1 Discussion

The objective of the paper is to propose the development of an artificial intelligence (AI) system designed to facilitate the search process for products by users.

1.1 Use of Filter

The user study revealed that the majority of users preferred to work with the filters first. This phenomenon may be attributed to the fact that contemporary systems are generally designed to assume that users will employ search filters during the search process. Consequently, users may find it unconventional to utilize solely the search bar to perform a search. The utilization of artificial intelligence by the majority of users does not align with conventional practices, as individuals have become accustomed to employing filters within online shopping platforms rather than utilizing the capabilities of AI directly. Following a series of inquiries, a conclusion was reached: The users have adapted to the system and are now able to discern whether the AI comprehends their intentions. Consequently, the majority of users have increasingly relied on the AI rather than the filters. Therefore, a period of adaptation is required for users to acclimatize to the KI. It is imperative to acknowledge the pivotal role of artificial intelligence in the integration of such systems within e-commerce platforms. The objective is to cultivate a conscious awareness among users.

1.2 Improvement through AI

The implementation of artificial intelligence has yielded notable enhancements in the realm of product search, thereby facilitating a more efficient and user-friendly experience for consumers. The artificial intelligence system demonstrated the capacity to automatically resolve spelling errors, thereby exhibiting enhanced tolerance for errors when compared to conventional systems. A further favorable aspect is that the AI was able to accurately interpret synonyms, thereby identifying the correct products.

1.3 Limitations

1.4 Future Work

In light of the limited diversity observed in user studies, it would be advisable to undertake a study that involves fewer participants, particularly those with a background in information technology. Additionally, it would be beneficial to include older adult groups to assess the intuitiveness of the artificial intelligence interface. This approach would facilitate a comprehensive evaluation of the ease of use of the AI for different demographics.

A further investigation could be conducted in which the conventional system and the AI are compared on two separate pages. This would allow for the assessment of the efficiency and efficacy of AI utilization in a web shop. This approach could also address the filter bias identified in our user study.

Due to temporal constraints, a static template was employed, with its sole reliance on the description. In this instance, the integration of a state-of-the-art template could potentially enhance the comparison.