



2018 ICN MERGER WORKSHOP

BOS 4: TECHNOLOGY AND DATA REVIEW

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Overview

- Role of Documentary Evidence in Merger Investigations
- Legal Framework
- Challenges in Obtaining & Reviewing Documents
- Ways to Address Challenges
- Background: Predictive Coding

Legal Framework

- Hart-Scott-Rodino (HSR) Act & HSR Rules
 - HSR Form, Items 4(c) and 4(d)
 - Voluntary Requests
 - Requests for Additional Information and Documentary Material (Second Requests)
 - Typically, both acquiror and target required to produce material
- Antitrust Civil Process Act
 - Civil Investigative Demands (CIDs) for Documentary Material
 - Issued where persons may have documents “relevant to a civil antitrust investigation” (*e.g.*, third parties in merger investigations)

Importance of Documentary Evidence

- Transaction-related documents
 - Examples: board presentations discussing deal; synergy analyses
 - Reflect parties' views of transaction rationale and competitive effects
- Ordinary course of business documents
 - Business records (*e.g.*, win/loss reports, customer lists, pricing or sales records, bid documents, contracts)
 - Reflect competitive position of parties and extent of competition
 - Analytical documents (*e.g.*, market studies, forecasts, surveys)
 - Planning documents (*e.g.*, business plans, budgets, strategies)
 - Documents related to prior transactions
 - Reflect parties' views on markets, competition, future expectations

Challenges

- Ensure production of responsive documents
 - Minimize production of non-responsive documents
 - Ensure identification of relevant/important documents during review by Division staff
- Huge and ever increasing amounts of documents produced in merger investigations amplify challenges

Recent Document Production Volumes

Year	Records	Images
2015	~34 million	~130 million
2016	~53 million	~134 million
2017	~87 million	~224 million

How to Cope: Focus Requests

- Tailor model Second Request to specific case
 - Several specifications in model are optional
- Limit time frame for document requests
 - Generally 2 years under model
- Limit scope of specific requests
 - Example: “documents sufficient to show” instead of “all documents”
- Limit number of custodians
 - New policy: Generally no more than 20 custodians per party

How to Cope: Cooperation with Parties

- Frequent communications regarding document collection, review, and production
 - Detailed specifications in Second Requests/CIDs
 - Questionnaire on Electronically Stored Information
 - Calls to discuss potential issues and modifications
- Written confirmation/agreements on major steps
 - Written confirmation of Second Request/CID modifications
 - Timing agreement (*e.g.*, custodians, priorities, schedule)
 - Agreement on review process (search terms, predictive coding)
 - Deduplication agreement

How to Cope: Improve Review Process

- Given size of productions, page-by-page review of full productions not realistic
 - Experiment with using temporary contract attorneys to increase review volume, but difficult to fit into Division structure
- Instead, focused review to identify important documents related to critical aspects of case
 - Requires careful planning: What are critical issues? Who are the important custodians? What is the relevant date range?
- Use of new review tools and techniques
 - Filtering
 - Search/Analytical Tools

Lessons Learned

- Specialized staff needed to handle technical aspects
- Be realistic about resources/time for investigation
- Coordination with parties crucial
- Utilize review platforms to deal with large productions
- Approach outsourcing with great caution



Questions?

Backup:

Technology-assisted Review (Predictive Coding)

1. What is predictive coding?
2. How does it compare to traditional document review?
3. How to negotiate a predictive coding protocol?

Predictive Coding

1. What is predictive coding?

Predictive Coding is:

The use of **machine learning** to:

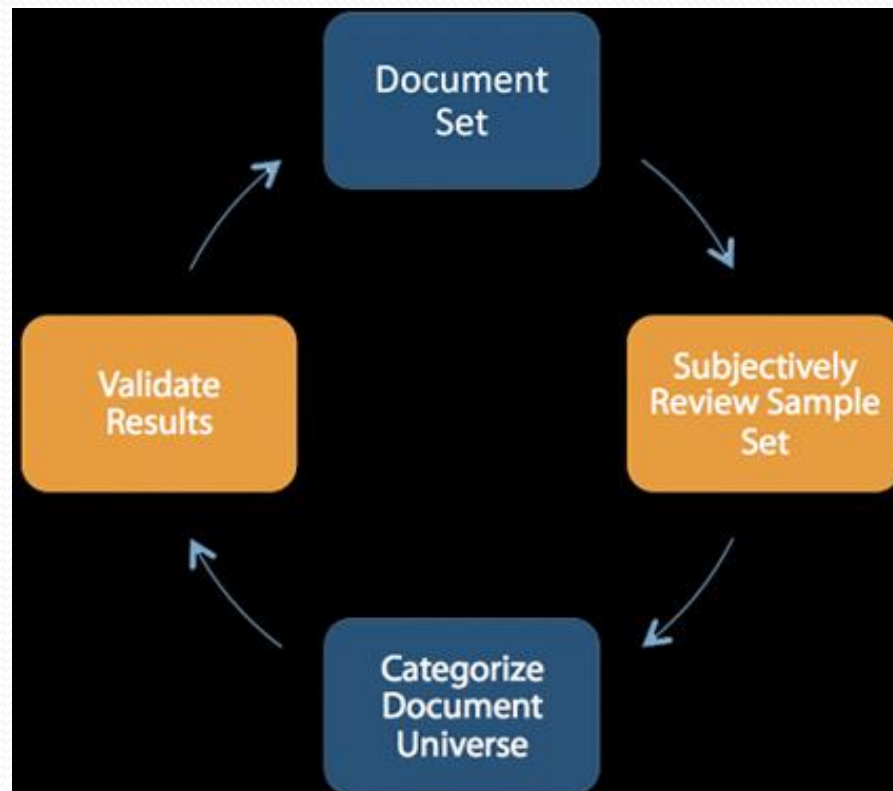
- categorize a collection of documents
- based on lawyer's review of a **subset** of the collection
- via an **iterative** process
- **validated** through defensible statistical **sampling** techniques

Predictive Coding is Really Like:



- A binary choice:
 - Responsive
 - Not Responsive
- Categorization made by subject matter expert

Predictive Coding is a **Process**:



Five Key Steps:

- Subject matter experts code documents in a representative sample (training set) as responsive or non-responsive
- Software “learns from” categorized documents to apply the same categorization to all documents in the collection
- Software refines its categorization based on additional samples categorized by the subject matter experts
- The accuracy of the categorization is measured statistically to assess its effectiveness
- After entire collection is categorized, experts QC additional samples to ensure the validity of the overall classification

Predictive Coding

1. What is predictive coding?
- 2. How does it compare to traditional document review?**

Traditional Document Review

- Manual (Linear) review of documents by a team
- Batches of documents assigned for review based on combination of:
 - Keyword searches
 - Custodian
 - Dates





- Even the best organized manual (linear) document review finds less than 50% of responsive documents
 - Often, far less
- Why are the results so poor?
 - Tired
 - Inconsistent
 - No effective means to QC initial review

Advantages of Predictive Coding

- Allows to review large document collections more quickly with a smaller team
 - Document collections are getting larger
 - Available resources are not
- More relevant; fewer irrelevant documents
- Because it's more accurate, potentially fewer disputes

Predictive Coding

1. What is predictive coding?
2. How does it compare to traditional document review?
- 3. How to negotiate a predictive coding protocol?**

Negotiation should Address:

- Is this an appropriate case for predictive coding?
- Collection & Workflow
- Privilege
- Validation
- Written Agreement + Communication

Is this an appropriate case?

- How many documents will be produced?
 - ~100,000 documents minimum
- For especially large cases, Division may propose using predictive coding
- Trying to “insert” predictive coding into an existing discovery protocol can lead to errors, disagreements



Where predictive coding fails

- Numbers
- Graphics/photos
- Foreign languages
- Audio Files
- OCR



Predictive coding also fails



29 March 2007 Trader A asked what Japanese yen Libor submission UBS was going to set. Manager A: "Too early to say yet ... prob[ably] .69 would be our unbiased contribution ... as i said before - i dun mind helping on your fixings, but i'm not setting libor 7bp away from the truth i'll get ubs banned if i do that, no interest in that".

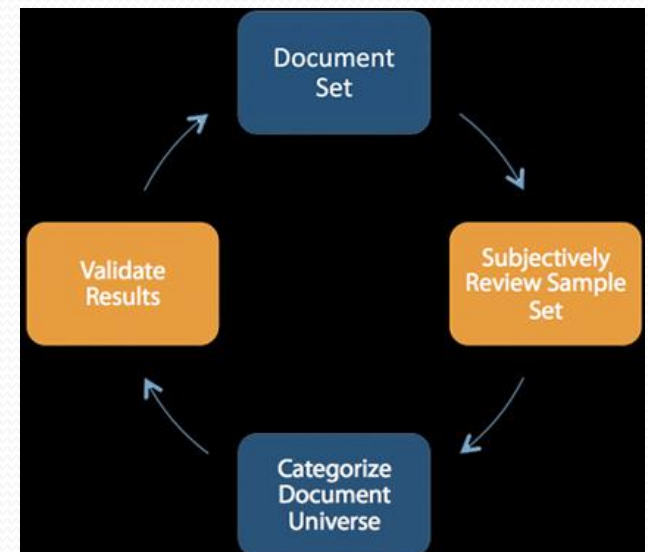
14 July 2009, Trader A requested of a broker in an electronic chat a higher Libor rate: "SUPERMAN ... BE A HERO TODAY." Broker F said: "ill try mate ... as always."

15 July 2009 in an electric chat Trader A requested: "3m and 1m unch [i.e. unchanged]". Trader A also inserted an extract of another electronic chat with Broker A of Broker Firm A in which Broker A said: "Putting the captain caos [sic] outfit on as we speak".

21 July 2009, Trader A contacted Broker E of Broker Firm B who advised him to make small changes to his Libor submissions: "If you drop your 6M dramatically on the 11th mate, it will look v fishy, especially if [Panel Bank 5] and [Panel Bank 2] go with you. I'd be v careful how you play it, there might be cause for a drop as you cross into a new month but a couple of weeks in might get people questioning you." Trader A replied: "Don't worry will stagger the drops ..."

Collection & Workflow

- To be addressed upfront
- Document collection:
 - Are search terms being used? – Consider alternatives (custodians, date range, filtering)
 - Self-collection issues?
- Workflow:
 - Depends on platform
 - Who is doing the coding? – Subject matter expert required
 - Reporting metrics



Privilege Review: Continuing Conundrum

- Parties usually demand page by page privilege review
 - Significantly limits cost/time savings of predictive coding
- How to address in the investigative context?
- Guard against “stealth” linear review

Validate the Results

- Most controversial issue
- Different approaches:
 - Sharing “training” or “seed” set
 - Joint training of software
 - Review sample of non-responsive
 - Require disclosure of metrics
 - “Trust us”



Written Agreement + Communication

- Predictive Coding Protocol agreed on in advance
 - Drafted by Division staff
- Protocol emphasizes importance of communication between lawyers, technical staff, and vendor
 - Technology is new – expect the unexpected
 - Division affirmatively asks whether any strange results
 - Easier to address problems before production is made