

## IMPROVING JUDICIAL DECISIONS BY MEANS OF CONCEPT MAPPING: IS IT POSSIBLE TO ACHIEVE SIMPLICITY THROUGH COMPLEXITY?

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**Abstract.** The analysis of court sentences related to complex cases with large timeline show that there is a great need for juridical knowledge management. It is therefore important the use of knowledge engineering tools to promote deep understanding about the facts and evidences of the judicial cases. The initial petition should be clear and presented with “simplicity”, which is very complex to go through (Paradigm of simplicity -Edgar Morin). The general aim of this work is to demonstrate that concept mapping plus research timeline can help to visualize, document, link events and report findings in court investigations. For the empirical study two cases are reported anonymously and selected because of their large timeline and complexity. The data were collected from a website that included judgments from a Portuguese court and from a court case that is being judged. All the events, documents, report findings were linked to the timeline as concept maps, that were elaborated using CmapTools. Significant differences were found relating the self-perception of facts and events by the authors of the petition in one case. Concept mapping linked to a research timeline can facilitate deep understanding of the judicial case, thus promoting the pursue for justice by the lawyers and the judge. The authors of the claim can improve their perception of vulnerability and enhance their ability to defend themselves, even during court judgments. Optimization of the testimonials input can also be promoted by the ability to consult the “Concept mapping -timeline”. If there is evidence of a general improvement in the understanding of the judicial case, it would be expected that it will also occur with the judge, thus increasing the probability of a just court decision. Concept mapping linked to a research timeline can therefore be an important tool to improve judicial knowledge management in the preparation of the initial claim of a case and in helping the judicial court and the judge to select all the facts which are objective and scientifically verifiable. This task is of utmost importance in order to obtain a just decision for the conflict. This work is also a first step in the development of tools to optimize “judicial knowledge management” which can be used to improve the ability to prevent and intervene in complex judicial cases.

**Keywords:** Judicial decision, Paradigm of simplicity, concept mapping, meaningful learning, research timeline