

# Introduction

Recommender System consider the concept drift

- According to Amazon report, about 30% their page views from recommendations
- An important aspect for building successful recommender system is to consider the concept drift.
- A user's interest changes over time, and the preference even towards the same type of items can change.
  - e.g. Most users who like wired earphones (e.g. EarPods) may change their interests over time and prefer wireless earphones (e.g. AirPods).

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## Existing methods problem

- Existing methods capture the concept drift of users mainly based on each user's consumption history.
- Some sequential recommender systems take a user's  $N$  recently-consumed items as input to predict the next item that user would consume.
  - Represent the concept drift of the users via the order of items in a user's consumption history.
- Despite their success, previous sequential recommender systems are limited in that they ignore how much users' interest in each item will sustain in the future.