Breakout Sessions – Series 5

IMPROVING THE CRYSTAL BALL

BETTER DECISIONS THROUGH BIG DATA

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1. Goals

- Adding objectivity to decision-making
- Quantification of risk
- Statistical approach to evaluating likely outcomes
- Improved communication/credibility with stakeholders
- Identifying untapped resources for making more persuasive legal and factual arguments

2. Key concepts:

- Big data: Pools of information available (once organized) to help you make better decisions.
  - *Example:* A database providing detailed information about the resolution of every employment discrimination lawsuit against a Fortune 500 company over the past four years.
- Analytics: Strategies for analyzing big data in the hope of identifying trends to explain why things happen, evaluate consequences, or predict the future.
  - *Example:* Analyzing data about every employment discrimination lawsuit against a Fortune 500 company over the last four years to determine if there is an average expected settlement value for such claims when dealing with a particular plaintiff-side law firm.
- Machine learning: Using algorithms (computerized rules) to analyze data, learn patterns, and glean insights or improve on human capabilities.
  - *Example:* Computer-assisted document review to identify potentially privileged information during discovery in an employment discrimination lawsuit.
3. Strategies

- Descriptive analytics – What occurred?
- Diagnostic analytics – Why did it occur?
- Predictive analytics – What will occur?
- Prescriptive analytics – How do we get there?

4. Categories

- Judicial analytics
  - *Examples:* What is the judge's track record with respect to a particular issue or certain type of case? What is the judge’s propensity to rule in our favor on a particular issue? How long does it typically take the judge to rule on a particular type of motion? What is the judge’s favorite case to cite when addressing a particular legal issue?

- Law and motion analytics
  - *Examples:* What case is cited most often in briefs that succeed on a particular legal issue? What kinds of evidence does our judge find most/least persuasive? Are there common factual characteristics in cases where defendants win/lose on a particular legal issue?

- Evaluating your legal counsel and/or opposing counsel
  - *Examples:* How long does it typically take my lawyer to resolve this type of case? How much discovery does plaintiff’s attorney typically propound? How often does this lawyer actually go to trial? Does this lawyer have a “going rate” for settling cases?

- Jurisdictional analytics
  - *Examples:* Is the law going to be applied differently based on a particular judicial panel? Statistically, are we more likely to prevail in one particular
jurisdiction versus another? Who are we likely to end up before if we disqualify a particular judge?

- Predictive analytics
  - *Examples:* Monte Carlo analysis, advanced decision tree analysis, regression analysis, etc.

- Decisional analytics
  - *Examples:* What is the statistical likelihood that, if our case goes to trial, the exposure will exceed $825k? Based on past behavior, what is the probability our judge will rule in our favor on a motion for summary judgment in a class action lawsuit?

- Exposure analytics
  - *Examples:* Extrapolating from a survey of a sample of employees, what is our likely liability if we were to be hit with a pay equity lawsuit? Based on HRIS data, what is the likely exposure if we are hit in a meal period class action lawsuit?

- Efficiency analytics
  - *Examples:* Using AI to draft discovery and review documents for production. How long does it typically take to get a case to a hearing on summary judgment? How much does it cost to prepare for mediation?

5. *Uses during litigation*

- Selecting counsel
- Setting internal expectations of key stakeholders
- Setting goals
- Predicting likelihood of particular events or outcomes
- Determining which arguments are/are not most likely to resonate with a particular judge
• Refining exposure calculations
• Automating/streamlining tasks
• Anticipating plaintiff’s strategies
• Predicting plaintiff’s “bottom line” negotiation position
• Predicting mediator’s case evaluation and strategy
• Picking the jury
• Anticipating results of appeal
• Many others

6. Non-litigation uses
• Compliance initiatives
• Litigation avoidance initiatives
• Insight into personnel decision-making
• Pay equity analysis
• Many others

7. Primary vendors
• Lex Machina
• Ravel Law
• Bloomberg Litigation Analytics
• Premonition Analytics
• Many others

8. ESI & predictive coding
• Automated document review and production
• Sentiment analysis
• “Witness finder” programs
Improving the Crystal Ball: Better Decisions Through Big Data

Presenters
Andrew J. Cook, Ph.D. (Torrance) and Evan R. Moses (Los Angeles)

Moderator
Benjamin R. Holland (Charlotte)

Will better analytics give you an edge?
Traditional approach

- “More likely than not ...”
- “A strong defense ...”
- “Reasonable likelihood ...”
- “Between 5 to 30 million ...”

How about this instead?
Analytics – Strategic Value

- **Descriptive analytics**: What occurred?
- **Diagnostic analytics**: Why did it occur?
- **Predictive analytics**: What will occur?
- **Prescriptive analytics**: How do we get there?

Rear-view mirror | Windshield | GPS

Selection of counsel / Setting expectations
Descriptive → Diagnostic → Predictive
Descriptive → Diagnostic → Predictive

Machine Learning and AI

Step 1
Drag and Drop the Complaint
Diagnostic ➔ Predictive ➔ Prescriptive

<table>
<thead>
<tr>
<th></th>
<th>Baseline Exposure (Low)</th>
<th>Baseline Exposure (High)</th>
<th>D Win on Min. Dismiss (Low)</th>
<th>D Win on Min. Dismiss (High)</th>
<th>D Win on Meal Waiver (Low)</th>
<th>D Win on Meal Waiver (High)</th>
<th>D Win on Cert (Low)</th>
<th>D Win on Cert (High)</th>
<th>D Win on MtU (Low)</th>
<th>D Win on MtU (High)</th>
<th>D Win on Trial (Low)</th>
<th>D Win on Trial (High)</th>
<th>PAGA Reduction (Low)</th>
<th>PAGA Reduction (High)</th>
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<td>32%</td>
<td>52%</td>
<td>45%</td>
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<td>32%</td>
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<td>33%</td>
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<td>48%</td>
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<tr>
<td>OTC - 2.0 Wages</td>
<td>$25,000.00</td>
<td>$31,000.00</td>
<td>16%</td>
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<td>N/A</td>
<td>N/A</td>
<td>33%</td>
<td>52%</td>
<td>48%</td>
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<td>Split Shift</td>
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<td>52%</td>
<td>35%</td>
<td>75%</td>
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<td>N/A</td>
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<td>52%</td>
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<td>75%</td>
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<tr>
<td>Wage Statements (126)</td>
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<tr>
<td>Unintimely Finally Pay 2018</td>
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<td>75%</td>
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<td>50%</td>
<td>35%</td>
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<tr>
<td>Uinitimely Pay Dur (employment 2014)</td>
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<td>$1,324,000.00</td>
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<td>N/A</td>
<td>23%</td>
<td>50%</td>
<td>35%</td>
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<tr>
<td>Recordkeeping Violations</td>
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<td>50%</td>
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<td>60%</td>
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</tbody>
</table>

Diagnostic ➔ Predictive ➔ Prescriptive
Diagnostic → Predictive → Prescriptive

40% chance below $500k

Below 0.18% chance between $10M-11M
Improving the Discovery Process

- Drafting discovery
- Responding to discovery
- Document review and production
- Legal holds
- Impact on sampling

Improved Legal Results

<table>
<thead>
<tr>
<th>Total number class certification cases Judge resolved re meal period claims</th>
<th>48</th>
<th>N/A</th>
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<tbody>
<tr>
<td>Class certification denied on meal period claim</td>
<td>17</td>
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<tr>
<td>Reconsideration granted on class certification</td>
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<td>2%</td>
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</table>

Top cases cited:
- *Brinker Restaurant Corp. v. Super. Ct., 53 Cal. 4th 1004*
- *Ashcroft v. Iqbal, 566 U.S. 662*  
  | 47 | 98% |
- *Belaire-West Landscape v. Sup. Ct., 149 Cal.App. 4th 554*  
  | 23 | 48% |
  | 44 | 92% |
  | 28 | 58% |
Improved Case Valuation

Other Employment Uses for Analytics

=$
Other Employment Uses for Analytics

“Excuse me, Sir, but me and the rest of the work force think this dress code probably violates OSHA rules.”

Predictive Modeling in HR Decisions

“Maybe we are micro-managing a bit too much.”
Predictive Modeling in HR Decisions
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