



Legal challenges of artificial intelligence - the example of the insurance sector

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- I. **What is artificial intelligence?**
- II. AI as a legal entity?
- III. AI and data protection law
- IV. AI and insurance supervision
- V. Outlook

I. What is artificial intelligence?

- **Imitation of human behaviour** by analysing data through automated processes
- **Not the same** type of data processing **as** the term **big data**
 - Big data is a generic term for **large** and partly **complex data sets**
- **Two types of AI:**
 - **Strong AI:** sets itself independent goals, performs intellectual transfers, reacts flexibly to new situations and topics
 - **Weak AI:** facilitating or replacing previously human routine work with algorithm-based technology

I. What is artificial intelligence?

- **More** scientists and practitioners are working on **deep learning** projects
 - Learning or self-learning neural networks
- **Disadvantages** of normal **algorithms**:
 - Only as effective as they have been programmed
 - Requires an exact idea of what one wants to achieve
- Partial **detachment** of the **human decision-making process**
 - To be **replaced** and **taken over** by AI
 - AI is enabled to **learn independently**
- Great **opportunities**, but also considerable **risks**
 - Result is more diverse and more intelligent
 - Greater economic benefit with less transparency

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II. AI as a legal entity?

- „e-person“ does not yet exist
- Such a regulation meets with **considerable reservations**:
 - EU Parliament uses the term robot in a **very broad** sense
 - Person with legal capacity can hardly act sensibly in legal transactions **without** his own liability mass
 - Excludes the possibility of considering the robot as a legal representative in the sense of § 164 BGB (German Civil Code)
 - Representative is liable himself according to § 179 BGB in the absence of power of representation
 - Solution could be the creation of an **insurance obligation** for robots
- **Partial legal capacity** is also proposed

II. AI as a legal entity?

- **BGH** (Federal Court of Justice): The interpretation of a declaration of intent made by an automated booking system does not depend on the interpretation by the computer, but on the human will behind it.
- AI is designed by humans for **specific tasks** only
- It **can optimize the path** to the goal, it **cannot yet develop its own goals**
 - If the **goal is not achieved**, this is attributed to the **business risk** of the user
 - In case of **programming errors**, **warranty** or **product liability claims** can be considered

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III. AI and data protection law

- **No verbal explanation** of the decision-making process poses **data protection law challenges**
- Decisions made by AI must meet the requirements of **Art. 22 General Data Protection Regulation (GDPR)**
 - **Scope of application** only decisions which **do not** involve human influence
 - Main purpose is the participation of the contracting party in automated declarations of intent
- Art. 22 **GDPR** contains a prohibition of automated individual decisions
 - **Exceptional cases in para. 2**
 - Para. 2 lit. a and lit. c in combination with para. 3 are of particular practical significance
 - Could the act also be performed by a natural person
 - Would human processing be just as effective as a milder means

III. AI and data protection law

- **Automated processes** are **more effective** than the execution by clerks
 - Necessity must be assumed in most cases
- Insurers must observe the further requirements of Art. 22 para. 3 **GDPR**

Right to:

- Obtain human decision control
- Present one's own standpoint
- Challenge the decision

III. AI and data protection law

- Obligation to inform the affected about the automated decision and the underlying decision logic, Art. 13 para. 2 lit. f **GDPR**
 - The latter **includes** the **essential basic assumptions** of the **algorithm**
- Unlike a score system AI-supported decisions are **not only** based on historical data
 - Interlinked evaluations
 - Requires high quality data
 - AI must enjoy the best possible education
- The scoring law is not easily transferable to AI applications

III. AI and data protection law

- The insurer **should not** rely solely on what is legally permissible
- Art. 22 para. 3 **GDPR** also applies in the case of consent pursuant to Art. 22 para. 2 lit. c **GDPR**
 - It seems simpler to use the technology without consent by reference to Art. 22 para. 2 lit. a **GDPR**

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IV. AI and insurance supervision

- The insurer needs to provide **transparency** to the insurance supervisory authority
- Insurers **must provide** the information authorities require **to fulfil their duties** - in Germany according to §§ 43 para. 1, 294 para. 1 Insurance Supervision Code (VAG)
- Main objective of supervision is the **protection of policyholders** and the **beneficiaries of insurance benefits** (§ 294 para. 1 VAG)
 - § 294 para. 2 s. 2 and para. 3 VAG determine compliance with laws important for insurance operations as the supervisory objective
 - Its purpose is to encompass **only** those provisions that **refer** to the main objective according to **paragraph 1**
 - Art. 22 **GDPR** has such a close connection to policyholder protection
 - ❑ The supervisory authority **may** request the documents required to verify the automated declaration (§§ 43, 294 VAG)
 - ❑ This information must be **complete, up-to-date** and **accurate** (§ 43 para. 2 s. 1 VAG)

IV. AI and insurance supervision

- A policyholder **cannot** demand from the insurer for inspection **the calculation formula of the algorithm** used or exact **details** of its **learning process**
 - Supervisory authority is entitled to do so
- The insurer **cannot invoke** the **protection** of its **business secrets**
 - Supervisory authority is subject to **secrecy pursuant** to § 309 VAG
- BaFin **has not** understood a **review** of **algorithms** essential to the insurance business as **part** of its **supervisory activities**
 - **Likely to change** as the use of AI develops

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V. Outlook

- Use of AI will be legally secure and ethically acceptable when an automated decision is **fully comprehensible** and **objectively verifiable**
- Not only insurance supervision will approach the subject more closely
- **Insurers** will have to **enable themselves** or with the help of **externally procured know-how** to better **understand** the **decision-making processes** controlled by AI
 - **requires investment** in training and further education

V. Outlook

- It is important to **ensure** that the **use of AI** is **compliant with data protection**
- The **protection against discrimination** poses great challenges for AI
- A difficulty is **how to deal with fairness** in the **settlement of claims**
 - Previous claims history or other contracts existing with the insurer can be taken into account
 - This **does not** necessarily **apply to subjective factors**
 - This may be a loss of human interaction **or** a gain in rationality in claims settlement
 - **AI still** has its **limits** when it comes to **reproducing human behaviour**

V. Outlook

- AI, as it stands today, should **only** be used in areas of application that are **particularly suitable** for this purpose
 - Large amounts of data
 - Where people need a lot of time to make comparatively simple decisions
 - E.g. the digital claims processing for **minor damages** in the field of **motor vehicle insurance**

Thank you very much for your attention!