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Benefits and harms of recommender systems in digital platforms for users, complementors and platforms [Working Title]

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Motivation: Recommender systems are widely used on digital platforms. Online marketplaces such as Amazon rely on them to suggest products to consumers, while video streaming services like Netflix use them to recommend films and series tailored to individual tastes. Music streaming platforms such as Spotify go even further, employing recommender systems to curate entire playlists based on users' preferences and listening behavior.

The widespread adoption of recommender systems goes hand in hand with substantial diversity in their design. Depending on a platform's business model, market environment, and user base, recommender systems can differ significantly. These differences affect not only platform performance but also influence user experiences and have implications for other stakeholders on the platform.

Goal: The goal of this thesis is twofold. The first goal is to examine the different ways in which recommender systems are used by digital platforms and to identify the basic properties of different recommender system approaches. In particular, the thesis seeks to highlight the main similarities and differences between these approaches.

The second goal of the thesis is to understand, from an economic perspective, how different implementations of recommender systems can affect platforms, complementors, and consumers. What are the economic benefits, as well as the possible harms, that can come from the use of these systems? How do these differ between different platforms and ways of implementing recommender systems?

References and Related Literature:

Chen, N., & Tsai, H.-T. (2024). Steering via algorithmic recommendations. *The RAND Journal of Economics*. 55(4), pp.501-518

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