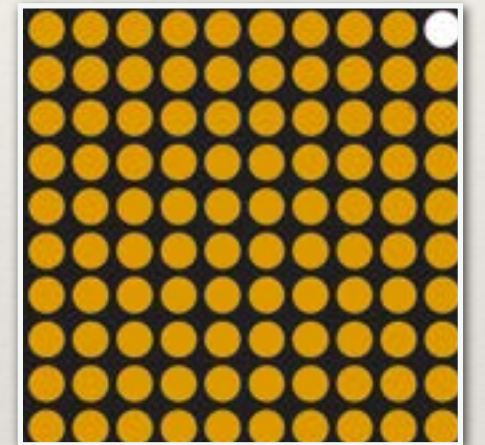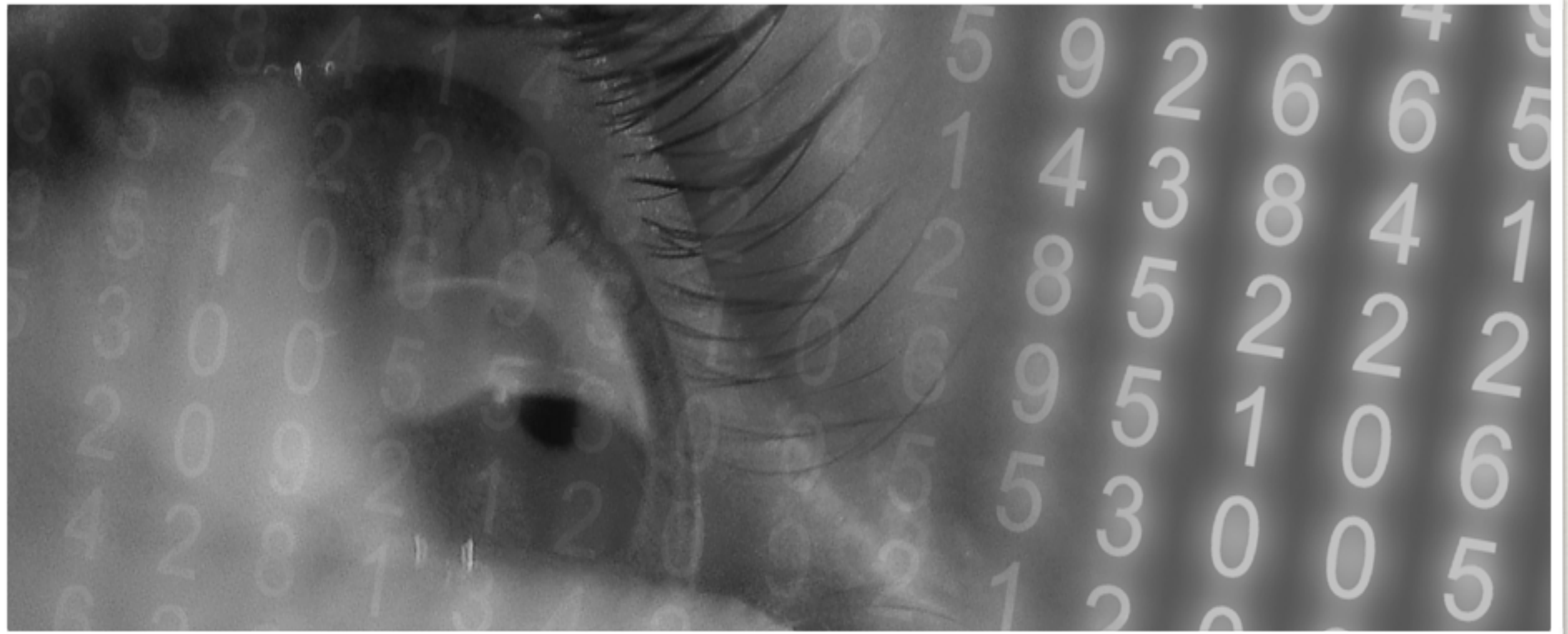# Offering and Impact Overview

# BeyondReview
## Power. Precision. Speed.

Powerful Reduction. Precision Review. Extraordinary Speed.

BeyondReview is a data-driven discovery services company that uses **visual classification technology** and **expert review attorneys** for end-to-end discovery with power, precision and speed.

# BeyondReview

Powerful Reduction
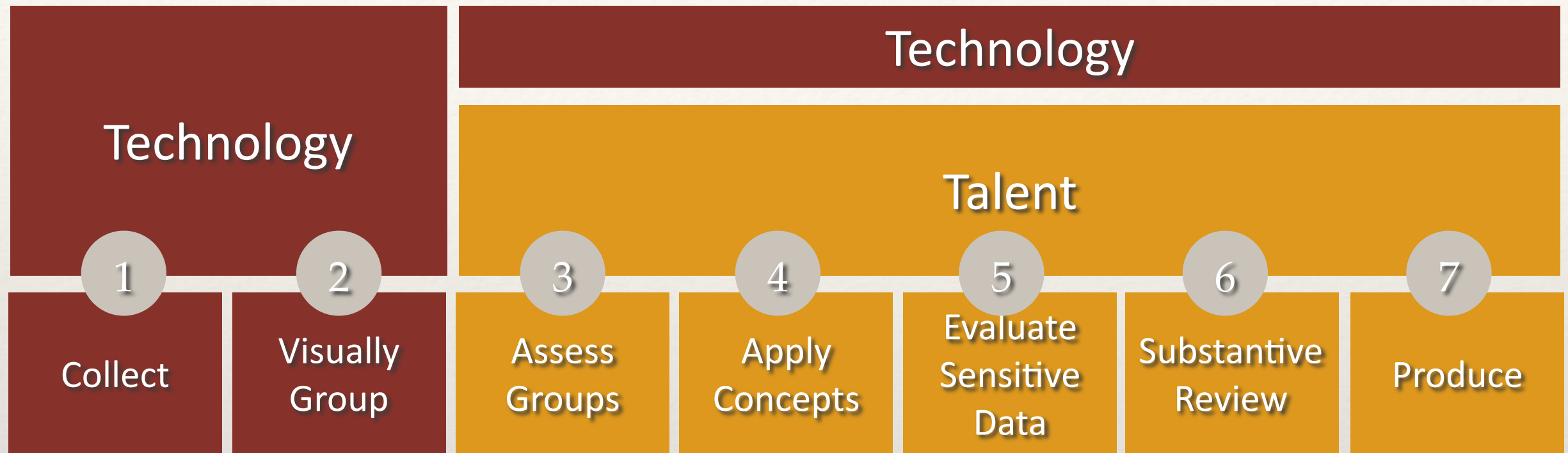Precision Review
Extraordinary Speed

*BeyondReview addresses three core problems for efficient data **reduction** and **review**.*

# The Challenge

Where to Start
What to Review
How to Review

Data-Driven Document Review

Technology

Technology

Talent

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Collect | Visually Group | Assess Groups | Apply Concepts | Evaluate Sensitive Data | Substantive Review | Produce |

*BeyondReview implements an advanced seven-step approach to deliver superior results.*
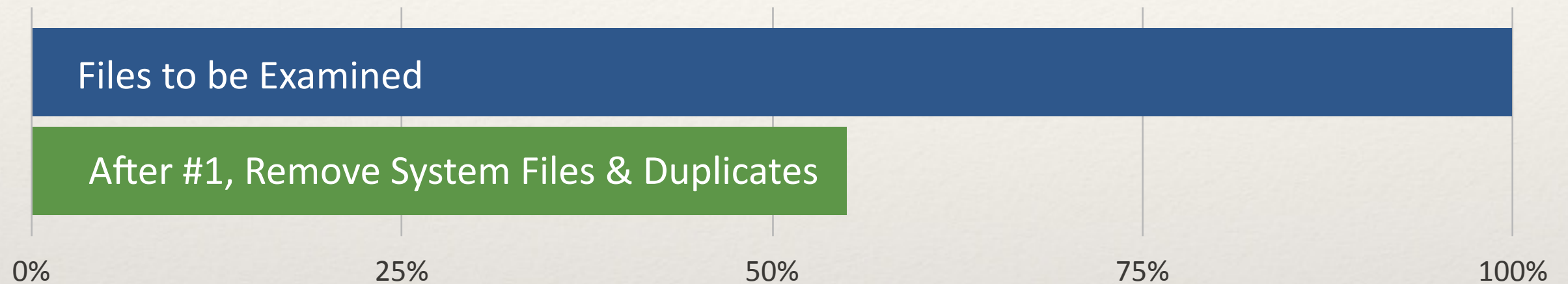
## The Approach

Powerful Reduction
Precision Review
Extraordinary Speed

**Collect**  1

- Prepare Collector Script
- Deploy Collector
- Initial Hash, De-Duplication and Enhanced deNISTing
- Cull to Single Instance Files
- Retrieve Collector
- Upload Collected Data into BeyondRecognition Servers

| | | | | |
|---|---|---|---|---|
| Files to be Examined | | | | |
| After #1, Remove System Files & Duplicates | | | | |

0%    25%    50%    75%    100%

*Step 1 of the approach provides forensically sound collection and initial processing.*
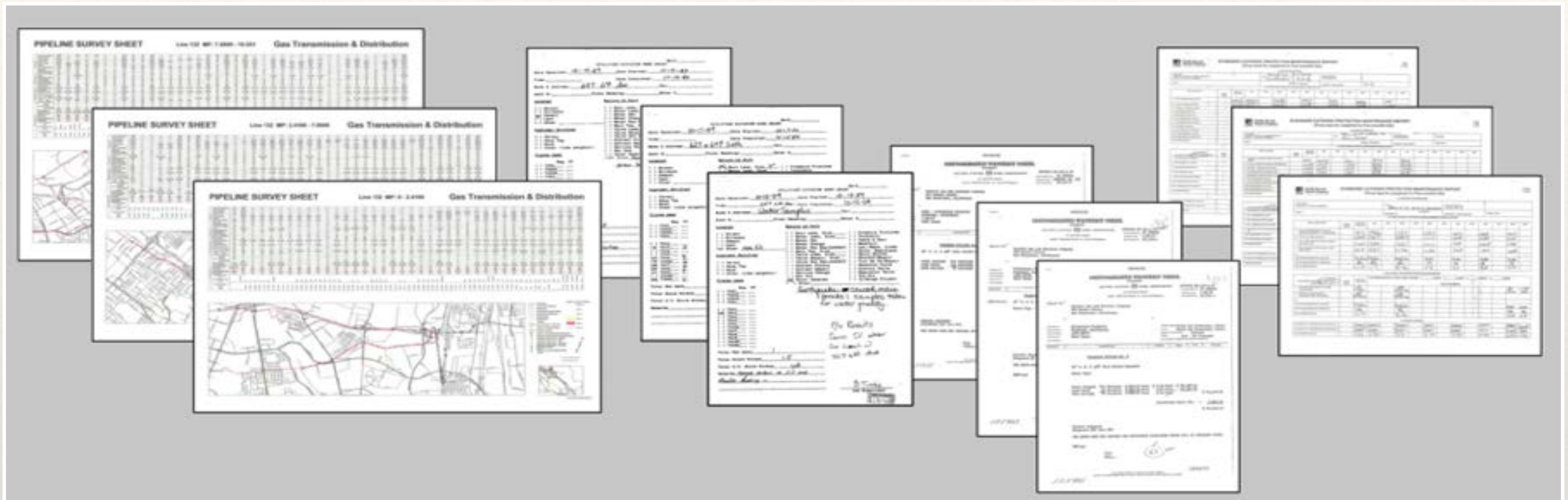
# Data Collection

No Additional Cost
Forensically Sound
Appropriate Reduction

**Visually Group**

- Hash De-Duplication and deNIST against Multiple Collections
- BeyondRecognition Visual Deduplication
- ESI Segmentation
- Formation of Visually Similar Clusters

2

*Step 2 of the approach completes processing and groups visually-similar documents.*
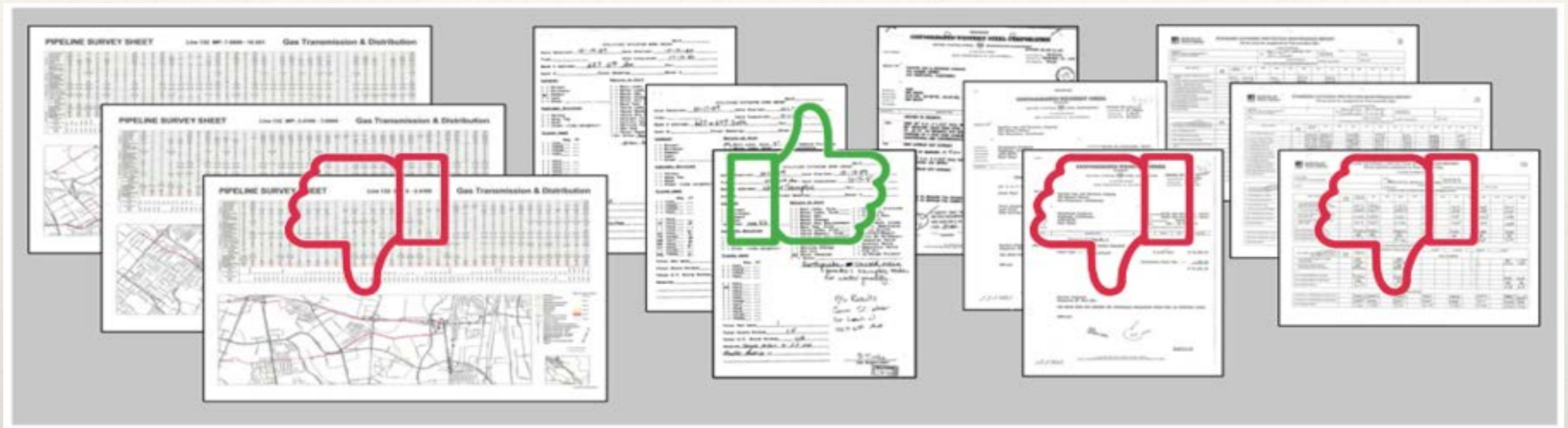
# Visually Group

Complete Processing
Significant Reduction
Unconstrained View

**Assess Groups**

3

- Expert Review Attorneys Evaluate Groups
- Review a Few Documents per Group
- Email Assessment Begins as Documents Attached to Emails are Assessed During this Step



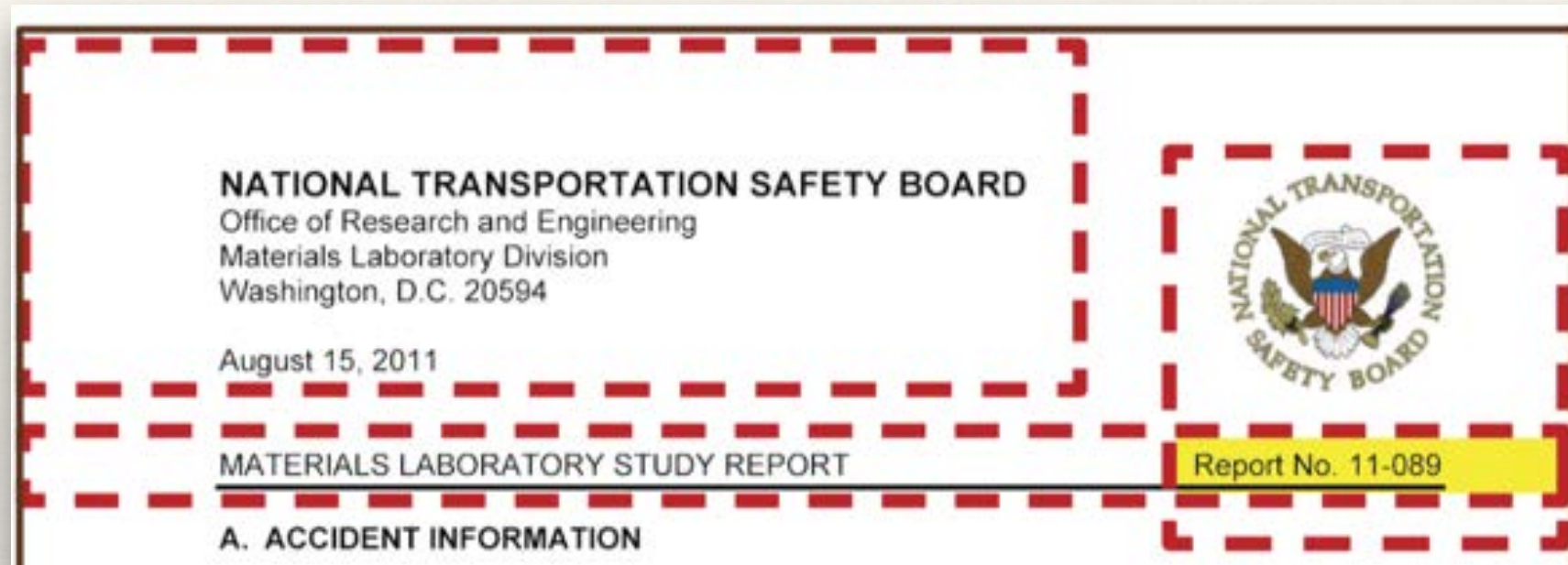*Step 3 assesses the potential relevance of document groups for document categorization.*

# Assess Groups

Expert Decisions
Efficient Review
Appropriate Reduction

**Apply Concepts**

- Isolate the Doc within the Categories (i.e. Potentially Relevant and To Be Determined) that will Require Further Review
- Isolate Documents in the Not Relevant Groups for QC Review

4

*Review attorneys determine potential relevancy of docs within groups requiring further review.*

# Apply Concepts
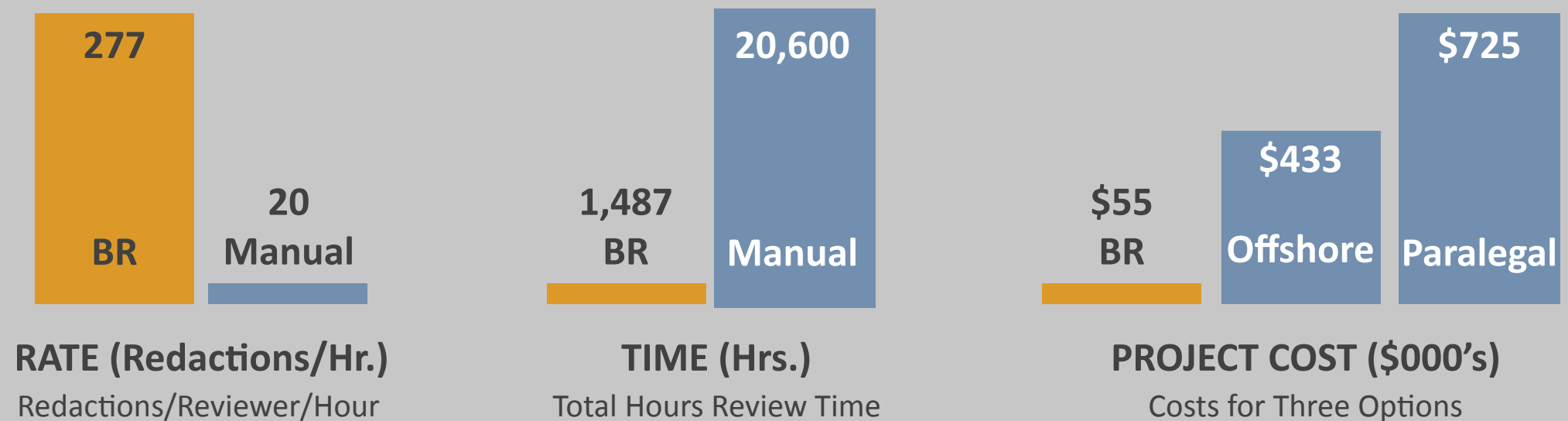
Expert Evaluation
Search To Find
Confident Choices

**Evaluate Sensitive Data**

- Personally Identifiable Information (PII)
- Privilege Documents
- Redactions
- Trade Secrets

5

**Rate, Time and Cost Comparisons for Performing 412,000 Redactions**

Garlock Sealing Technologies, Inc. Asbestos Bankruptcy Redactions

277 BR — 20 Manual

1,487 BR — 20,600 Manual

$55 BR — $433 Offshore — $725 Paralegal

**RATE (Redactions/Hr.)**
Redactions/Reviewer/Hour

**TIME (Hrs.)**
Total Hours Review Time

**PROJECT COST ($000's)**
Costs for Three Options

*Step 5 enables attorneys to identify and consider sensitive data prior to substantive review.*
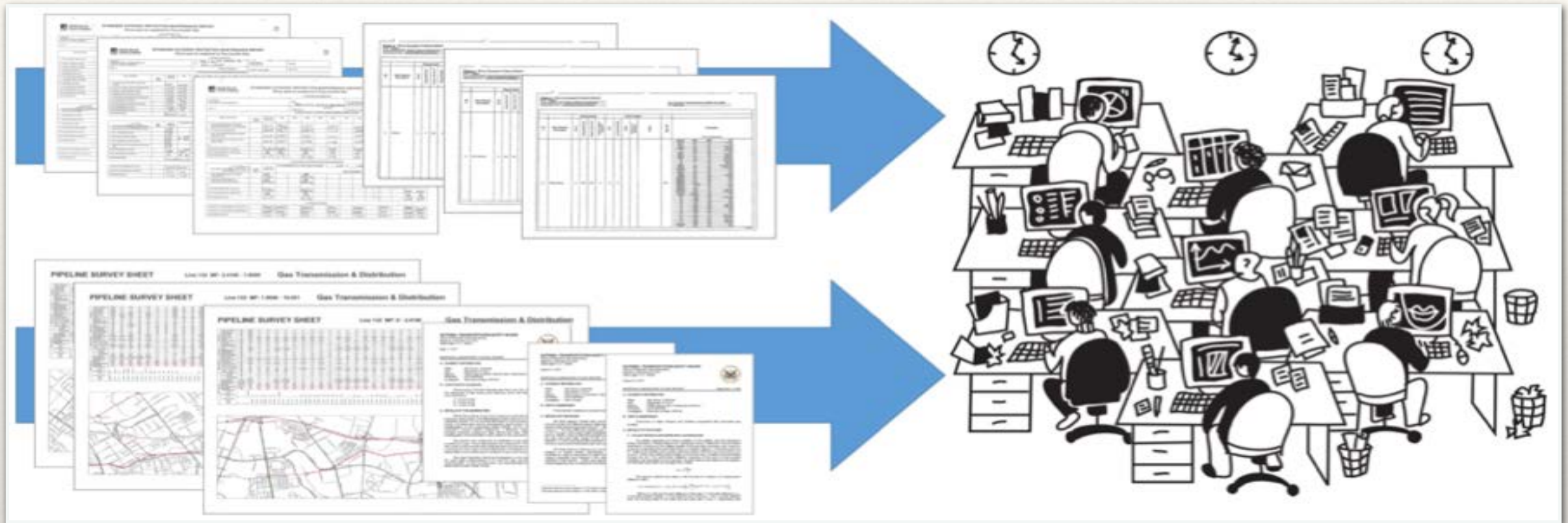
# Evaluate Sensitive Data

Save Time.
Save Money.
Decrease Risk.

**Substantive Review**

- Attorneys Begin Reviewing Potentially Relevant and To Be Determined Documents Isolated During Step 4
- Visually Similar Doc Groups are Maintained and Exported to Review Platform, Enabling Consistency and Speed

6

*Attorneys begin reviewing potentially relevant documents on the review platform of choice.*

# Substantive Review

Expert Attorneys
Consistent Review

**Produce**

- BeyondReview Can Produce In Virtually Any Desired Format
- Documents Can Be Reduplicated to Produce All Original Responsive Documents

**7**



*Step 7 enables attorneys to produce appropriate documents as required.*

# Document Production

Complete Capability
Reduplication Friendly

*BeyondReview accomplishes critical tasks with proven technology, talent and processes.*
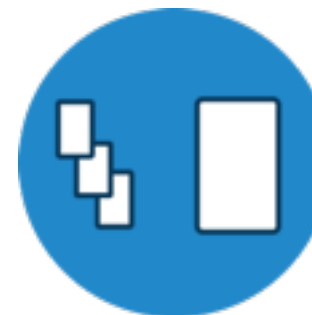
# The Techniques

Collection / Legal Hold
Email
Redaction

## What is a "Data Collector"?

A Data Collector is a USB hardware device that connects to a server on the network to collect potentially relevant data from client workstations, server and other file shares. Data Collectors reduce the number of files preserved and speeds the collection process.
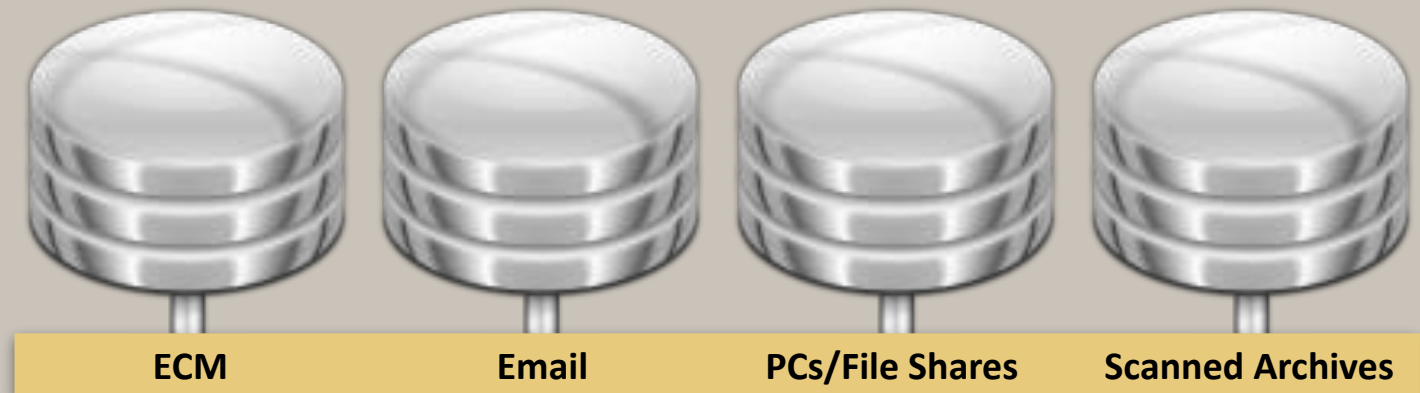


| ECM | Email | PCs/File Shares | Scanned Archives |

| Collection | Deduplication | Encryption | Compression |

*Automatically collect, deduplicate, encrypt and compress potentially relevant data.*

# Collection and Legal Hold

Automated Approach
Policy Integrity
Defensible Disposal

**The "Data Collector" as a Legal Hold Copy**

Data Collectors can be held indefinitely as the legal hold copy. The Data Collector process is impeccably secure – only a BeyondRecognition server can read or extract the data. This constitutes a reasonable, point-in-time legal hold copy allowing the enterprise to continue regular disposition of the in-use files.

**The BeyondReview legal hold approach leverages BeyondRecognition-powered Data Collectors to provide corporations with the following benefits:**

- Does Not Collect Known Files
- Single-Instance File Collection
- Faceted Collection
- Encryption

- Inherited Security Model
- Can Collect from Virtually Any Storage Device
- Auditing and Reporting
- Forensically Sound

*Comply quickly with preservation holds without interrupting business and retention continuity.*

# Collection and Legal Hold

Indefinite Copy
Impeccably Secure
Interruption Free

**BeyondReview uses the following comprehensive and defensible process to handle emails and attachments:**

1) Emails and Attachments Collected
2) Attachments are Grouped for Analysis
3) Emails Deduped based on Hash Value and Message ID and then Consolidated based on EML Format
4) Attachments Processed and Assessed using Visual Classification Technology
5) Concepts Applied to All Emails and Attachments
6) Potentially Relevant Emails and Attachments Exported to Review Tool for Substantive Review and Quality Control
7) Emails and Attachments Produced per Client Needs

*A unique, comprehensive and defensible seven-step approach to email and attachment handling.*

# Email and Attachment Handling

Comprehensive
Defensible
Unique

**Email and Attachments**

**Handling of Email and Attachments: Step** ⬤ 1

*The goal of the collection process is to secure a forensically sound copy of each email and attachment.*

# Email and Attachment Collection

Secure Collection
Forensically Sound
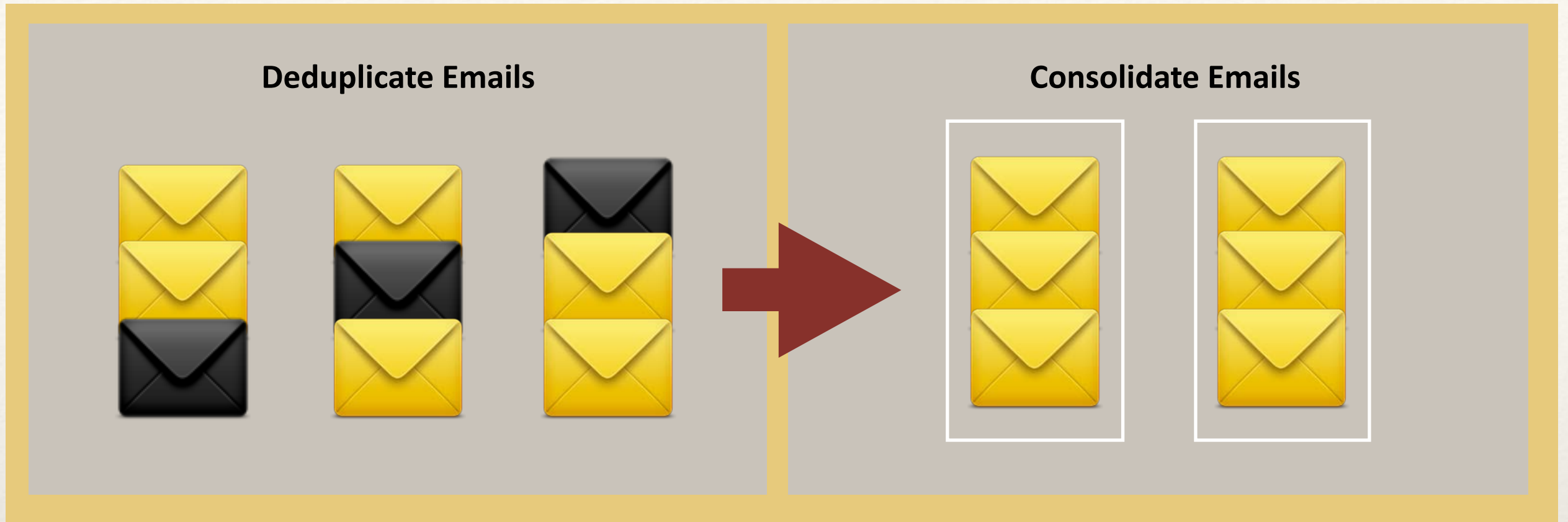
**Emails**

**Attachments**

**Handling of Email and Attachments: Step** 2

*This process prepares attachments for further assessment while maintaining family relationships.*

# Attachments Grouped for Analysis

Attachments Prepared
Relationships Maintained

**Deduplicate Emails**

**Consolidate Emails**

**Handling of Email and Attachments: Step** 3

*Defensibly deduplicate emails based on hash value and message ID and then consolidate by EML format.*

# Deduplication and Consolidation

Hash Value (Dedupe)

Message ID (Dedupe)

EML Format (Consolidate)

**Process Attachments**
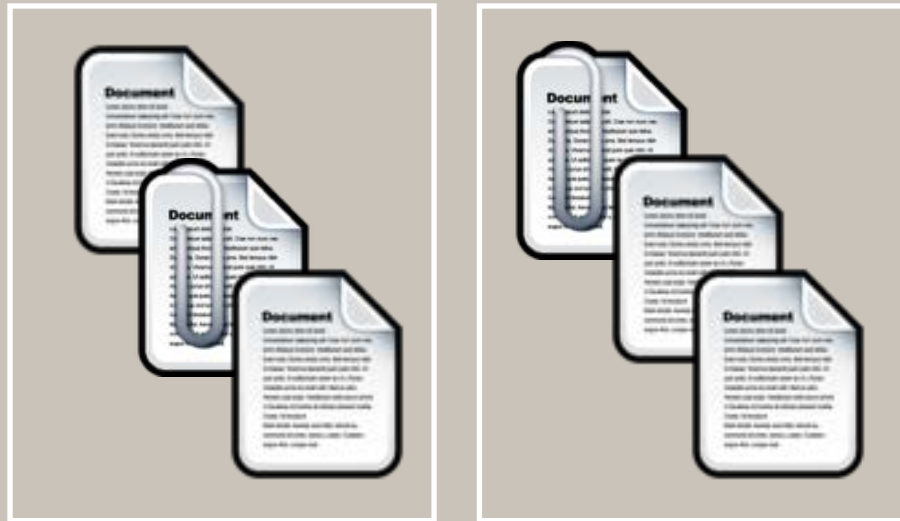
**Assess Attachments**
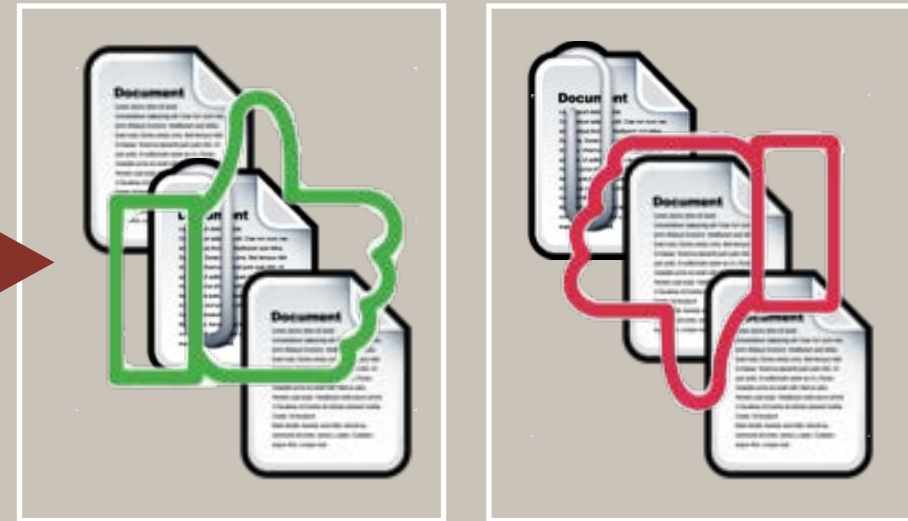
## Handling of Email and Attachments: Step  4

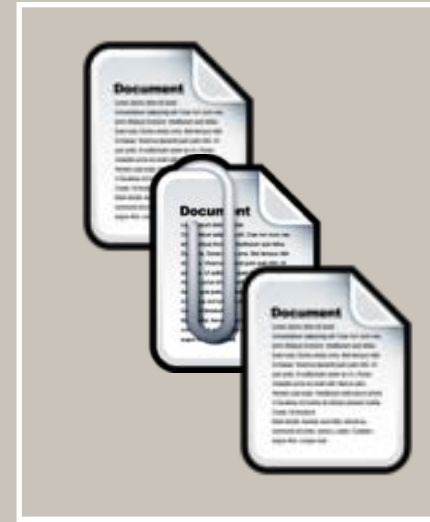*The goal of this step is to process and assess attachments using advanced visual classification technology.*

# Process and Assess Attachments

Visual Classification
Unconstrained by Text
Full Normalization

**Apply Concepts to Emails**

**Apply Concepts to Attachments**

**Handling of Email and Attachments: Step** 5

*The goal of this step is to better understand how the documents conceptually relate to issues of the case.*

# Apply Concepts

Apply to Emails
Apply to Attachments

**Substantive Review**

Relevant

**Quality Control Check**

Not-Relevant

**Handling of Email and Attachments: Step** 6

*Export potentially relevant emails and attachments to review tools for substantive review and QC.*

# Export and Quality Control

Potentially Relevant
Export to Review Tool
Substantive Review
Quality Control Check

**Email and Attachments**
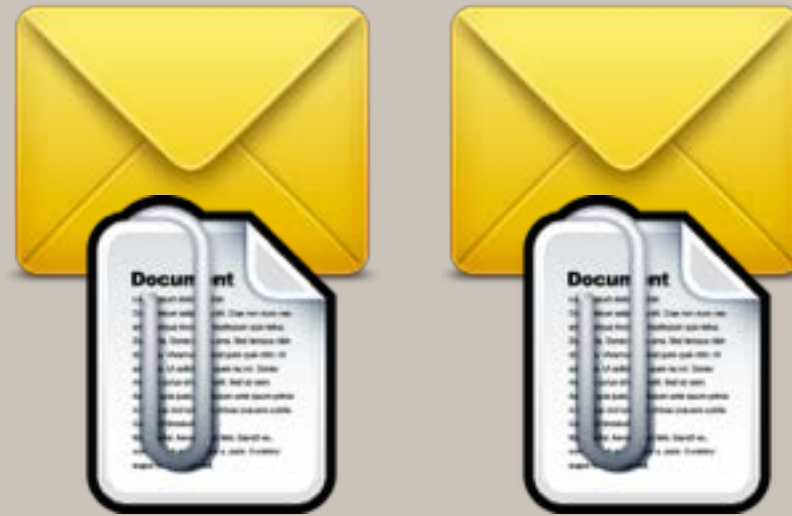


**Handling of Email and Attachments: Step** 7

*The goal of this step is to produce emails and attachment per client needs.*

# Email and Attachment Production

Complete Production Per Client Needs

**What is Beyond Redaction"?**

BeyondReview's redaction capability leverages advanced visual classification technology to evaluate sensitive data and redact based on either word or pattern matching or on redacting certain zones within groupings of visually-similar documents.

**Rate, Time and Cost Comparisons for Performing 412,000 Redactions**
Garlock Sealing Technologies, Inc. Asbestos Bankruptcy Redactions

| 277 BR | 20 Manual | | 1,487 BR | 20,600 Manual | | $55 BR | $433 Offshore | $725 Paralegal |

**RATE (Redactions/Hr.)**
Redactions/Reviewer/Hour

**TIME (Hrs.)**
Total Hours Review Time

**PROJECT COST ($000's)**
Costs for Three Options
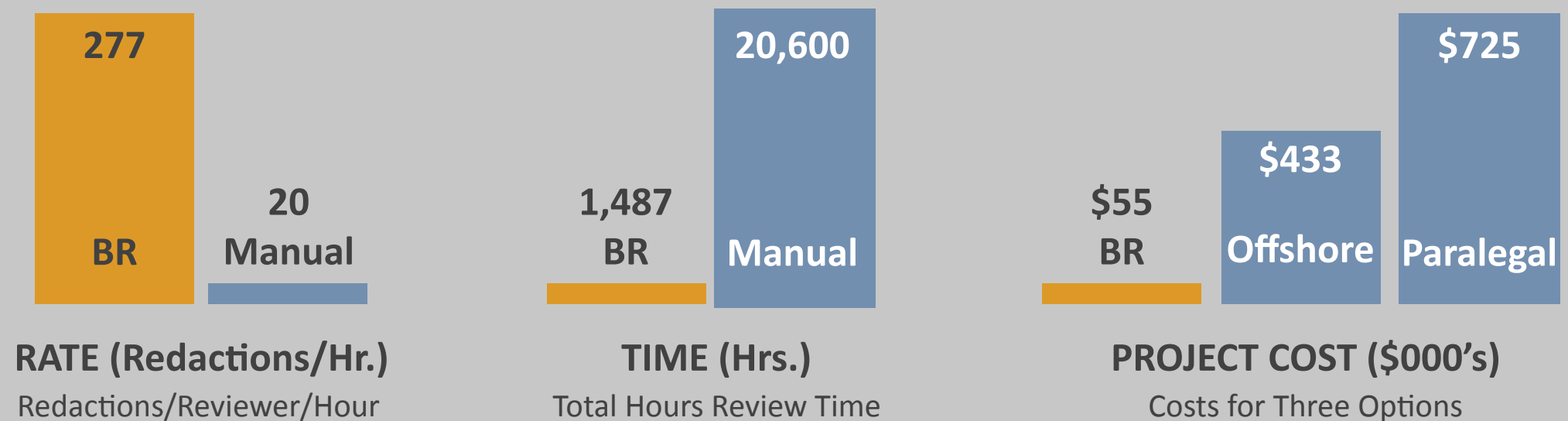
*12 bankruptcy courts redact over 412,000 documents in three months.*

# Redaction

Automated Grouping
Targeted Selection
Defensible Redaction

**The "Differentiator" of BeyondRedaction**

Very few document collections have documents with 100% accurate text. BeyondRedaction's ability to analyze and group documents based on visual appearance provides far greater assurance that all the terms that need to be redacted are in fact redacted.

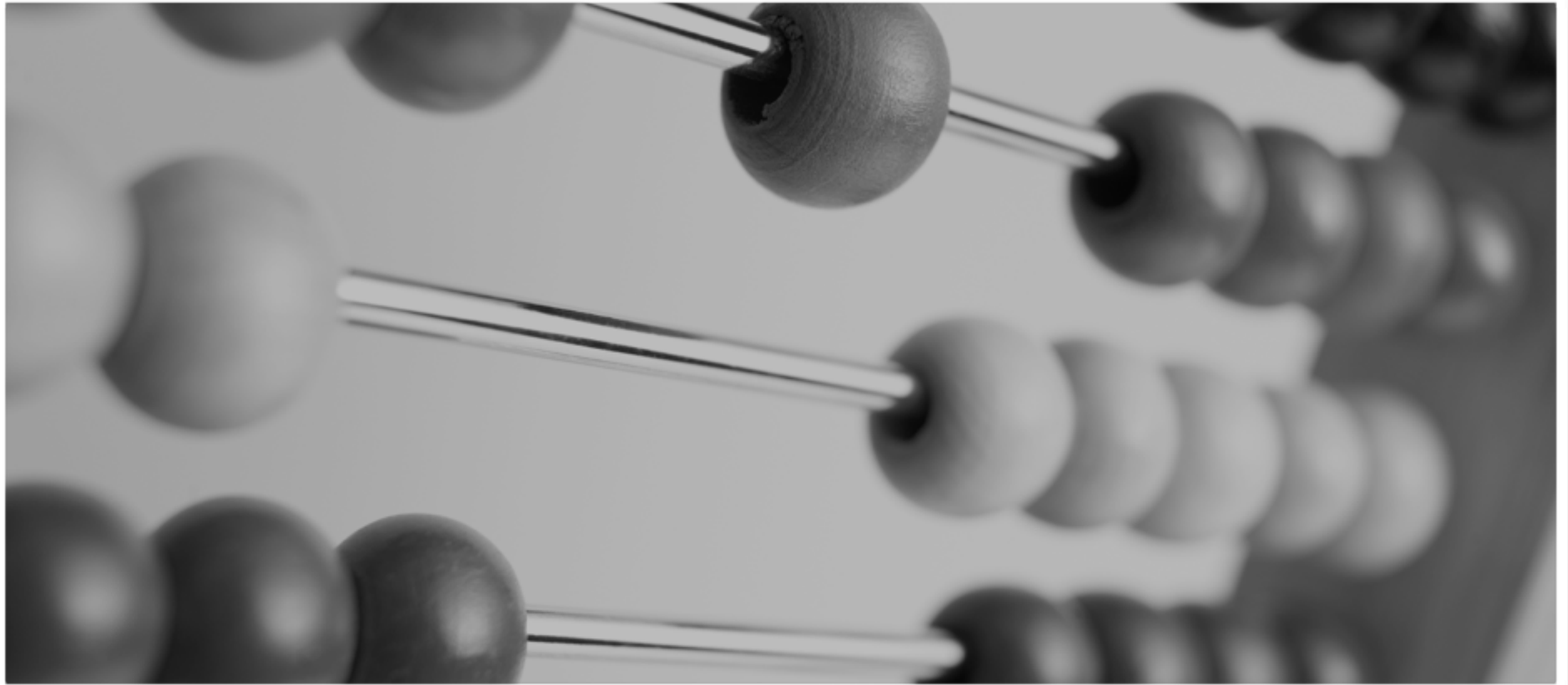Redaction Based on Text Coordinates
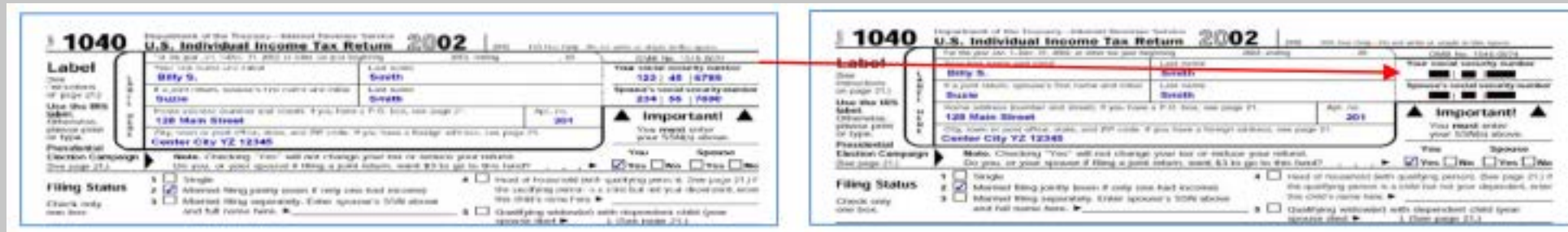


Redaction Based on Page Coordinates
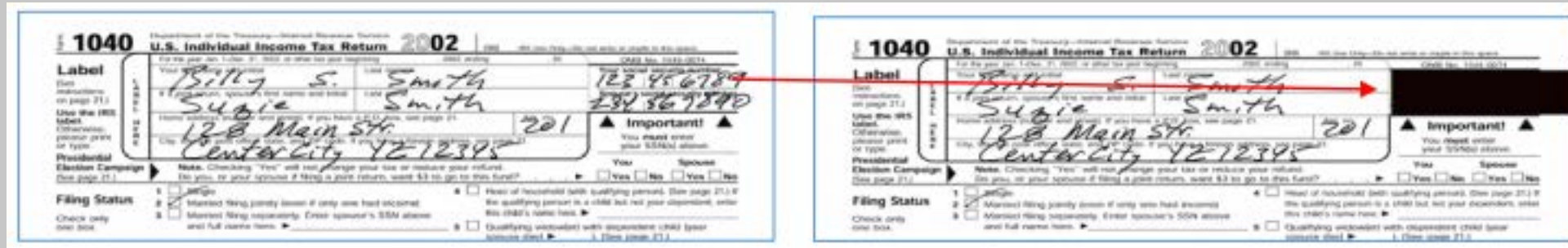


*Quickly and cost effectively redact sensitive data at a rate far exceeding traditional approaches.*

# Redaction

Locate Data
Evaluate Data
Redact Data

*Visually classify both electronic and scanned docs regardless of the amount or quality of text.*

# The Technology

Visual Classification

**Visual classification is the only technology that classifies both electronic and scanned documents regardless of the amount or quality of text associated with them.**

From the user perspective, visual classification is extremely easy to understand and work with. Once documents are collected, visual classification groups documents based on their appearance. This normalizes documents regardless of the types of files holding the content. The Word document that was saved to PDF will be grouped with that PDF and with the TIF that was made from scanning a paper copy of either document.

*Visually classify both electronic and scanned docs regardless of the amount or quality of text.*

# Visual Classification

Text and Non-Text
Scanned and Digital
Visual Similarity
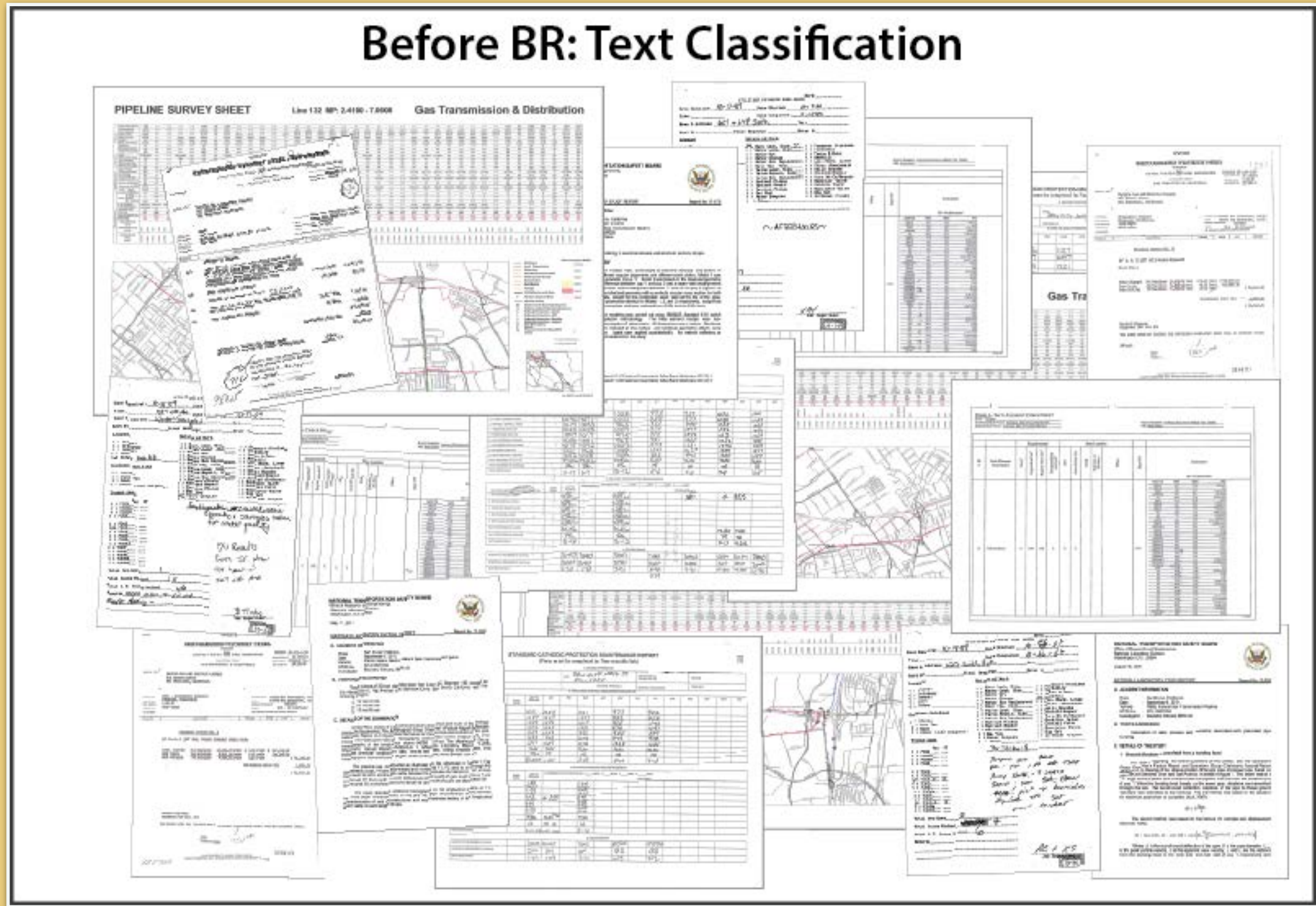
**Before Visual Classification with BeyondRecognition**

With Visual Classification from BeyondRecognition

# Zonal Attribution With Visual Classification

*BeyondReview's Data Center and Discovery Center provide complete data security.*

# Security

Data Center
Discovery Center

**BeyondReview's data center operations ensure the highest levels of enterprise facility (physical), applications, network and storage security. Certification and compliance achievements for data center operations include:**

1) ISO-20000-1
2) ISO-27001
3) SSAE-16 SOC 1
4) SOC 2 (Service Organization Control)
5) HIPAA (Health Insurance Portability and Accountability Act)
6) U.S. -EU Safe Harbor
7) FFIEC (Federal Financial Institutions Examination Council)

*BeyondReview works with one of the world's leading technology companies to deliver secure services.*

# Data Center Security

Secure
Certified
Compliant

**The BeyondReview Discovery center provides a scalable, secure and state-of-the-art facility for the conduct of legal discovery and review. Located in Houston, Texas and easily accessible from all locations within the Houston Metropolitan area, Discovery Center capabilities and amenities include:**



1) A 22,000 sq.ft. state-of-the-art review center.
2) Scalable and configurable workspaces equipped with dual monitor review stations and the latest technology platforms operating on secure networks.
3) Multiple project management, client and counsel offices and conference rooms.
4) 24/7 carded security and on-site security personnel.

*The BeyondReview Discovery Center provides security and support for quality discovery and review.*

# Discovery Center Overview

Scalable
Secure
Accessible

## Demo Tasks

- Automated Visual Grouping
- Group Assessment
- Concept Application
- Sensitive Data Evaluation
- Substantive Review
- Production


DUE DILIGENCE

*BeyondReview uses advanced **reduction** and **review** technology from BeyondRecognition.*

# Demonstration

Powerful Reduction
Precision Review
Extraordinary Speed
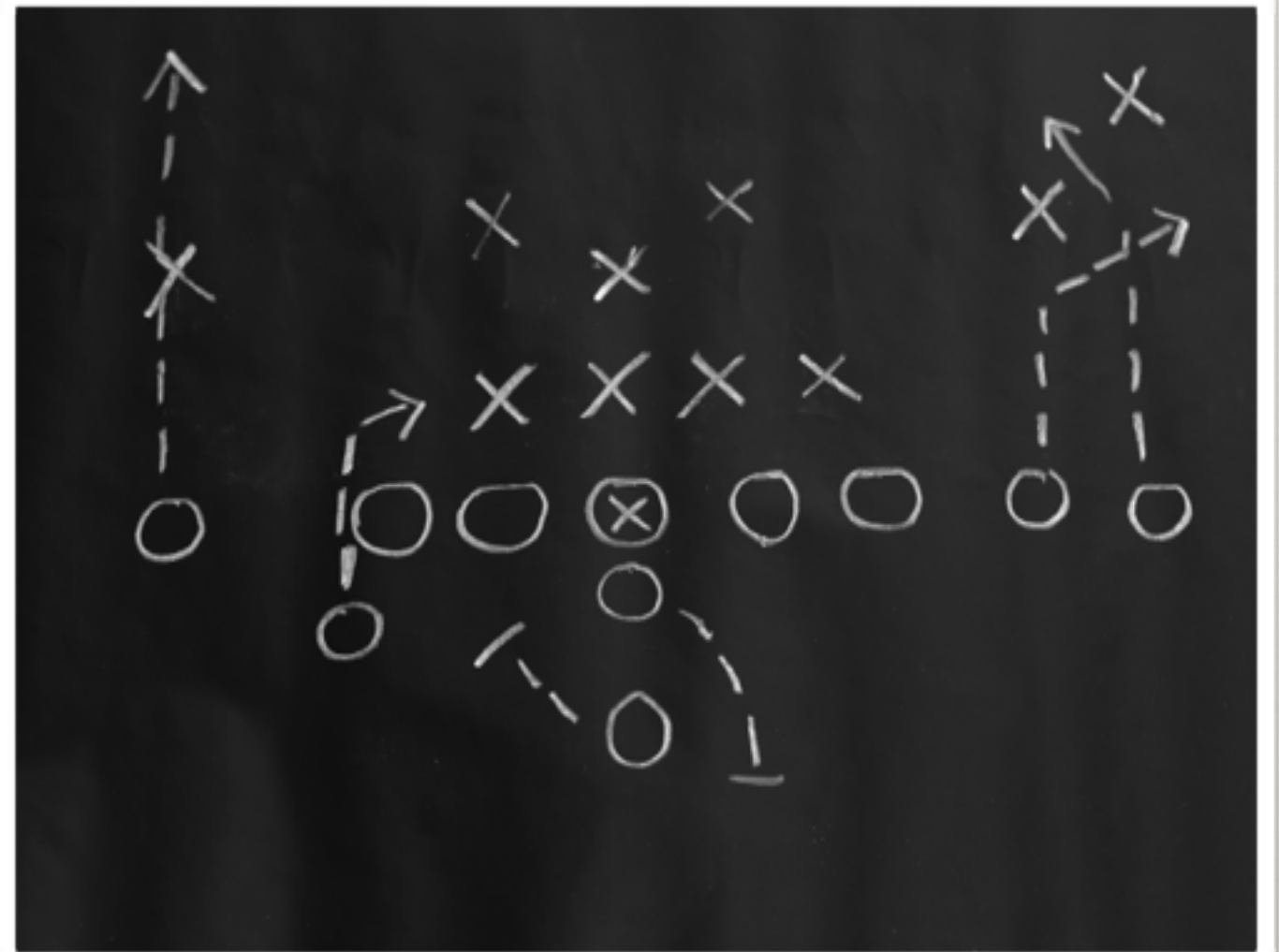
## Information Package

### *Background*
- Company Overview
- Approach to Data Reduction and Review
- Redaction Special Master Study

### *Implementation*
- Non-Disclosure Agreement
- Workflows (Concept/Project)
- Statements of Work (Concept/Project)
- Project Management and Project Functions

### *Security*
- Data Center Security
- Discovery Center Overview



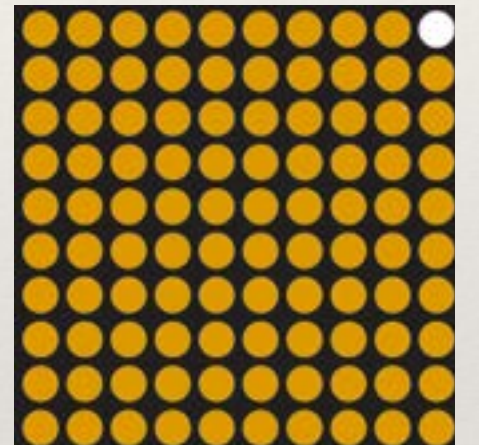*BeyondReview provides a documented and systematic approach to reduction and review.*

# Playbook

Proven Background
Documented Process
Strong Security

# For More Information Contact:

David.Lugbauer@BeyondReview.US

**BeyondReview.US**

**Powerful Reduction. Precision Review. Extraordinary Speed.**