SOWCompact: A federated process mining method for social workflows (Summary)*

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Summary of the Contribution

The growing informatization of the environment allows modeling people's behavior as a social workflow, where both individual actions and interactions with other people are captured. This modelling includes actions that are part of an individual's routine, as well as less frequent events. Although infrequent actions may provide relevant information, it is routine behaviors that characterize users. However, the extraction of this knowledge is not simple. There are problems when analyzing together large amounts of traces from many users, resulting into a social workflow that does not clearly depict their behavior, either individually or as a group. Tools that allow grouping/filtering of users with a common behavior pattern are needed, to analyze each of these groups separately. This study presents the federated process mining and an associated tool, SOWCompact. Its potential is validated through the case study called activities of daily living (ADL). Using federated process mining, along with current process mining techniques, more compact processes using only the social workflow's most relevant information are obtained, while allowing the analysis of these social workflows.

Keywords: process mining · pattern discovery · social workflows · federated process mining

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