LITREATURE SURVEY

NEWS TRACKER USING CLOUD APP DEVELOPMENT

TEAM LEADER : R.Atchaya - 820419104010

A.Abitharani - 820419104002

R.Divyasree - 820419104021

V.Nishanthini - 820419104044

INTRODUCTION

News tracking seems to become ubiquitous in online business and leads to increased privacy concerns of users. This paper provides an overview over the current state of the art of web-tracking research, aiming to reveal the relevance and methodologies of this research area and create a foundation for future work. In particular, this study addresses the following research questions: What methods are followed? What results have been achieved so far What are potential future research areas? For these goals, a structured literature review based upon an established methodological framework is conducted. The identified articles are investigated with respect to the applied research methodologies and the aspects of web tracking they emphasize.

ABSTRACT

Nowadays, more and more news readers read news online where they have access to millions of news articles from multiple sources. In order to help users find the right and relevant content, news recommender systems (NRS) are developed to relieve the information overload problem and suggest news items that might be of interest for the news readers. In this paper, we highlight the major challenges faced by the NRS and identify the possible solutions from the state-of-the-art. Our discussion is divided into two parts. In the first part, we present an overview of the recommendation solutions, datasets, evaluation criteria beyond accuracy and recommendation platforms being used in the NRS. We also talk about two popular classes of models that have been successfully used in recent years. In the second part, we focus on the deep neural networks as solutions to build the NRS. Different from previous surveys, we study the effects of news recommendations on user behaviors and try to suggest possible remedies to mitigate those effects. By providing the state-of-the-art knowledge, this survey can help researchers and professional

practitioners have a better understanding of the recent developments in news recommendation algorithms. In addition, this survey sheds light on the potential new directions.

PREVIOUS REVIEW

In addition to the NRS-related papers, we also reviewed the previous surveys to see what they had covered. The challenges addressed in the literature often correspond to what is being investigated in the research during that time. For example, in classical NRS surveys (Borges and Lorena 2010; Karwa 2015; Dwivedi and Arya 2016), issues such as personalization, accuracy, cold-start problem, and scalability have been discussed. In some later NRS surveys (Karimi et al. 2018; Chakraborty et al. 2019), the new issues addressed (in addition to those covered in previous surveys) are beyond-accuracy aspects. Recently, the NRS surveys (Li and Wang 2019; Feng et al. 2020; Qin and Lu 2020) have covered topics such as cold start, news content and feature engineering, and changing user preferences. The challenges discussed by each of these surveys are listed in Table 1.

1. In the previous surveys, the common challenges related to the news domain were considered. In addition to these common challenges, such as timeliness and user modelling, we discuss new challenges such as content quality and the effects of news recommendations on user behaviours. We provide an overview of the state-of-the-art research that addresses these new challenges.
2. We focus on the most popular recommendation models that are successfully used to build the NRS, with a special emphasis on deep learning-based models due to a lack of coverage on this topic in previous surveys.
3. The impact of news recommendations on user behaviours is a

growing concern in the news industry. Although this issue has been raised by online journalism (Möller et al. 2018; Helberger 2019), we believe that it is also related to the discipline of computer science and information systems. Thus, different from previous surveys, we discuss changes in user behaviours that come in effect after recommendations. We also discuss possible remedies from computer science, psychology and journalism that do exist but have not been fully applied in recommender systems to mitigate those post-algorithmic news recommendation effects. In the discussion section, we also offer our own ideas of possible remedy approaches.

EXISTING SYSTEMS FOR NEWS TRACKING APPLICATIONS

Many models have been used in the past to build an NRS. One of the most popular and successful classes of models for the NRS is the latent factor model, especially factorization methods. In recent years, the deep learning-based solutions have come up as an emerging branch of recommender systems. We consider them as the other most popular class of models successfully used for the NRS. These models are briefly covered below.

1.Factorization models

2.Matrix factorization (MF)

3.Non-negative matrix factorization (NMF)

4.Tensor factorization

(TF)5.Bayesian personalized ranking (BPR)

MAJOR CHALLENGES IN NEWS TRACKING

Timelines

User modelling
Quality control of news content

CONCLUSION

These are the currated survey on the topic "News Tracking system "