WWTF Project NXT19-003

RegMiner: A web-based software prototype for mining constraints from regulatory documents

Abstract

Business process compliance aims at ensuring that processes are in line with compliance constraints. Regulatory documents constitute a major source for compliance constraints and their analysis is an ongoing and by now mostly manual task. Within the CRISP project (project number ICT15-072) a method chain was developed that enables an automated extraction and analysis of compliance constraints from regulatory documents [3, 4, 5, 6]. Yet, the application of this method chain was mainly accessible for users with a technical background. The RegMiner project aimed at bridging this gap by providing a low-threshold entry into the automated analysis of regulatory documents for non-technical experts. In particular, the RegMiner prototype1 is provided in the form of a lightweight web service. RegMiner takes regulatory documents as input, e.g., via the EUR-Lex platform2 , extracts constraints from these regulatory documents and provides a graph-based output that depicts a grouping of constraints based on, e.g., topics. In addition not just compliance constraints are displayed but also the paragraph in which the constraint is present, i.e., a user can look up the context of a specific constraint. This is especially important for the legal domain. In sum, RegMiner constitutes an important step towards digitalized compliance management by providing automated support in analyzing the increasing amount of regulatory documents.

Keywords:

Text Mining, NLP, Constraint Mining, Interactive Software, GDPR, Finance

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Further links about the involved persons and regarding the project you can find at

https://archiv.wwtf.at/programmes/new_exciting_transfer_projects/NXT19-003