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Text-Mining in Financial Services

Smart analysis of information

Text-Mining in Financial Services

Text-Mining and natural language processing (NLP) give our clients the ability to extract and analyze information from enormous amounts of documents by machine, thereby relieving their employees from highly repetitive tasks. Current advances in artificial intelligence (AI) and computing power make text-mining solutions attractive for almost every client. Our strong capabilities in machine learning combined with our subject matter experts' know-how give us the opportunity to build tailored text-mining tools that are pre-trained for the specific use cases of our clients.

Full service offering

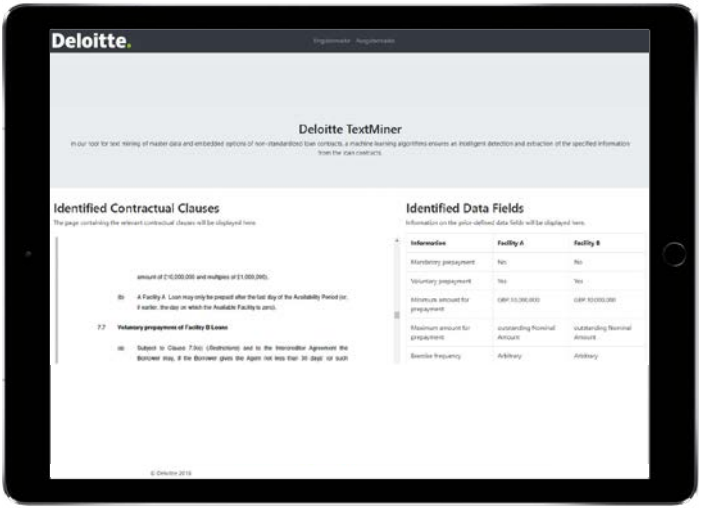
Experienced teams
Our pool of experts consists of data scientists with a strong track record in machine learning, NLP, AI and cloud-computing as well as subject matter experts available to pre-train the text-mining tools for the given use case.

Customized Text-Mining solution
While we offer the integration of available text-mining software to solve our clients' needs, the in-house development of text-mining tools based on open-source machine learning and text-mining solutions often yields better performance in terms of accuracy, employee acceptance and the implementation of further developments.

End-to-end service
Our services range from developing tailored text-mining tools, constructing graphical user interfaces, preparing data for algorithm training (labeling), implementation and maintenance, thereby also taking workflow management and process automation into account.

Individual project scope
We offer projects ranging from conducting initial feasibility studies and developing prototypes for text-mining solutions to integrating fully functioning text-mining tools in our clients' IT infrastructures and process landscapes.

Example reference project



Due to regulations, a large German bank was facing the need to analyze thousands of non-standardized loan contracts with regard to specific embedded options (e.g. prepayment options). However, a manual analysis of thousands of dissimilar contracts was operationally infeasible. Therefore, we developed a text-mining tool with graphical user interface and function range tailored to the client's needs.

The text-miner we developed is able to analyze non-standardized loan contracts using AI to identify whether certain options are given in the contracts. When such options are identified, the text-miner automatically extracts additional information from the contracts (e.g. the minimal prepayment amount and exercise periods). The output screen of the text-mining tool is designed in a way that the employee can check the results at a glance.

The project scope also comprised the model selection as well as the implementation and testing of machine learning algorithms. Ultimately, a combination of an AI- and a rule-based approach enabled the desired identification of the relevant text passages and the automated extraction of the specified information. The knowledge-base required to train the AI algorithm was derived from the excellent experience of our subject matter experts.

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Issue 07/2019