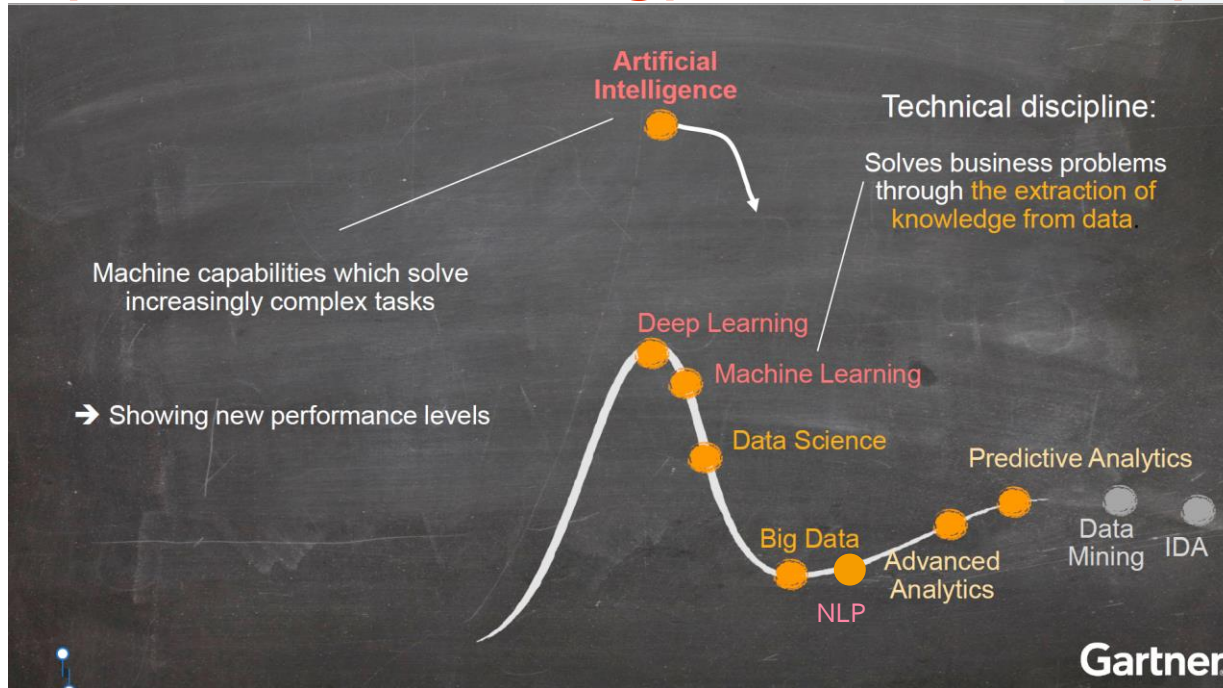


Artificial Intelligence

How is Austria approaching AI integration into judicial policies

Mag. Georg Stawa
Federal Ministry of Constitutional Affairs,
Reforms, Deregulation and Justice
Wien, 22. Juni 2018

Disciplines of AI technology in the Gartner hype cycle



Current AI core disciplines in Austrian Justice:

- Natural language processing (NLP) / analytics
- Machine Learning
- Deep Learning

+

- BigData
- Data Science
- Analytics

How is Austria approaching AI integration into judicial policies

AI Use-Cases in Austrian Justice

Digital & physical mail income:

Analysis, classification and extraction of metadata for mail income (electronical legal communication (ELC) & scanned)
Intelligent routing and file creation
Preparation of a proposal for the naming of documents

Digitization Assistant of existing analog files:

Determination of description and classification of scanned documents
Detection of "first-pages" of a document / attachment
Proposal of a digital file structure of scanned files

Anonymisation of court documents:

Recognition of names, addresses, roles of certain parties involved in judgments and decisions, and preparation of anonymisation proposals.

Analysis and preparation of investigation data

Analysis, classification and extraction of metadata from any form of "data". Detection of relationships and communication runs.

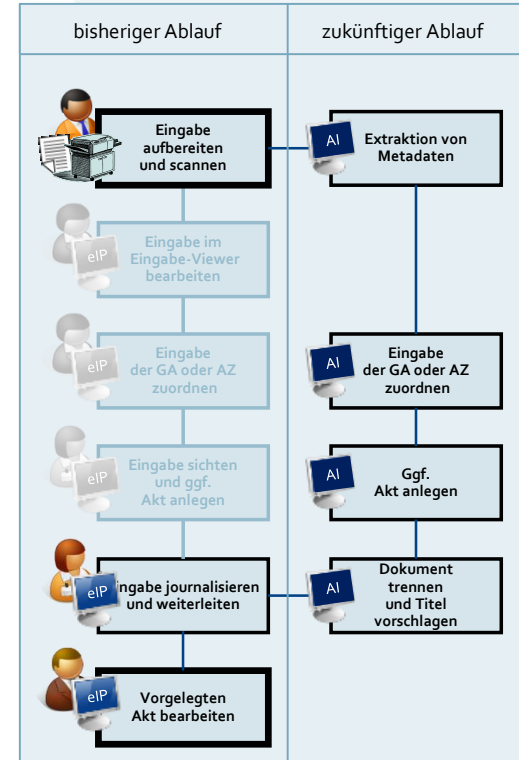
With AI unstructured and structured information can be analyzed and processed quickly and efficiently.

AI for analyzing incoming mail

Automated routing of all incoming documents (structured and unstructured, scanned and via ELC), without manual processing of the administration staff of the courts.

Areas of application:

- Analysis of input documents and extraction of metadata
- Identification of given identifiers (files for direct allocation)
- Recognition of the procedure type of incoming documents without file number including intelligent allocation, creation of files and assignment
- Categorization of scanned documents
- Preparation of a proposal for document descriptions and names

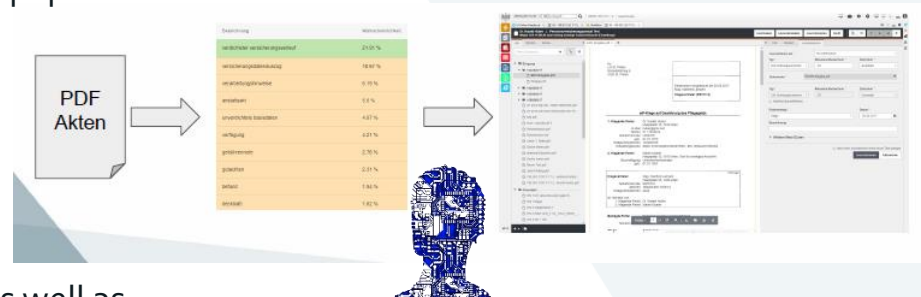


AI for digital file management

For consistent file management, incoming unstructured documents should be processed uniformly and metadata should be adopted automatically. The intelligent digitization of existing paper files should also be supported.

Areas of application:

- Detection of “first pages” of single documents after bulk scanning and separation of entries with supplements
- Determination of description and classification as well as adoption and harmonization of document titles
- Intelligent creation of the digital file structure (for scanned files) including table of contents
- Creation of object-oriented-views (f.e. documents of first party)



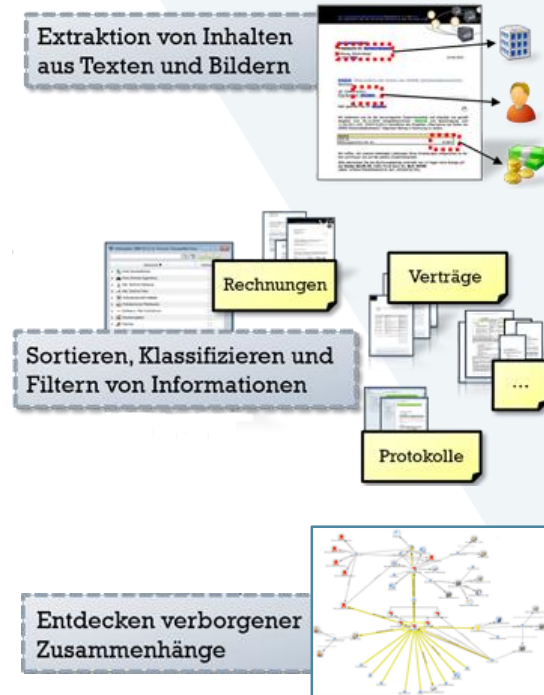
AI for analysis in investigation data

Analysis, classification and extraction of metadata from any form of "data" as well as recognition of relationships and communication flows.

Areas of application:

- Preparation of large amount of data for the detection of semantic correlations
- Automatic information extraction from documents
- knowledge creation without manual knowledge work
- Traceability of information origins
- collaborative discovery and visualization of fraud patterns
- configuration and adaptation to domain specific questions without the need of custom coding

How is Austria approaching AI integration into judicial policies



AI for anonymization of court decisions

Automated anonymization and metadata recognition of court decisions and preparation for publication in the Legal Information System (RIS)

Areas of application:

- Analysis of decision documents and extraction of metadata
- Recognition of natural and legal persons, addresses and current role
- Anonymisation of personal data of parties
- Anonymisation while preserving the comprehensibility of the case

Outlook / Potentials:

- Creation of links and relationships to literature and other court decisions
- Creation of judicial composition
- etc.

How is Austria approaching AI integration into judicial policies

Demo Beispiel
Modellierungswerkzeug für linguistische Komponenten

erforderlichenfalls auch sonstige Orts- und Gebietsbezeichnungen, die Rückschlüsse auf die betreffende Rechtssache zulassen, durch Buchstaben, Ziffern oder Abkürzungen so zu anonymisieren, dass die Nachvollziehbarkeit der Entscheidung nicht verloren geht.

Das **Oberlandesgericht Wien** als **Rekursgericht** fasst durch die **Richterin Mag. Kumar** als **Einzelrichterin** gemäß § 8a Z 1 in der Rechtssache der klagenden Partei **[redacted]** **Italien**,
vertreten durch **Disok Hermann Petsche Rechtsanwälte LLP & Co KG** in **Wien**,
beklagte Partei **[redacted]** **Ungarn**,
durch Dr. **Tibor Galffy**, Rechtsanwalt in **Wien**, wegen EUR 520.000,- s.A.
Rekurses des Sachverständigen **Dipl. Ing. Peter Püringer** (Rekursinteresse EUR 1.253,-)
B e s c h l u s s :
[redacted] 20 Cg 88/19-99, den

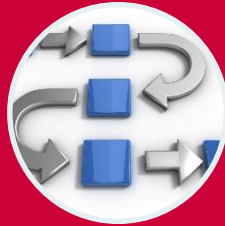
Richterin Mag. Kumar
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Rule identifier = 4BECCSDA6C7990F9CA814E06E5F7482
Function = Richterin Mag. XXX
Surname = Kumar
Title = Mag.
Value = Richterin

Namen werden durch einen Annotator erkannt und als Indexwert markiert.

Outlook for use of AI in the field of Justice



AI for optimization in
data acquisition



AI for optimization of
internal workflows



AI for decision support



AI in (limited) business
areas

Thank you for your attention

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