

amantea2022BusinessProcessModelling

Title

Business Process Modelling in Healthcare and Compliance Management: A Logical Framework (Amantea et al. (2022))

Abstract

This work describes a methodological approach to investigate Compliance Management in healthcare based on a BPM perspective, exploring an application in an innovative hospital service. Firstly, we present a business process analysis by modeling the process with the adoption of a standard language. Secondly, we encode a set of rules in LegalRuleML, an XML formalism designed to be a standard for representing the semantic and logical content of legal documents. The rules represent some provisions of the General Data Protection Regulation (GDPR) that are involved in the health process analyzed. Moreover, in order to perform the regulatory compliance check automatically, we converted the set of rules into Defeasible Deontic Logic format (DDL), readable by the Regorous compliance checker developed at CSIRO. Overall, the paper shows a methodology to automate regulatory compliance checking of a real hospital process with actual regulations and norms. The codes in the LegalRuleML and DDL formats used in the work are available online.

Keywords

No keywords available

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