



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

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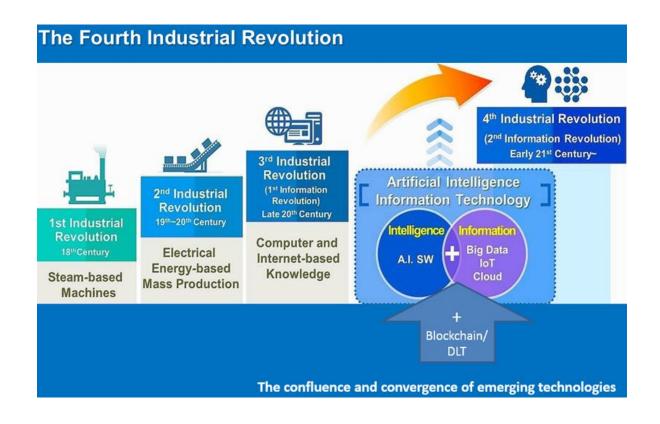


#### How is the Dutch judiciary approaching Al

- What
- Why?
- How?



#### **What**





#### Why

Be prepared for the fourth industrial revolution, a futureproof 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 dilligence, 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

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#### **Experiments**

- Robot process automation
- Speech recognition software
- Automated anonymization of judgements
- Criminal sentence analysis
- Debt problems analysis
- Al Knowledge based system





## Research into the (im)possibilities of Artificial Intelligence in case law

Manuella van der Put



- 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



#### Al 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 Al





#### **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: Al 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

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## Thank you!

### Paldies!