Challenges and opportunities of AI in the judicial systems. Reflections from the Netherlands

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How is the Dutch judiciary approaching AI

- What
- Why?
- How?
What
Why

Be prepared for the fourth industrial revolution, a future-proof judiciary

- Position of the judiciary in society
- Opportunity to boost of quality
- Financial opportunities

- Dealing with developments outside the judiciary
External developments

- Dutch police using predictive policing and predictive mapping
- Companies using AI for discovery, due diligence, smart contracts, etc
- Legal analytics
- Alternative dispute resolution (ADR)
  - e-court
How

• Developing a strategy on data, and the adoption of new (AI-) technologies in the judicial system

• Creating the conditions for implementing this strategy

• Experiments!
How

• Strategy/vision:
  - Internal, external, cooperation?
  - Ethical barriers
  - Legal barriers
  - Organisational barriers
How

Creating the right conditions for implementing this strategy

• Know-how
• Research
• Data infrastructure
Experiments

- Robot process automation
- Speech recognition software
- Automated anonymization of judgements
- Criminal sentence analysis
- Debt problems analysis
- AI Knowledge based system
Research into the (im)possibilities of Artificial Intelligence in case law

Manuella van der Put
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• Introduction
• Motives
• Scientific research
• Pilot/case study
• Goal
Motives

• Digitalisation and reorganisation of case law in the Netherlands
• Structural shortcomings in budget
• Discontent about the long average processing times among litigants and judges
• Approachability of case law, price tag and length of the process
• The world around us is changing
• Taking advantage of the new technologies/possibilities
Scientific research in case law

- PhD process with pilots
- Involvement of the court, Council for the judiciary, Department of Justice, universities, students, data science specialists
- How does the judge reach the jurisdictional verdict and what could artificial intelligence (AI) mean for our work?
- Could AI contribute to quality and efficiency?
Research into the process of the jurisdictional verdict

• Not only a rational judgement
• Quality of the jurisdiction
• Emotion, subconscious, intuition and sense of justice play a part
• The judge takes into account what the effect of their decision will be
• Use of cognitive and emotional rules of thumb
Skills judges

- Independent
- Impartial
- Integrity
- Professional
- Analytic ability
- Sense of entitlement
- Environmental awareness/context
- Convincing
- Authority
AI skills

- Generic intelligence
- Quick decision making
- Processing lots of data in a short amount of time
- Stable decision making
- Defined role/task
- Analytic skills
Pilot started 1 september 2018

• Combine human legal skills with AI
Pilot

- Key question: what are the possible uses of an artificially intelligent knowledge based system in analyzing, preparing and making jurisdictional decisions?
- Combination of thinking and acting
- Development of an artificial intelligent knowledge based system
Pilot: AI Knowledge based system

- The system analyses and searches for similar cases based on imported text, pleadings
- The system extracts the facts itself and searches similar facts in other cases
- Searching for matching and ranking (top 10)
- Common cases such as traffic violations, no default cases, asylum- and custody cases
Prospective effect pilot:

- Insight in (im)possibilities of AI in case law “Enchant and disenchant”
- Contribute to the quality of jurisdiction (ex. equality and unity)
- Shorter duration of proceedings, more available knowledge based systems, more satisfaction
- Support of the directing role of the judge, preparing the hearing, analyzing the conflict, decision motivation, settlement between parties
Thank you!

Paldies!