

AI-Driven Personalization: Generative Models in E-Commerce

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Abstract: *E-commerce platforms are increasingly leveraging personalized recommendations to provide a more tailored shopping experience for users. While traditional recommendation methods typically rely on collaborative filtering, which considers behavioral data and user similarities, they often neglect individual preferences and tastes. In contrast, generative models have shown promise in enhancing personalized recommendations, especially in the e-commerce industry. These models create data points based on a distribution, enabling them to better represent the underlying user data. By integrating data from various sources, businesses can develop personalized recommendations that are more relevant than generic suggestions, taking into consideration individual interests, preferences, and purchase history. Generative models have the ability to learn and adjust over time, resulting in more precise suggestions for users. Their implementation in e-commerce has proven effective in boosting user engagement and driving sales. Additionally, these models can improve customer satisfaction and loyalty by providing more pertinent and personalized content. They also have the potential to set e-commerce platforms apart in a competitive market and enhance users' shopping experiences. As these models continue to advance, it is expected that they will further enrich e-commerce experiences in the future.*

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