Ideation Phase
Literature Survey

Date	26 September 2022
Team ID	PNT2022TMID18306
Project Name	News Tracker Application
Maximum Marks	4 Marks

Literature Survey:

1

TITLE	News topic detection based on capsule semantic graph
AUTHOR	Shuang Yang; Yan Tang
JOURNAL	Big Data Mining and Analytics
DOP	June 2022
KEY POINTS	• This is a news topic detection model on the basis of capsule semantic graph (CSG). The keywords that appear in each text at the same time are modelled as a keyword graph, which is divided into multiple subgraphs through community detection. • Each subgraph contains a group of closely related keywords. The graph is used as the vertex of CSG. The semantic relationship among the vertices is obtained by calculating the similarity of the average word vector of each vertex. • At the same time, the news text is clustered using the incremental clustering method, where each text uses CSG; that is, the similarity among texts is calculated by the graph kernel.

2

TITLE	News Recommendation Systems - Accomplishments, Challenges & Future Directions
AUTHOR	Chong Feng; Muzammil Khan; Arif Ur Rahman; Arshad Ahmad
JOURNAL	IEEE Access
DOP	January 2020
KEY POINTS	- News publishers have decreased disseminating news through conventional newspapers and have migrated to the use of digital means like websites and purpose-built mobile applications. - The objectives of the current work are to identify and classify the challenges in news recommendation domain, to identify state-of-the-art approaches and classify on the application domain, to identify datasets used for evaluation and their sources, the evaluation approaches used and to highlight the challenges explicitly addressed. - The literature is thoroughly studied over the time span of 2001-2019 and shortlisted 81 related studies, broadly classified into six categories and discussed. The analysis showed that 60% of news recommendation system adopted a hybrid approach, 66% studies little talk about datasets, and addresses a few challenges from a long list of challenges in the news domain.

3

TITLE	HYPNER: A Hybrid Approach for Personalized News Recommendation
AUTHOR	Asghar Darvishy; Hamidah Ibrahim; Fatimah Sidi; Aida Mustapha
JOURNAL	IEEE Access

DOP	March 2020
KEY POINTS	- A personalised news recommendation system extracts news set from multiple press releases and presents the recommended news to the user. In an effort to build a better recommender system with high accuracy, this paper proposes a personalised news recommendation framework named Hybrid Personalised News Recommendation (HYPNER). - HYPNER combines both collaborative filtering-based and content-based filtering methods. The proposed framework aims at improving the accuracy of news recommendation by resolving the issues of scalability due to large news corpus, enriching the user's profile, representing the exact properties and characteristics of news items, and recommending diverse set of news items. - Validation experiments showed that HYPNER achieved 81.56% improvement in F1 -score and 5.33% in diversity as compared to an existing recommender system, SCENE.