**Building an AI-tool for the detection of financially distressed companies by Belgian commercial courts**

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In Belgium, each commercial court has one or more Chambers for Companies in Difficulty (CCD), that investigate and monitor financially distressed companies. Detection of such companies is facilitated through a database with so-called “flashlights”, indicators signaling financial instability. These include tax or social security payment failures, asset seizures, and late submission or non-filing of annual accounts. Judges manually select cases from this database based on various criteria, often determined individually, leading to a somewhat arbitrary process.

Upon selection of a company, a confidential file is opened, initiating an investigation by the CCD. Subsequently, the company is usually invited for a closed meeting at the court to discuss its financial issues and potential solutions. The chamber then decides on various courses of action, including requesting further information, appointing a judge for a more detailed investigation, advising reorganization, or initiating bankruptcy proceedings if recovery seems improbable.

Recognizing the inefficiencies of manual selection, we are currently working on a pilot project at the Commercial Court of Antwerp to develop an AI tool to assist judges in this process. Utilizing machine learning techniques, the tool aims to analyze past data on selected companies and the subsequent decisions of the chambers. By identifying patterns, it will predict which companies, mentioned in the flashlights database, are likely candidates for investigation and rank them according to expected CCD decisions.

This AI tool, however, will not replace judges' discretion or decision-making authority. Its recommendations are not binding, and judges retain the autonomy to open or close files as they see fit. While the tool streamlines the selection process, the final decisions rest with the chambers, ensuring human oversight and flexibility in addressing each case's unique circumstances.

Our paper will describe the AI tool that we are developing as well as the challenges of this project (e.g. challenges relating to the sensitive character of the data and access to the AI tool and finding a balance between automation and judicial discretion).