The Challenge and Promise of Predictive Coding for Privilege

Manfred Gabriel, Chris Paskach, David Sharpe
Overview

Impact
- Why does finding privilege matter?

Privilege
- Why is it hard to find?

Test
- Encouraging results
The Three Goals of eDiscovery document review

1. Disposition of Documents
2. Protection of Information
3. Construction of Knowledge
Predictive Coding and the 3 Goals

- **Disposition**
  - Optimize for efficiency
  - Manageable recall

- **Protection**
  - Highest recall required
  - Highest stakes

- **Construction**
  - Lowest prevalence
  - Richest Context
Full Review of the Producible Population

<table>
<thead>
<tr>
<th>Most Common Workflows</th>
<th>All Docs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Responsive (Single Classifier)</td>
<td>Workstream 2: Attorney Review</td>
</tr>
<tr>
<td>Predicted Non-Responsive (Single Classifier)</td>
<td>Workstream 1: Cull</td>
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What if we can detect privilege reliably?

<table>
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<tr>
<th>Possible Workflows for successful prediction on Privilege</th>
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<tr>
<td>Predicted Responsive (Classifier A)</td>
<td>Workstream 3: Attorney Review</td>
<td>Workstream 2: Sample</td>
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What if we can detect privilege reliably?

Possible Workflows for successful prediction on Privilege

- Predicted Privileged (Classifier B)
- Predicted Not Privileged (Classifier B)

- Predicted Responsive (Classifier A)

- Predicted Non-Responsive (Classifier A)

- Review
- Sample $\$$

- Cull
Footnote about family members

- predicted to be privileged (plus family members)
- predicted to be responsive (plus family members)
- all documents
Privileged information is rare and precious

• Stakes are high: Disclosure may lead to significant disadvantage
• Privileged documents are rare
  • 2.7% Prevalence (over 51 matters)
  • Anecdotally:
    • 0.5% Prevalence
    • Improves to 5% with Boolean searches
Knowing it when you see it

• “Privileged and confidential” no indicator
• Legal advice (or request for it) hard to identify
• Sender and Recipient matter, but how is complex
  • Disclosure to third parties varies by privilege type
  • Non-attorneys within the client organization
  • Role of in-house lawyers
  • Joint-Defense agreements
• Facts not apparent in the text of the document may affect privilege.
Substance of Privilege implies prediction strategy

1. Run predictions for all documents privileged at creation

2. Review for Waiver
Porfiau / PFA workflow

Documents deemed Privileged by the Review Team

Contracts, Drafts of

PFA

Text Cleansing (scripts)
FROM: barshk@gtlaw.com
RECEIVED: Mon, 29 Oct 2001 09:00:40
TO: kay.mann@enron.com, ben.jacoby@enron.com, steven.krimsky@enron.com, dave.kellermeyer@enron.com
CC: reetzr@gtlaw.com
BCC: reetzr@gtlaw.com
SUBJECT: DEP's Notice of Change of Position in Pompano Beach Proceeding

UPDATE--DEP recently issued a Notice of Change of Agency Position (Notice of Change) in the Pompano Beach proceeding in which DEP advised all of the parties and the administrative law judge that it was intending to modify the previously issued intent to issue relative to six issues.

The primary two conditions that DEP is modifying its position concern the NOx emission limits during distillate fuel use and a reduction in the number of hours that the facility can operate on distillate fuel use. Specifically on the first issue, DEP intends to limit the facility to 36 ppmvd for NOx rather than the previously issued limitation of 42 ppmvd. On the second issue, DEP proposes to reduce the number of hours of diesel fuel use from 1000 hours to 500 hours per year after 2004.

The other issues raised in the Notice of Change include: startup and shutdown conditions; emergency equipment; other minor sources; and the VOC emission limit. I have discussed the Notice of Change with Dave Kellermeyer and he, in turn, is going to discuss the Notice in detail with Scott Osbourn. We have some questions on certain of the issues raised in the Notice of Change, which we will need to clarify with DEP.

I will circulate the Notice of Change to you in the next few minutes if you have not already seen it. In addition, we intend to respond to the Notice with a pleading that sets forth: i) our intention to object and present evidence in opposition to certain of the permit changes proposed by DEP, and ii) our desire for expedited discovery with respect to the textual permit language now proposed by DEP. Kay, we will be sending you that draft pleading today for your review and comment. We would like to file the pleading by tomorrow if possible.

Debbie and Steve, if you have any questions on this matter prior to your meeting tomorrow, please contact me. I will be here in the office all day.

Thanks--Kerri
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EXHIBIT -- DEP’s Notice of Change of Position in Pompano Beach Proceeding

204 0.794 The primary two conditions that DEP is modifying its position concerns the NOx emission limits during distillate fuel
205 0.774 change include: startup and shutdown conditions; emergency equipment; other minor sources; and the VOC emission limit.
206 0.754 I have discussed the Notice of Change with Dave Kellermeyer and he, in turn, is going to discuss the Notice in detail with Scott Osbourn. We have some questions on certain of the issues raised in the Notice of Change, which we will need to clarify with DEP.
207 0.744 I will circulate the Notice of Change to you in the next few minutes if you have not already seen it. In addition, we intend to respond to the Notice with a pleading that sets forth: i) our intention to object and present evidence in opposition to certain of the permit changes proposed by DEP, and ii) our desire for expedited discovery with respect to the textual permit language now proposed by DEP. Kay, we will be sending you that draft pleading today for your review and comment. We would like to file the pleading tomorrow if possible.
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## Results (two closed Canadian cases)

### Lawyer / Manual Review

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<td>369</td>
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- **Recall**: 48%
- **Precision**: 39%
- **F1**: 43%

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- **Recall**: 90%
- **Precision**: 42%
- **F1**: 57%

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- **Recall**: 58%
- **Precision**: 39%
- **F1**: 47%

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- **Recall**: 90%
- **Precision**: 38%
- **F1**: 53%
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