Artificial intelligence in judicial decisionmaking

AI: challenges and opportunities for courts

Dory Reiling PhD. Mag Iur.
My topics

✓ AI in court practice
✓ “Predictive” “justice”
✓ Ethical principles for the use of AI
✓ Challenges for courts

Courts have different processes

<table>
<thead>
<tr>
<th>Party relation</th>
<th>Outcome unpredictable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1 title</td>
<td>2 notarional</td>
</tr>
<tr>
<td>4 judgment</td>
<td>3 settlement</td>
</tr>
</tbody>
</table>

Courts have different processes: outcome unpredictable?

<table>
<thead>
<tr>
<th></th>
<th>title</th>
<th>notarial</th>
<th>settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>judgment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“Predictive” “Justice”

- Unpredictable court case outcomes are a risk
- Principle: past judgments are correct
- Secure data
- Correct data
- Trained algorithm
Predicting ECHR outcomes: 79% accuracy

- Complexity reduction done in process and the decisions
- **Claim**: 79% accuracy on average
- Is 79% good?
  - Yes/no: 50% probability,
  - All cases: 84% probability
- **Judicial decision-making is significantly affected by the stimulus of the facts**

Possible AI for a Solution Explorer

- Use chatbot technology
- Voice recognition and form completion
- Content translation
- Forecasting possible outcomes
European ethical Charter for the use of AI in judicial systems and their environment

✓ 1 Respect for fundamental rights
✓ 2 Non-discrimination
✓ 3 Quality and security
✓ 4 Transparency, impartiality and fairness
✓ 5 Under human control
Non-discrimination

Prevent discrimination between individuals or groups of individuals.

- Distinction we consider unfair
- Unfair treatment of different people

Risk assessments in custody, sentencing and parole (COMPAS and ARNOLD)

- Cause:
  - Biased judges?
  - Biased laws?
  - Biased programmers?
  - Lack of data?
  - Bad algorithms?
Transparency is current NL case law

- NL Supreme Court and Council of State:

  - full, timely and appropriate disclosure
  - (ex ante or ex post?)
  - to assess the choices made and the data and assumptions used, so as
  - to ensure effective legal protection against decisions based on those choices, data and assumptions, with the possibility of judicial review by the courts.

ECLI:NL:RVS:2017:1259
ECLI:NL:RVS:2018:2454
ECLI:NL:HR:2018:1316
Challenges for courts: AI under user control

- Preclude a **prescriptive approach**
  - The computer does not decide on its own

- Ensure that users are **informed actors**
  - Users understand what the AI does

- Users are **in control** of their choices
  - Users can decide what to do with the AI’s result
Challenges for court: judge profiles

• Profiling judges

• What for?
• By whom?
• By others
• By their own court (system)

• Ethical, legal principles:
• Regulation, policy?
• Ban?