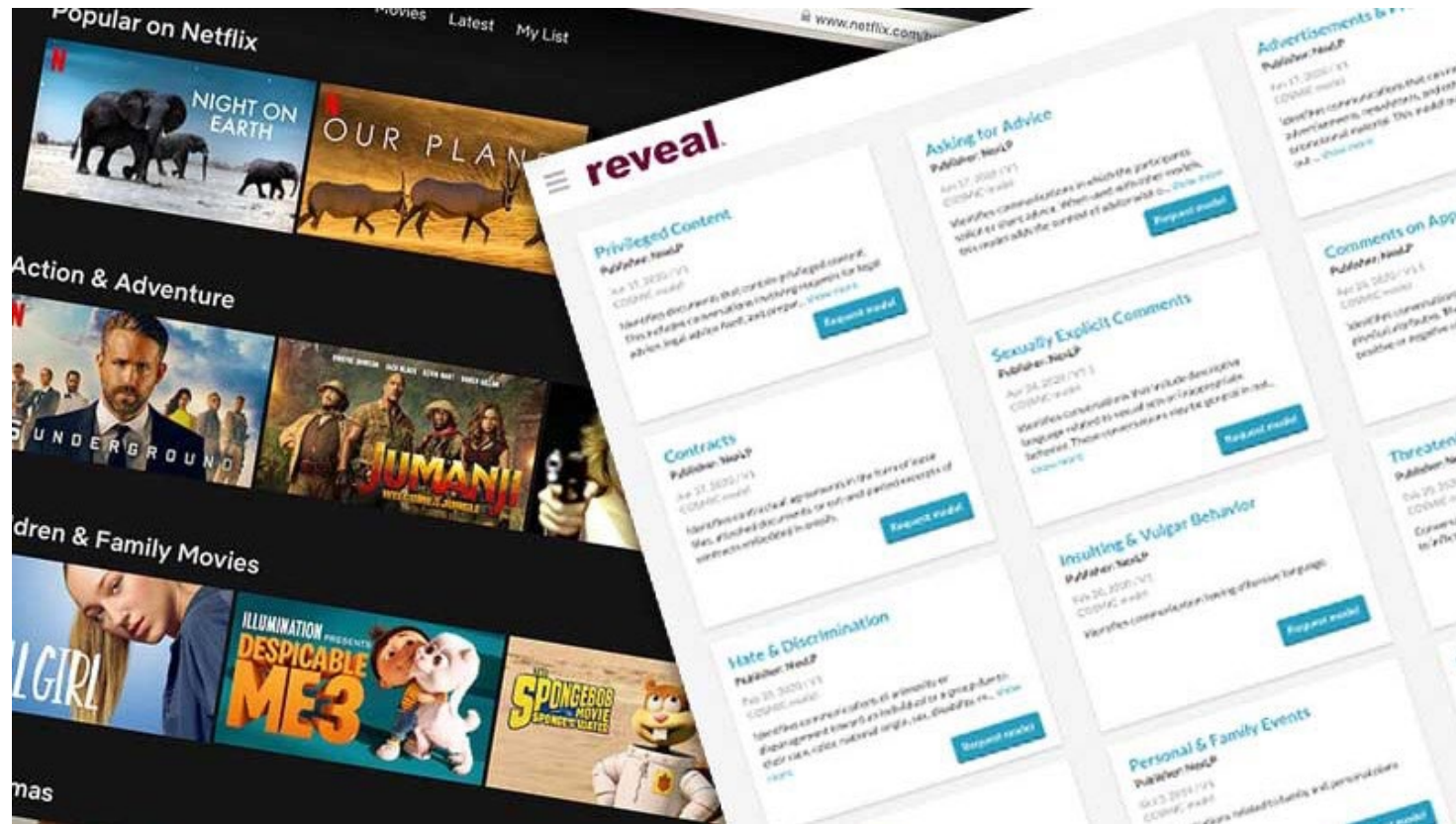
Find the Key Players with AI (continued)

- **Computer Vision:** Teach computers how to see.
- **Use Cases**
 - Identify images in eDiscovery.
 - Locate logos or images in a contract.
 - Search body cam footage.



AI Models as Easy to Use as Netflix

Powerful AI at your Fingertips



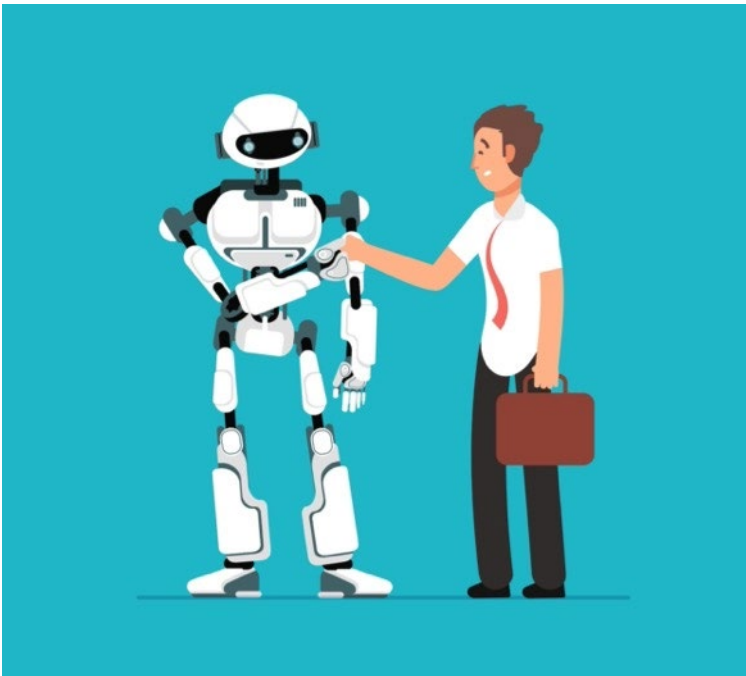
AI and YOU

Why might YOU want AI for eDiscovery?

Need for Artificial Intelligence

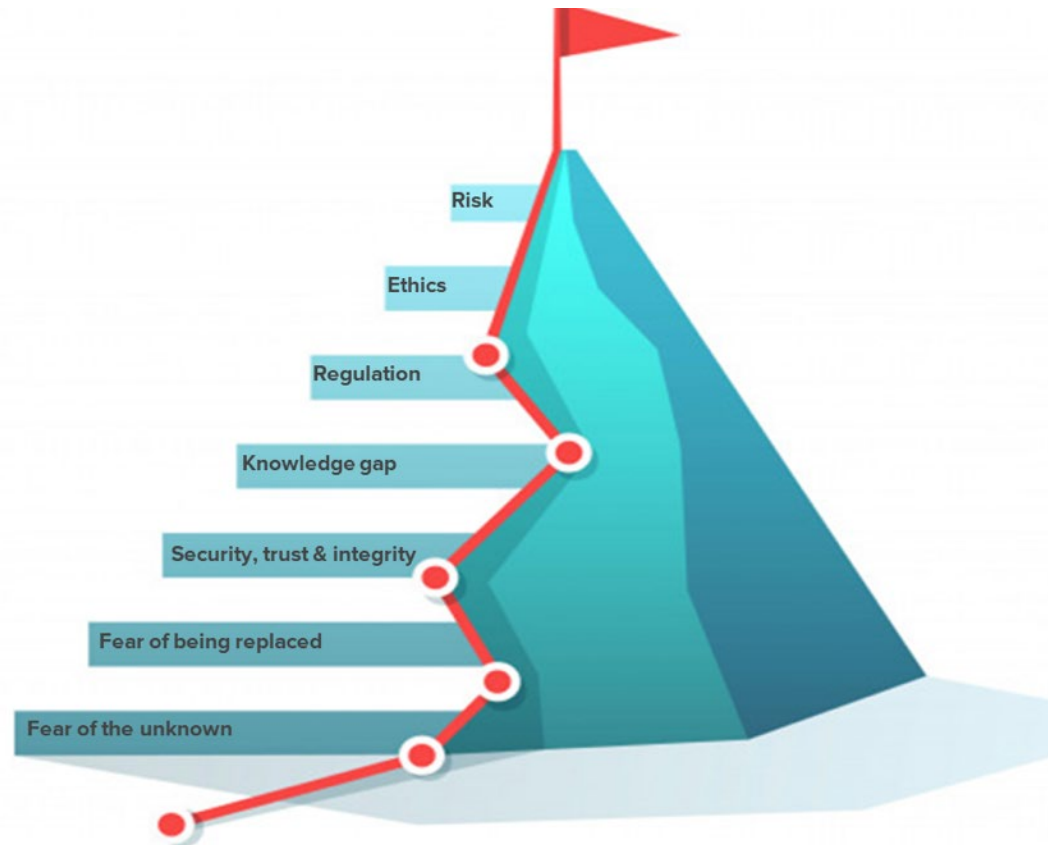


Ethical Duty of Technical Competence

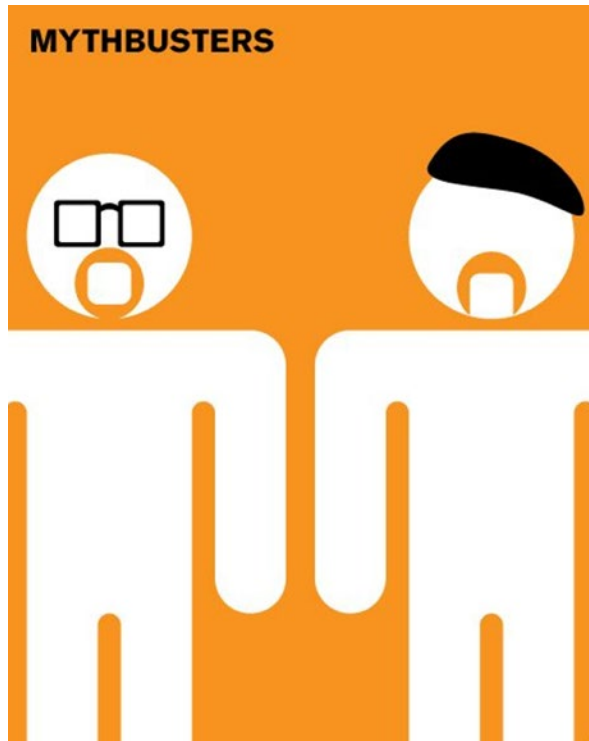


- **ABA Model Rule 1.1: Competence**
A lawyer shall provide competent representation to a client. Competent representation requires legal knowledge and skill. Thoroughness and preparation are reasonably necessary for the representation.
- **California Standing Committee on Professional Responsibility and Conduct**
The Committee opined that “[d]epending on the actual circumstances, a lack of technological knowledge in handling eDiscovery may render an attorney ethically incompetent to handle certain litigation matters involving eDiscovery.”
- **Comment 8 (revised 2012)**
To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

What are your barriers to AI adoption?



Legal AI MythBusters



What frightful myths are holding you back from embracing innovative technology?

1. It is too hard.
2. Only the right person to do it.
3. We can't afford to.
4. It is a luxury.
5. We are too big or too small.
6. Just means new technology.
7. My industry doesn't innovate.
8. Change is risky.
9. Now is not the right time.
10. Innovation is scary.

AI and Legal Technology to Support Your Practice

Agenda

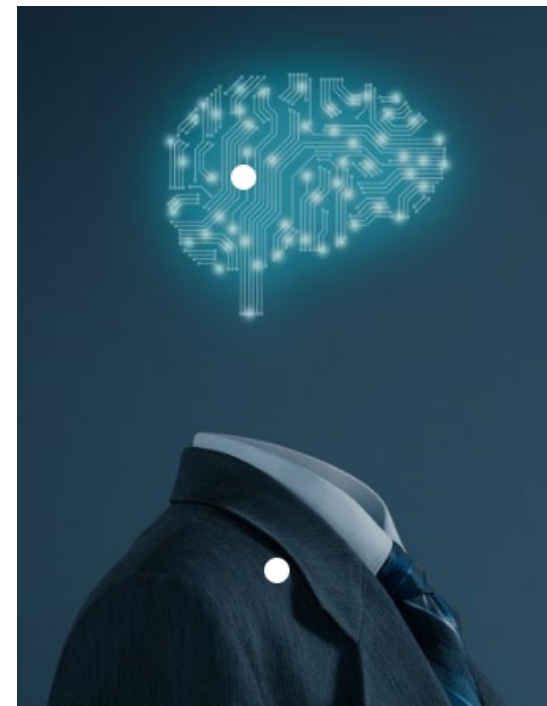
1. Why Adopt AI to Support Delivery of Legal Services
2. Benefits of AI
3. AI Myths
4. Examples of How AI Can Support your Practice
 - Technology to Support your Practice Today
5. Other Important Topics Impacting Your Practice



What is Artificial Intelligence in the eDiscovery Space?

Artificial Intelligence (AI) in eDiscovery is the utilization of technology that simulates human intelligence to conduct tasks in an automated fashion.

- In its current state, AI is not a push-button end-to-end solution; it requires human involvement.
- The effective use of AI augments the human experience and allows the user to be more efficient, cost-effective, and consistent.
- AI is implemented through the skilled use of software applications.



Current Guidance

Rules of Professional Responsibility

- Rule 1.1: Duty of Competence
- Rule 1.6: Confidentiality
- Rules 5.1 & 5.3: Supervision
- Rule 5.5: Unauthorized Practice

ABA Resolution 112 issued August 2019

Case law

Rule 1.1 - Duty of Competence

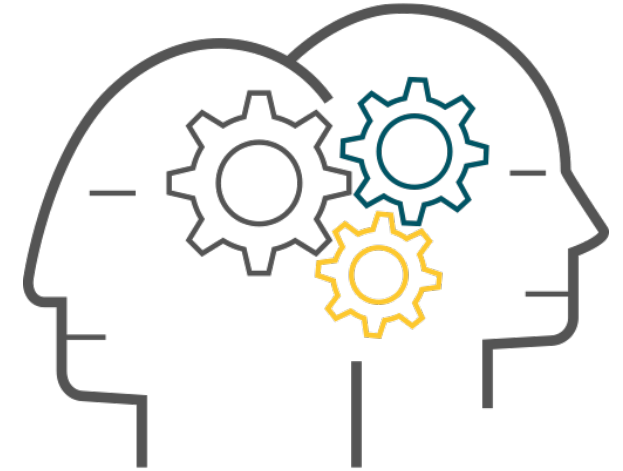
A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness, and preparation reasonably necessary for the representation.

“To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology.”

Comment 8 to Rule 1.1 adopted in 2012

Under Rule 1.1, lawyers also must have a basic understanding of how AI tools operate. While lawyers cannot be expected to know all the technical intricacies of AI systems, they must understand how AI technology produces results. As one legal commentator notes, “[i]f a lawyer uses a tool that suggests answers to legal questions, he must understand the capabilities and limitations of the tool, and the risks and benefits of those answers.”

ABA Resolution 112, August 2019



Rule 1.6 - Confidentiality

A lawyer shall make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client.

How does a lawyer protect the confidentiality of client information when using AI? When using a service provider that uses AI? When using a service provider that uses AI in the cloud? When using a service provider that uses AI in the cloud that crowdsources its algorithms or training?

Under ABA Model Rule 1.6, lawyers owe their clients a general duty of confidentiality. This duty requires explicitly a lawyer to “make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client. “Some AI tools may require client confidence to be “shared” with third-party vendors. As a result, lawyers must take appropriate steps to ensure that their client’s information is appropriately safeguarded. Appropriate communication with the client also is necessary.

To minimize the risks of using AI, a lawyer should discuss the confidentiality safeguards in place with third-party AI providers. A lawyer should inquire about “what type of information is going to be provided, how the information will be stored, what security measures are in place with respect to the storage of the information, and who is going to have access to the information.” AI should not be used in the representation unless the lawyer is confident that the client’s confidential information will be secure.

ABA Resolution 112, August 2019

Rule 5.1/5.3 - Duty to Supervise

A lawyer having direct supervisory authority over another lawyer shall make reasonable efforts to ensure that the other lawyer conforms to the Rules of Professional Conduct ... [and] a lawyer having direct supervisory authority over the non-lawyer shall make reasonable efforts to ensure that the person's conduct is compatible with the professional obligations of the lawyer.

How does an attorney supervise an algorithm if the code is not visible and the calculations happen across a vast data pool at a rate of millions per second?

In 2012, the ABA adopted an amendment to Model Rule 5.3 which changed the title of Rule 5.3 from “Responsibilities Regarding Non-lawyer **Assistants**” to “Responsibilities Regarding Non-lawyer **Assistance**.”

“The change clarified that the scope of Rule 5.3 encompasses non-lawyers, whether human or not.”

Some tasks should not be handled by today’s AI technology, and a lawyer must know where to draw the line. At the same time, lawyers should avoid underutilizing AI, which could cause them to serve their clients less efficiently. Ultimately, it’s a balancing act. Given that many lawyers are focused on detail and control over their matter, it is easy to see why “the greater danger might very well be underutilization of, rather than overreliance upon, artificial intelligence.

Rule 5.5 - Unauthorized Practice of Law

A lawyer who is not admitted to practice in this jurisdiction shall not, except as authorized by these Rules or other law, establish an office or other systematic and continuous presence in this jurisdiction for the practice of law; or hold out to the public or otherwise represent that the lawyer is admitted to practice law in this jurisdiction.

Under Lola, is document review considered the practice of law? Is legal research? What about due diligence? Negotiating an NDA? (All of these can be done by machine).

In 2015, the Second Circuit distinguished between tasks performed by machines and tasks performed by lawyers (*Lola v. Skadden, Arps, Slate, Meagher & Flom LLP*, No. 14-3845 (2d Cir. 2015)). The Second Circuit found that **tasks that could otherwise be performed entirely by a machine could not be said to fall under the practice of law**. Consequently, Lola raises the possibility that machines can reclassify tasks that were traditionally considered the practice of law as now falling outside of the scope of the practice of law. (JD Supra - AI and Professional Conduct)

Legal Tech Adoption: The Lawyers

- The Luddites
- The Hunt and Peckers
- The Technophile
- **The Legal Athlete**
 - Nimble
 - Diverse Skill Set
 - Legal
 - Technical
 - Project and Process Management
 - Design Thinking
 - People Skills

Do NOT be here!

Legal Tech Adoption: The Luddites

- “Computers?!?! My assistant sets up a computer in my office when I need to meet with a tech company.”
- “Print it out and ship it to my house so that I can review it . . . Printed out its 30 boxes of paper? You must be doing something wrong.”



This Photo by Unknown Author is licensed under CC BY-NC

Legal Tech Adoption: The Lawyers

- The Luddites
- The Hunt and Peckers
- The Technophile
- **The Legal Athlete**
 - Nimble
 - Diverse Skill Set
 - Legal
 - Technical
 - Project and Process Management
 - Design Thinking
 - People Skills



You CAN be here!

Legal Tech Adoption: The Legal Athlete

According to the ABA, the average age of a law school graduate is 23 to 25 years old – people who always had the internet in their life; but for the prior generation of attorneys, things we take for granted now was new tech in the mid-1990s and early 2000s

- “Is there an app for this?”
- “We do this all the time. Can we automate it?”



This Photo by Unknown Author is licensed under CC BY

We Are Talking About AI

What People Believe AI Is



What AI Actually Is



Benefits of AI and Impact on Delivery of Legal Services

1. Improve Discovery Efficiencies
2. Reduce Discovery-Related Costs
3. Faster to the Facts
4. Supports Investigations
5. Enhances the Lawyering



Legal AI Now

Classification Tools

Platforms that use machine learning algorithms to identify, extract, categorize, and organize information.

Example Use: Find all change of control provisions in a large group of contracts.

Automation Tools

Platforms that use machine learning algorithms to automate a task or systematize a process.

Example Use: Draft documents using automation software that requires completing a simple worksheet.

Research Tools

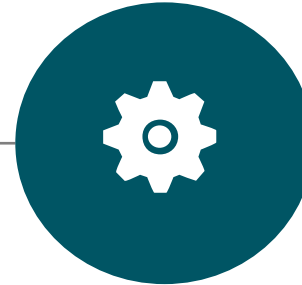
Platforms that use machine learning algorithms and NLP to search and retrieve information relevant to a legal question and then deliver the information in an accessible fashion.

Example Use: Ask a chatbot a question about employment law.

Prediction Tools

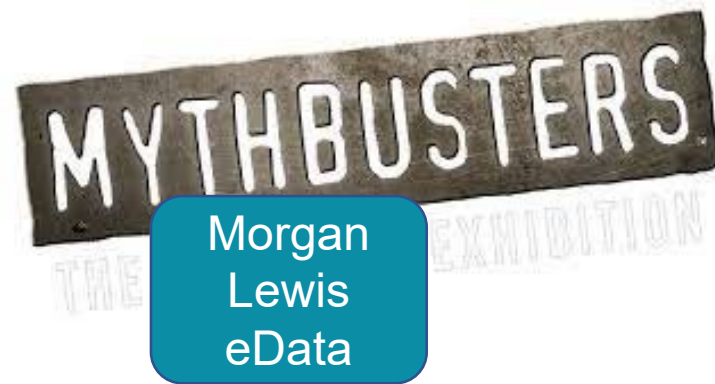
Platforms that digest unstructured data to provide information and make predictions.

Example Use: What is the likelihood this judge will grant summary judgment?

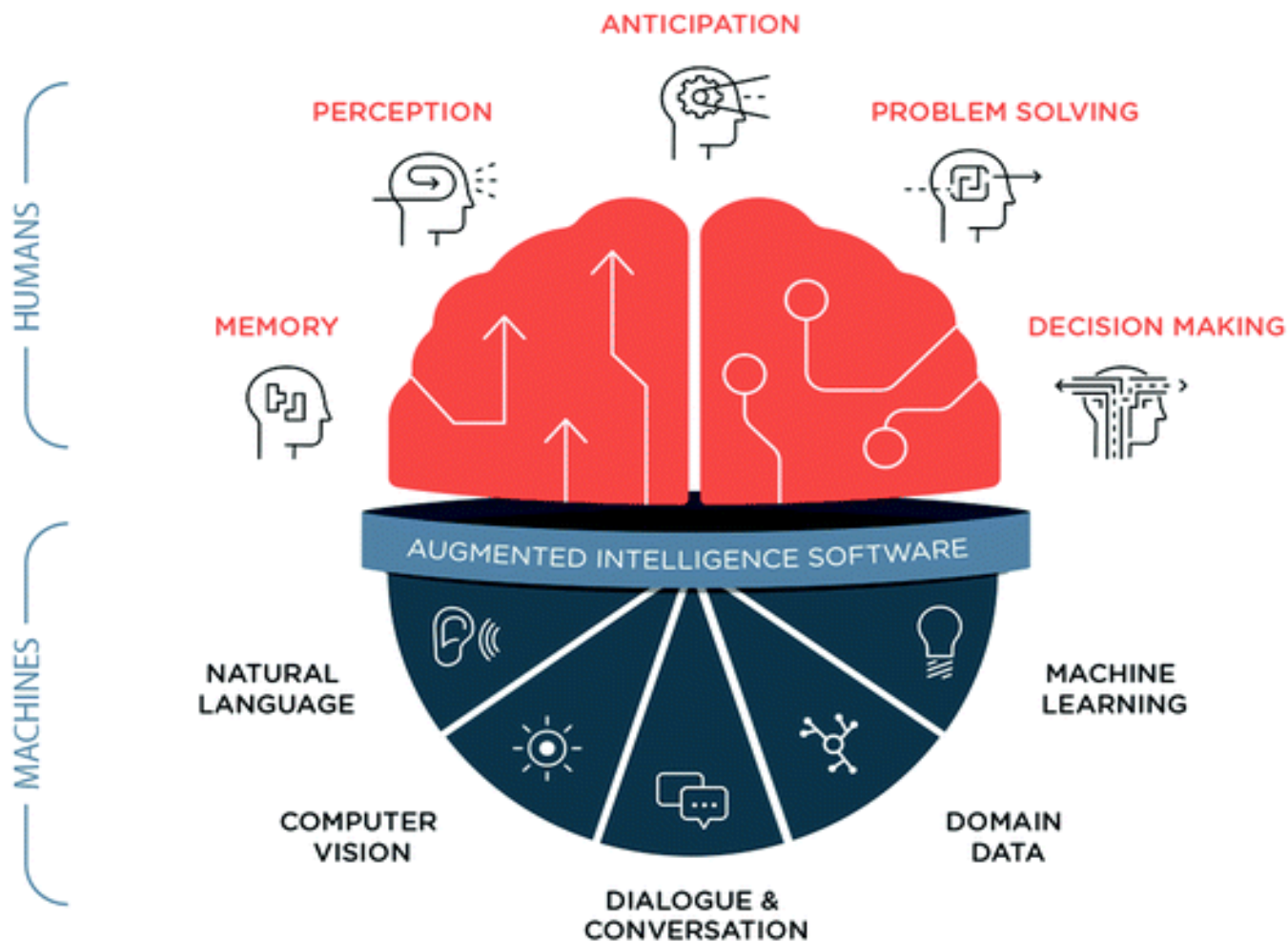


But to Drive Adoption, You Must Address The Myths

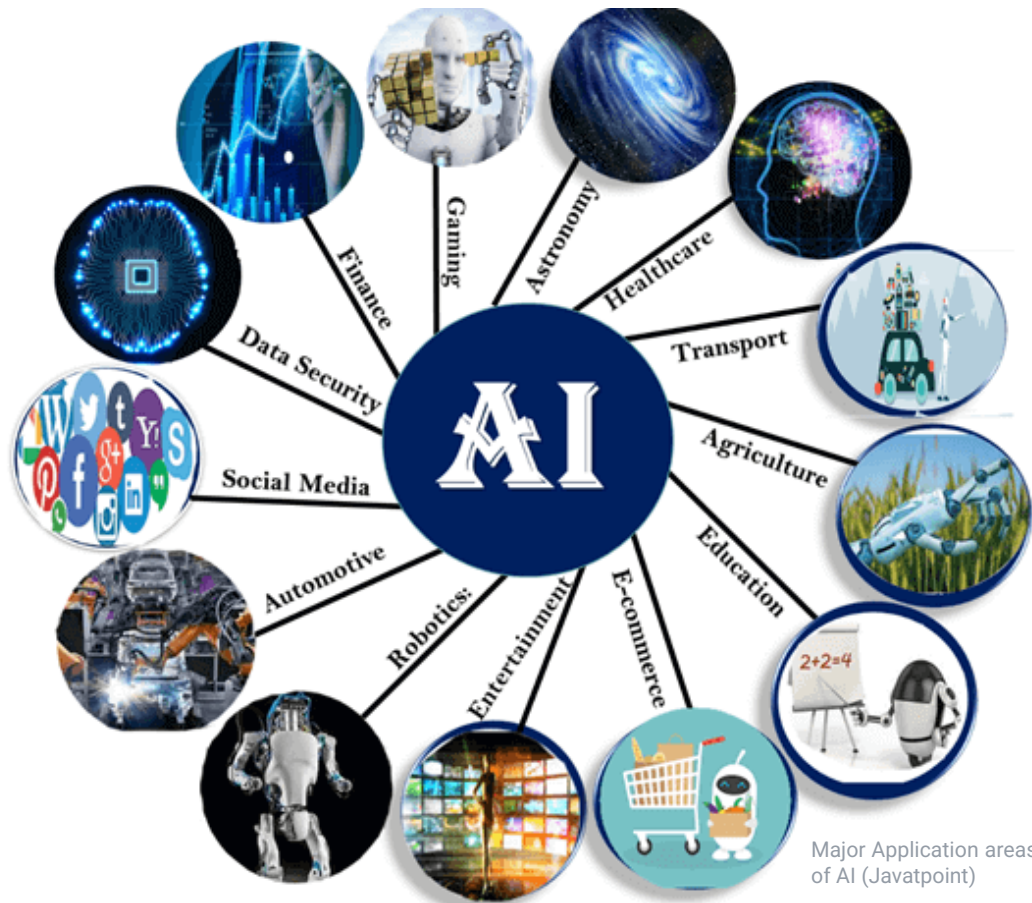
- Eyes On Review is the Gold Standard
- The Other Side Will Never Agree
- The Courts Will Never Approve
- End of Lawyers
- Too Hard
- Too Expensive
- My Case is Unique
- Change is Risky
- Bias
- Maybe the Next Case



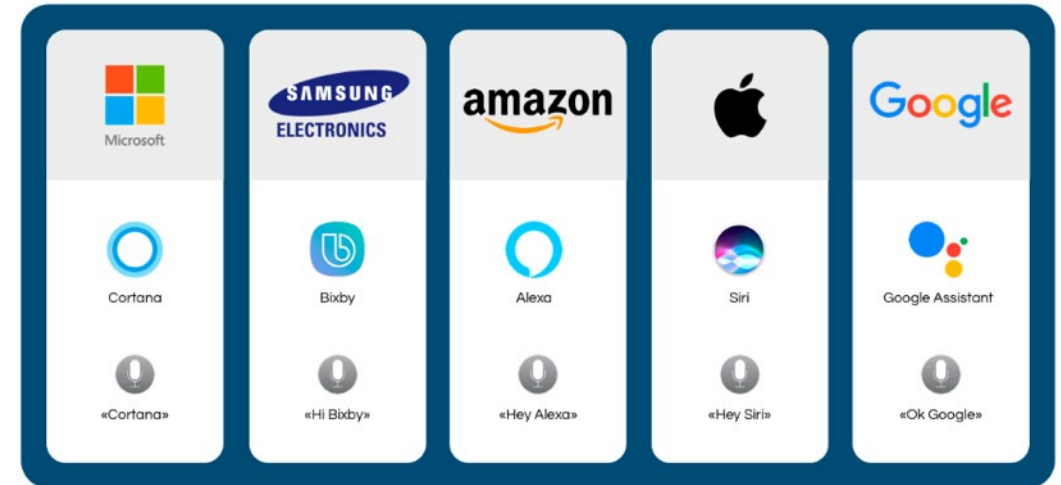
Augmented Intelligence Software



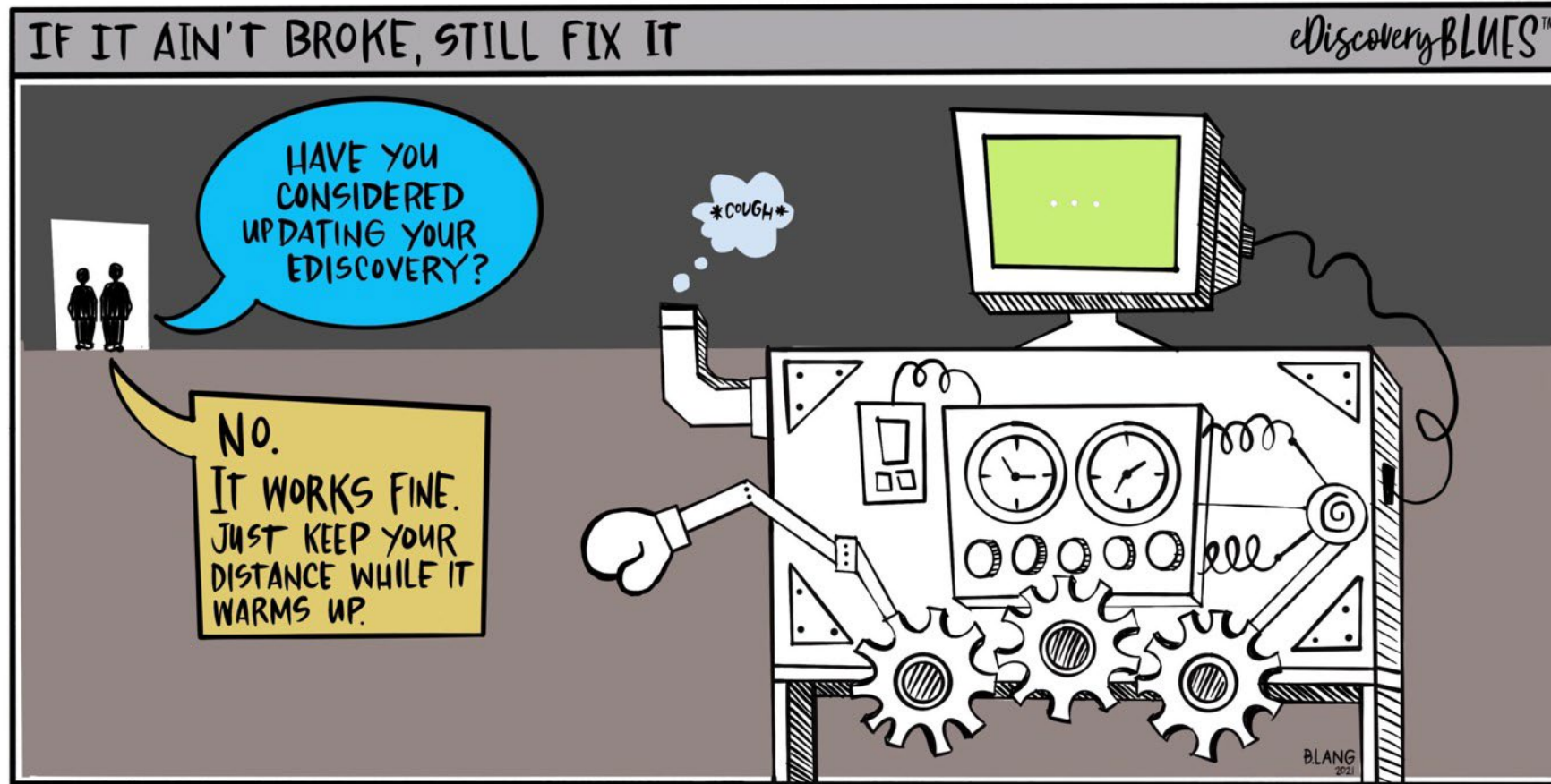
AI in Our Daily Lives – Why Not Legal?



Virtual Assistants



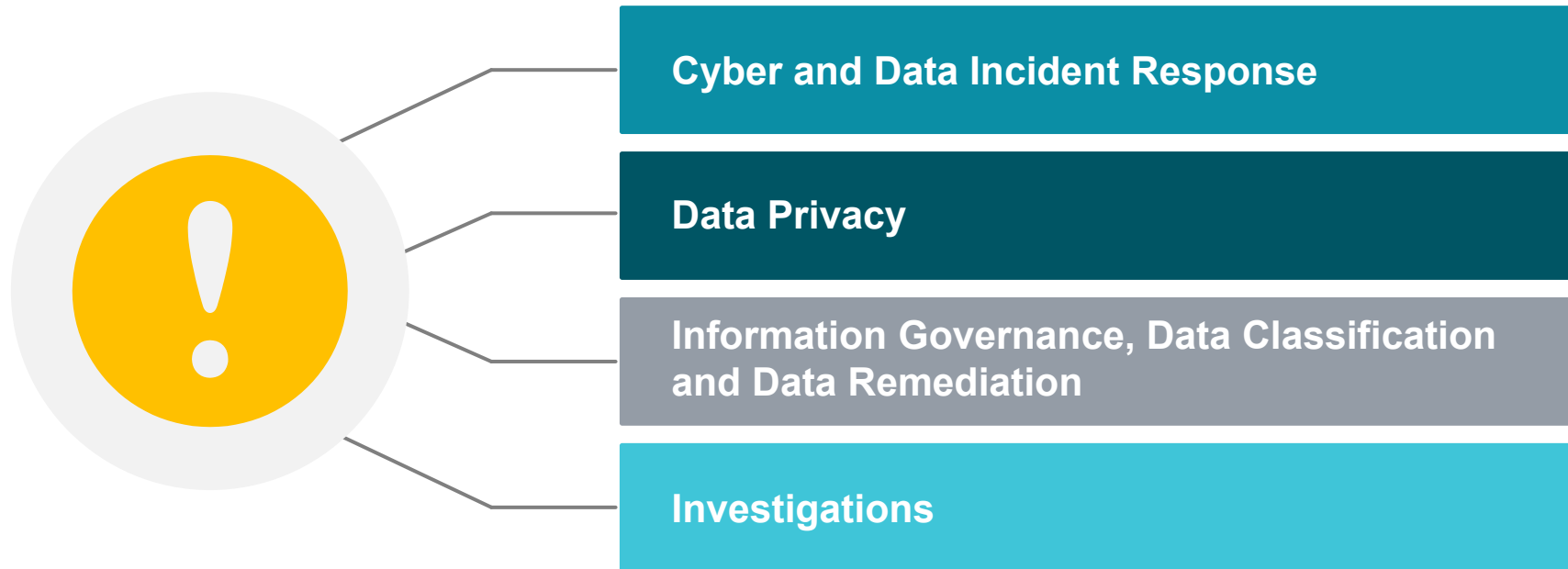
If It Ain't Broke, Still Fix It



© IPRO 2021

The Future of AI and Its Impact on the Legal Profession

AI Supports Solving New Legal Challenges



Examples of Technology and AI Available to You Today

Artificial Intelligence Utilized by the Firm

Artificial Intelligence Applications

Analytics

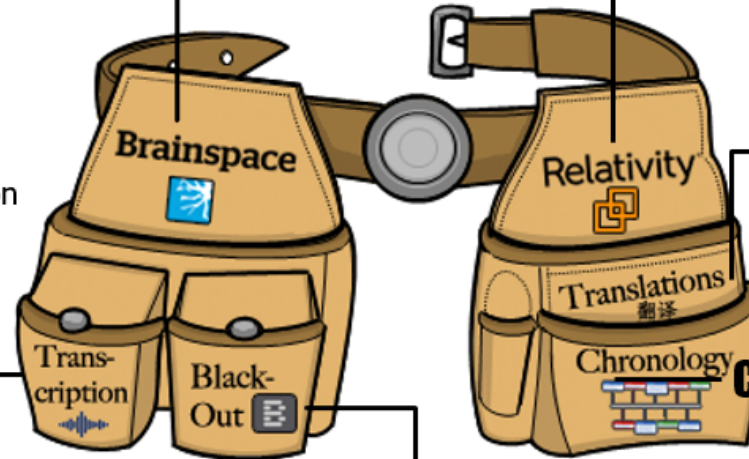
- Concept Searching
- Communication Analysis
- Machine Learning
- Smart Document Classification
- Image Detection
- Sentiment Analysis

Audio Transcription

- Machine transcription of digital audio recordings

Automated Redactions

- Auto-redact both image & native Excel files



Data Management System

- Processing
- Review Platform
- Advanced Search
- Mobile Text & Chat
- Production

Document Translations

- Machine translation of foreign language documents

Chronology & Timelines

- bring together your case theory, documents, work product, and even transcripts
- Create chronologies and visual time lines to tell your story

Review Analytics

Threading

Identifies documents contained in thread groups. Allows for suppression of lesser inclusive email threads and the ability to batch by thread.

Document Level Deduplication

Allows for suppression and propagation across exact duplicates. Identified either through exact hash values or textual analysis.

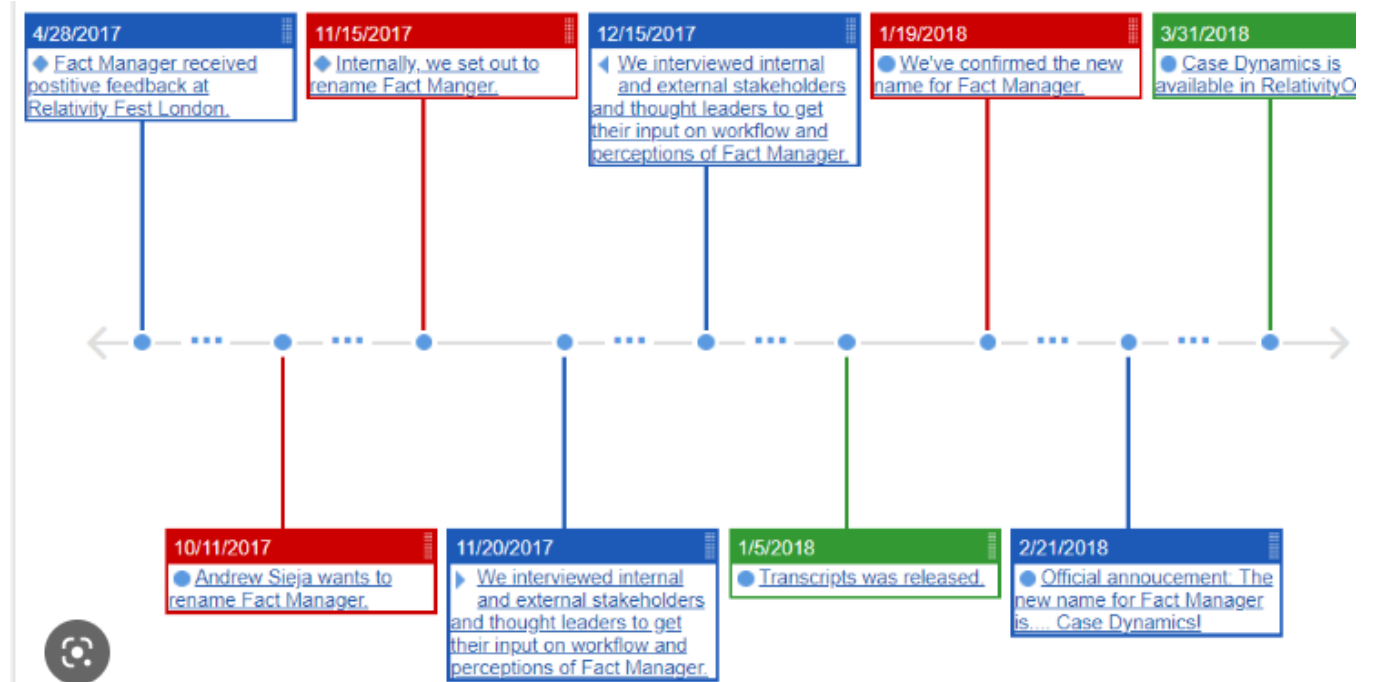
Automated Redactions

Analyzes documents for items such as PII and automatically applies redactions.

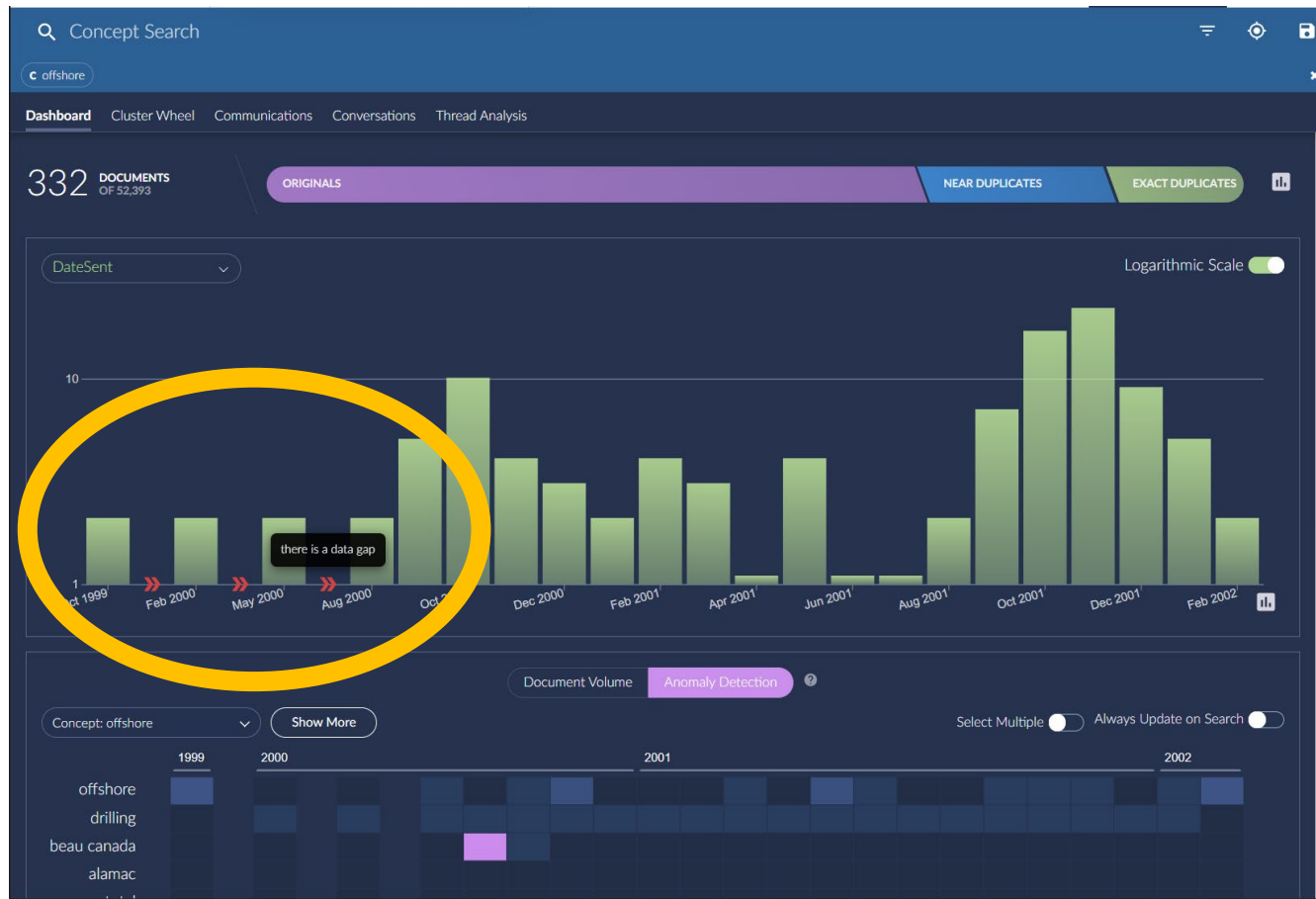
Chronologies

Leverages coding decisions to be visually grouped together into chronological order.

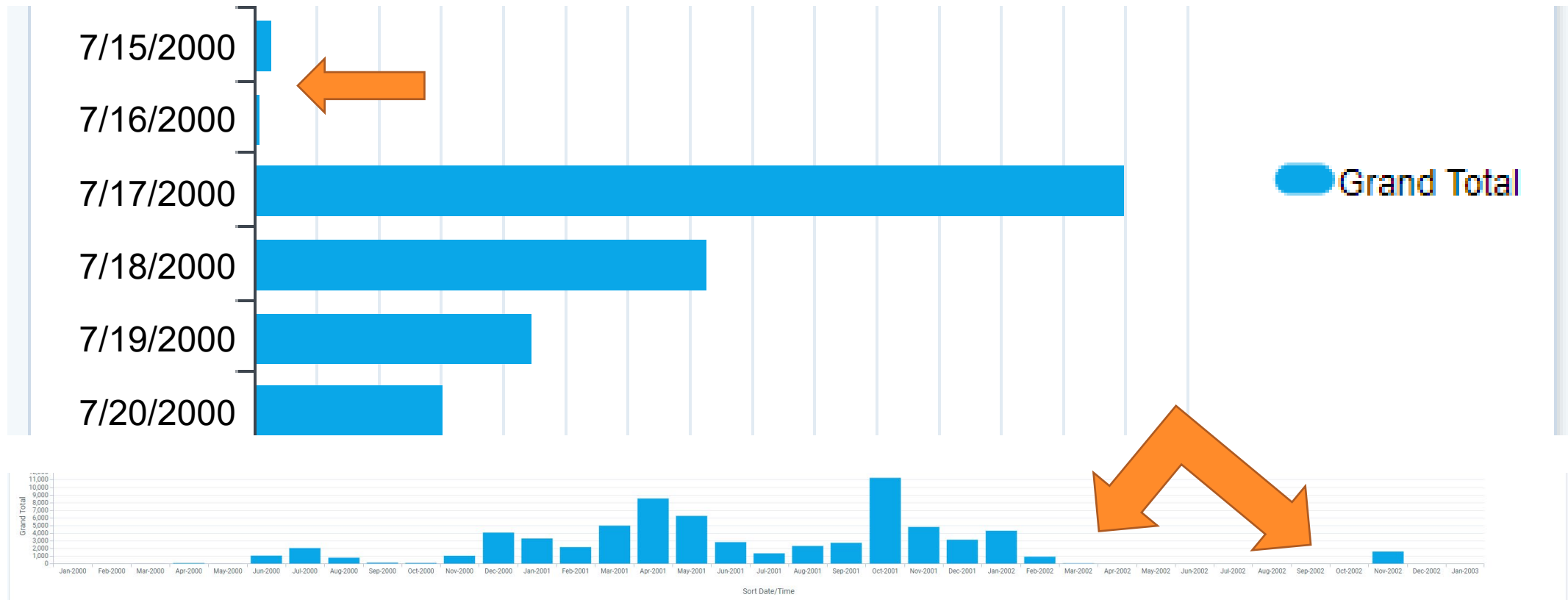
Redacted – Protected Health Information



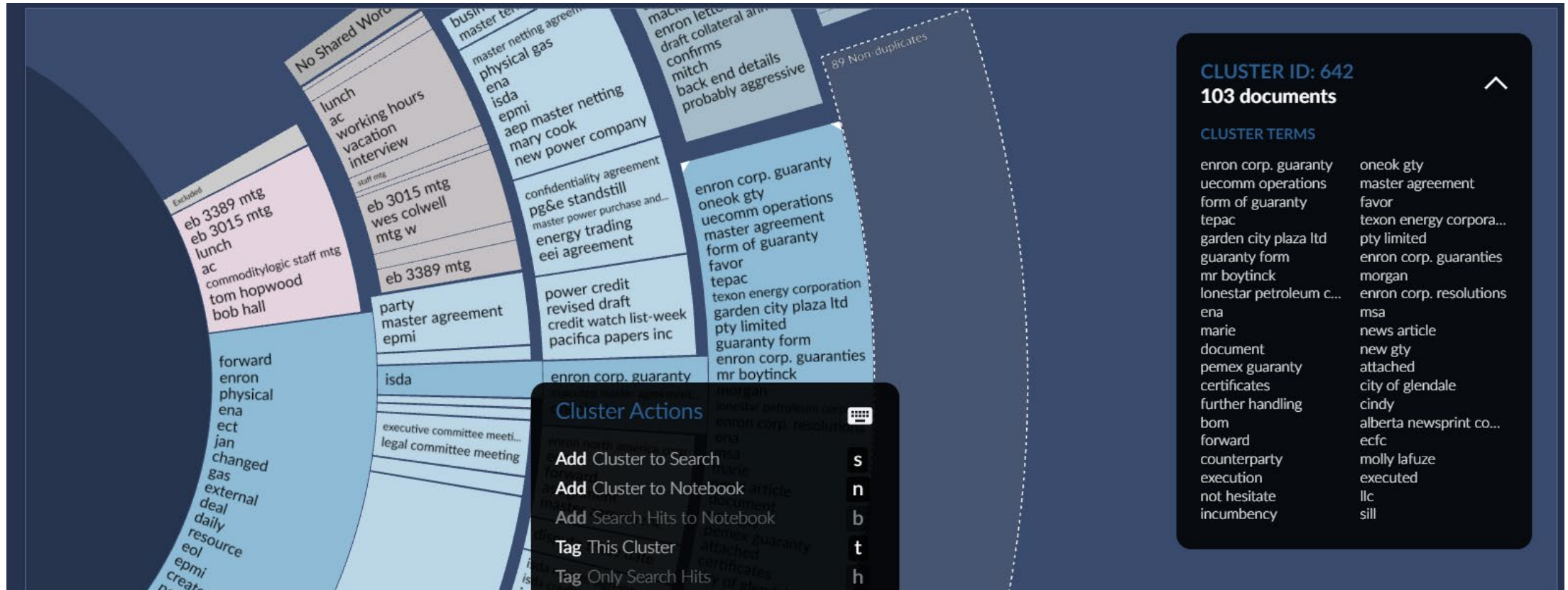
Date Gap Analysis



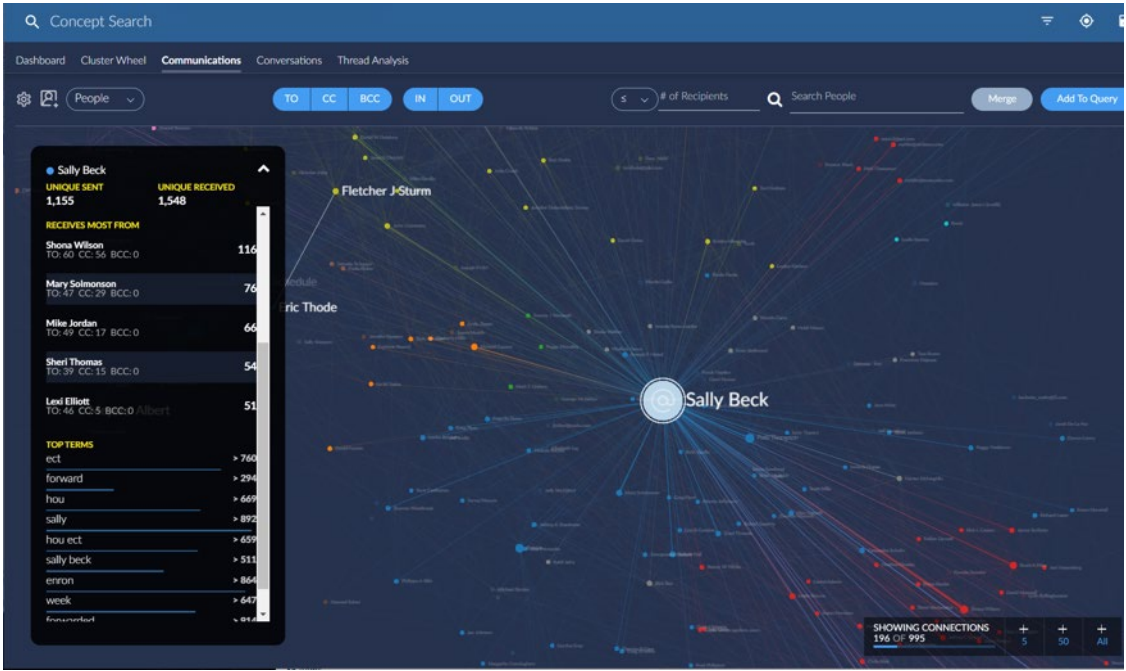
Date Gap Analysis (cont.)



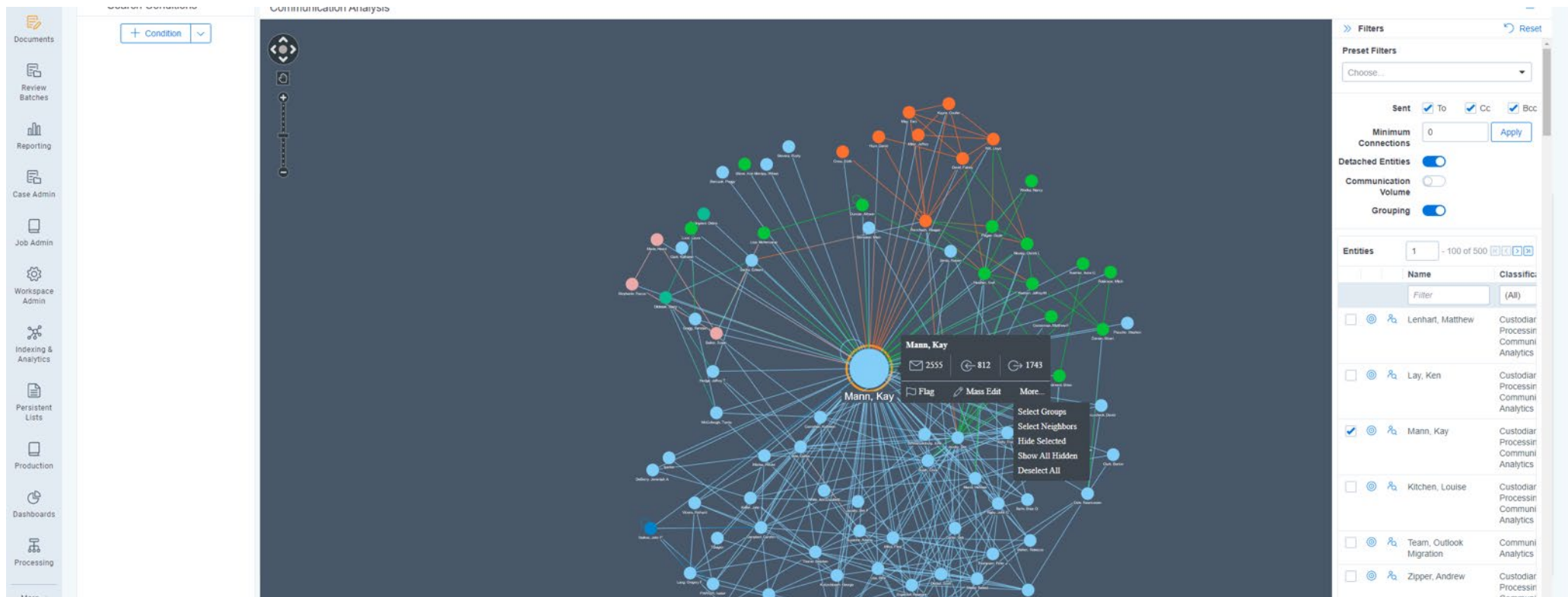
Clustering



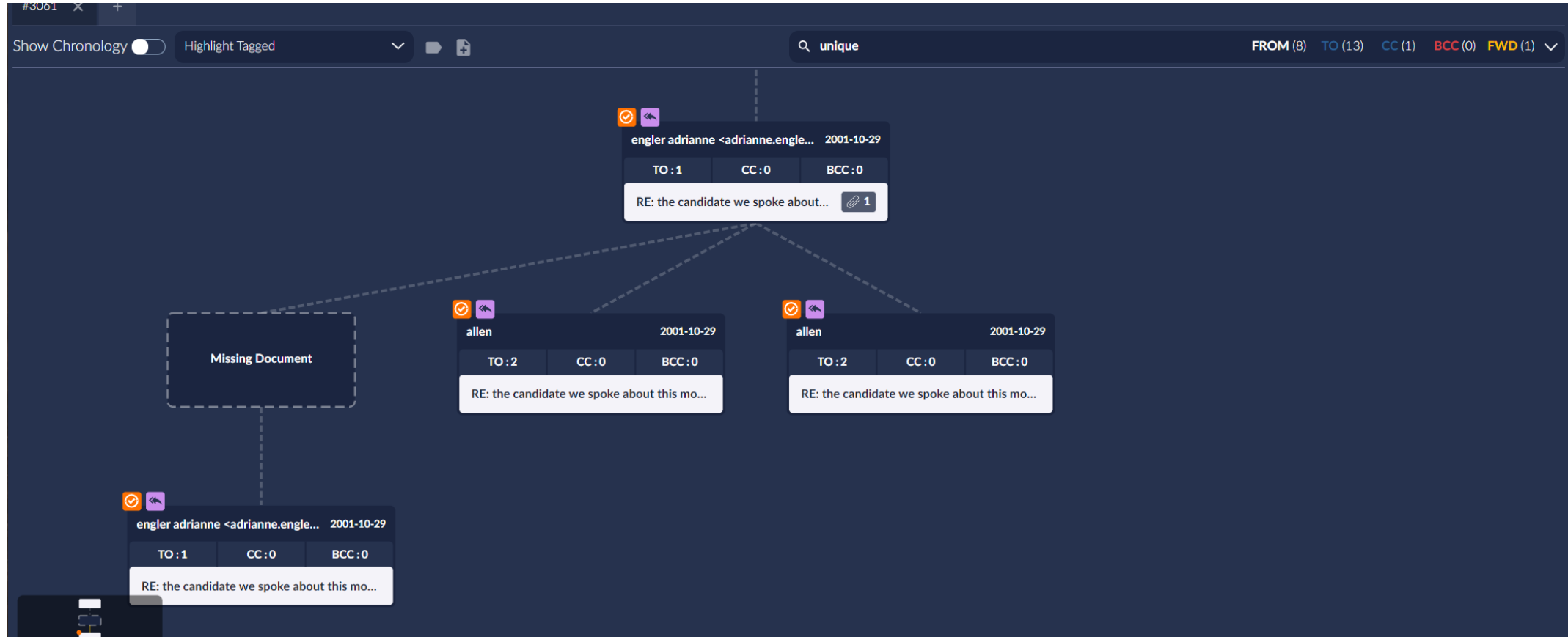
Social Networking



Social Networking and Communication Analysis



Email Thread Analysis



Sentiment Analysis

#	Control Number	Custodian	Sentiment Status	Sentiment Overview	Sentiment Distribution	Sentiment:Richness	Sentiment:Negative %	Sentiment:Top Negative
1	REL00000002351	Otto Mation	Completed	Negative; Positive	3-Negative	20	6%	I am quite looking forward to shrinking my enemies until they comply with my requests. (Sentence 93, Score 0.97)
2	REL00000002352	Otto Mation	Completed	Negative; Desire	4-Negative; 2-Desire	32	14%	You really do need to learn when they've failed to reach their max potential. (Sentence 92, Score .92)
3	REL00000002353	Otto Mation	Completed	Negative; Desire; Anger	4-Negative; 1-Desire; 1-Anger	38	13%	Rumor has it Dexter is bringing his horrible deviled eggs! (Sentence 90, Score .90)
4	REL00000002354	Otto Mation	Completed	Negative	2-Negative	26	20%	They have wasted a lot of time and made little progress. (Sentence 93, Score .88)
5	REL00000002355	Otto Mation	Completed	Anger; Positive; Negative	5-Anger; 4-Positive; 2-Negative	28	18%	I hate copy cats. (Sentence 86, Score .85) I think he stole my egg recipe. (Sentence 94, Score .96)
6	REL00000002356	Otto Mation	Completed	Desire	4-Desire	24	0%	
7	REL00000002357	Otto Mation	Completed	Anger; Desire	3-Fear; 1-Anger; 1-Desire	34	0%	
8	REL00000002358	Otto Mation	Completed	Negative; Desire	3-Negative; 3-Desire	30	16%	Rumor has it Dexter is bringing his horrible deviled eggs! (Sentence 90, Score .90)
9	REL00000002359	Otto Mation	Completed	Positive	3-Fear; 1-Positive	36	0%	
10	REL00000002360	Otto Mation	Completed	Desire	4-Desire	22	0%	

Technology Assisted Review



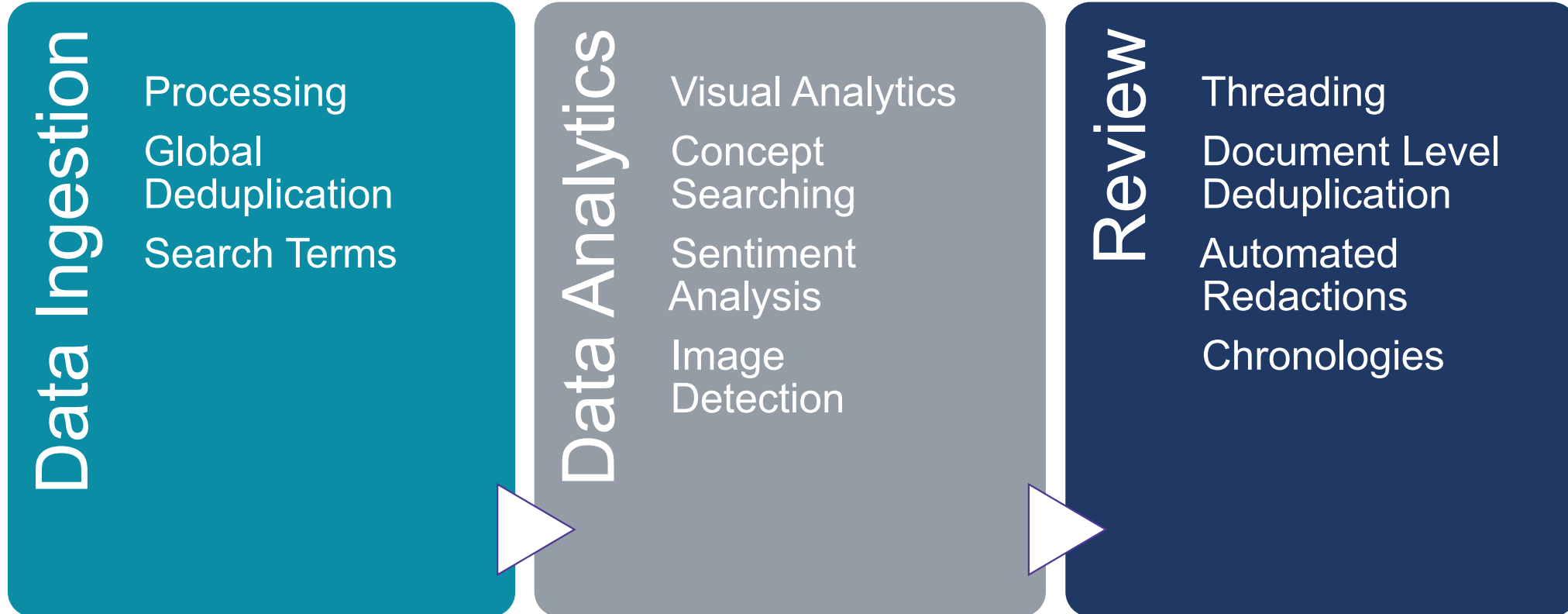
Machine Learning and Technology Assisted Review

Process Overview

- Technology Assisted Review (TAR) is one of the most utilized forms of AI in eDiscovery.
- TAR allows users to input data and assign a negative or positive value.
- The data is then analyzed, assigning a weighted output to each record.
- The inputs can be continuously updated, and the model will refine based on its learning ability.
- As the model learns, the weighted outputs are adjusted to more accurately reflect the contents of each record.



AI Beyond TAR



Future Trends

Portable Models

- Machine learning allows coding decisions to be leveraged across datasets.
- The user can train the model on discrete and distinct issues and quickly identify the desired data.
- Currently requires resolving potential issues with confidentiality, attorney-client privilege, and personally identifiable data.

Mobile Phone Data

- Mobile phone data is complex and unique. Mobile phones often contain many applications, each with preservations and collection issues.
- However, leveraging geolocation, text message data, social media posts, and financial transactions can help create a comprehensive and chronological story of events.

Internal eDiscovery Modules

- Email service providers are now attempting to enter the eDiscovery space.
- Allows users to internally implement collections, searches, and analytics, including machine learning, review, and exports.
- Captive market has the most significant potential to disrupt the market and reset standards in the eDiscovery space.

Future Trends (cont.)



AI Detractors



Other Important Topics Impacting Your Practice

Preservation Challenges

- Preservation in place v back-end preservation
- Emerging technologies

Templates

- ESI protocols
- Protective orders
- Do not forget FRE 502(d)
- Legal holds
 - Custodian
 - IT
 - Structured database owners

Methods to Reduce Discovery Burdens

- Discovery scoping
 - Custodians
 - Date ranges
 - Search terms
- Review strategies
 - Analytics outlined
 - Search term hit only review
- Search term analysis and sampling

New Challenges

With the advancement in AI technology comes new issues and risks that attorneys must be aware of. One of the most concerning is the ability to manipulate or fabricate data.

Deep Fakes

- Deep Fakes are famous in Hollywood and social media.
- AI is utilized to manipulate a user's likeness or voice to replicate that of a famous individual.
- Deep Fakes aren't limited to image and likeness but can include fake text messages, social media posts, bank statements, and emails.

Mitigating Risk



- Always conduct forensic collections!
- Always request metadata!
- Avoid utilizing screenshots!



Questions?

Learn how we can help you at HaystackID.com
or reach out to us at Info@HaystackID.com / 800.267.9695