How to Develop a GDPR-Compliant Blockchain Solution for Cross-Organizational Workflow Management: Evidence from the German Asylum Procedure

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Abstract

Blockchain technology has the potential to resolve trust concerns in cross-organizational workflows and to reduce reliance on paper-based documents as trust anchors. Although these prospects are real, so is regulatory uncertainty. In particular, the reconciliation of blockchain with Europe's General Data Protection Regulation (GDPR) is proving to be a significant challenge. We tackled this challenge with the German Federal Office for Migration and Refugees. Here, we explain how we used Action Research to guide the Federal Office in creating a GDPR-compliant blockchain solution for the German asylum procedure. Moreover, we explain the architecture of the Federal Office's solution and present two design principles for developing GDPR-compliant blockchain solutions for cross-organizational workflow management.