## Ethical and legal analysis of machine learning based systems: a scenario analysis of a recommender system

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Extended abstract

The presence and application of digital services has become an integral part of the personal daily routine as well as within business processes. In the last two decades an increasing number of companies have adopted a business model based on digital services attained from user data. Accompanying these developments are not only the changes in the processes but also the attention that is brought by the society towards the effects and the constitution of these services.

Moral and ethical demands are steadily rising and claims for regulation are get-ting loader. In this paper, we use a case study of a recommender system to identify potential ethical issues within the composition and usage of the artifact as well as the correspondent legislation. We make clear what ethical aspects are addressed by legal requirements and make suggestions on how to implement the identified ethical and legal issues into the artifact design and thus create a unique quality for the final software product. We show that without social awareness and responsibility, legal regulations alone cannot guarantee socially compliant IT.