# Involving Common Media to Export Product Recommendation Using Existing Data

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*Abstract:* **There is an increasingly blurred line between e-commersce and social networking. Many e-commerce platforms support the social authentication process through which users can sign in using their social network identity, for example, on Facebook or Twitter. In addition, users can also post new items on microblogs with links to the website of the product for e-commerce. The purpose of this paper is to recommend goods for e-commerce web pages to users on social networking sites under "cold-start," an issue that was scarcely investigated before, in an innovative approach to the cold-start product advice. One of the main challenges for the advice is how to use the information derived from social networking platforms. We suggest using connected users through social networking websites and e-commerce websites as a bridge to map the functionality of social networking users to another feature for product suggestion and for social networking. In particular, we suggest learning the user and product characteristics of data obtained from e-commerce sites using recurring neural networks (known as the user embedding and the goods embedding), and then implement a revamped system of gradients boosting trees to turn user social networking features into user embedding.**

***Keywords:*** **Phrase Mining; Chunking; Topic Model; Topical Phrase Mining;**

## I. INTRODUCTION:

We study an interesting problem of recommending products from e-commerce websites to users at social networking sites who do not have historical purchase records, i.e., in "cold-start" situations. We name the cold-start product suggestion of this issue cross-site. Although online product recommendation has been extensively studied before most studies only focus on constructing solutions within certain e-commerce websites and mainly utilize users' historical transaction records [1]. Cross-site cold start product advice was rarely studied before, to the best of our experience. Here only user information for social networking is available and the process of transforming information for social networks into latent user functionality is difficult and can be efficiently used for product advice. To address this challenge, we propose to use the linked users across social networking sites and e-commerce websites (users who have social networking accounts and have made purchases on e-commerce websites) as a bridge to map users' social networking features to latent features for product recommendation. In particular, we suggest learning the user and product characteristics of data obtained from e-commerce sites using recurring neural networks (known as the user embedding and the goods embedding), and then implement a revamped system of gradients boosting trees to turn user social networking features into user embedding. In 'cold-start' cases, we have created a new issue of recommending items from a website to social networking users. It has scarcely been researched before to the best of our understanding. For consumers and items of data obtained from email websites, we suggest applying the recurrent new networks in order to learn similar function representations. We suggest a tweaked gradient boosting process for microblogging attributes that can be conveniently integrated into latent function representation for product recommendation. By integrating user interfaces and product features for cold start product recommendation, we propose and install feature based matrix factorization.

## II. PROBLEM STATEMENT:

Most research concentrate only on building strategies within certain websites for e-commerce and only use historical records of our transactions. Cross-site cold start product recommendations have rarely been tested before to the best of our experience. A wide range of research work was conducted primarily to address the cold-start problem. For the prediction of potential users ratings, Seroussi etl. Suggested that information from online accounts and subjects derived from user generated contents could be used as a matrix factorization model [2]. They just concentrate on the choice for brand or segment purchases based on a trained classificatory that cannot be extended explicitly to the recommendation of our cold start product. In comparison with the various features discussed in our approach, their features only

  

include gender, age and face book loves. The participants do not recognize the possibility for transferring heterogeneous data from social media networks in a manner that is ready for use on the e-commerce side.

## III. PRAPOSED METHODOLOGIES:

We research a fascinating issue of suggesting e-commerce goods for consumers on websites that have no previous buying histories, i.e. in "cold-start" scenarios. We named the cold-start product advice for this issue around the website. Only the social networking information is accessible to the consumers in our problem environment, and it is a difficult challenge to transform information for Social Networking into latent functions that can easily be used for product suggestion. In order to tackle this problem, we suggest that connected users through websites and e-commerce websites (users of social networking profiles and e-commerce buys) can be used as a bridge to chart latent product recommendation functionality for social networking users [3][4]. In fact, our proposed architecture addresses the issue of cold started product cross-site recommendations effectively. We conclude that both science and industry will have a profound effect in our report. We are formulating a new issue of recommending goods to social networking users in "cold-start" scenarios from an e-commerce platform. It was rarely previously researched to the best of our understanding. For consumers and for goods from data obtained on e-commerce web sites, the recurrent neural networks would be used to learn linked feature representations.

## IV. ENHANCED SYSTEM:

We are developing the framework module Online Social Networking (OSN). The online social networking feature allows us to develop the framework. Where this module is used for new user logins and the users can login with their authentication after registrations. If messages can be sent to private and public after the current users, options are created [5]. Users will share their posts with others as well. The user will look for other user accounts and public messages. Users will accept friend requests and submit them with this module. The feature selection is developed for Microblogging. Prepare a list of possibly helpful microblogging features and create a vector for each connected user for microblogging. Generate distributed functional representations by in-depth learning from all members of the website. Learn the mapping algorithm, which in the second step converts the data on the microblogging attribute into the distributed function representations. It employs all related users as training data for the function representation pairs. We used a local host ecommerce dataset containing several records of user transactions. A user ID, a commodity ID and a buy timestamp are used with any transaction log. First, we collect transactions through user IDs and then get a list of the items bought for each user. The integration models that can be configured to two basic architectures, respectively CBOW and Skip-gram are essential for our methods [6]. Empirically, we use these two architectures to test the effects of our colder approach and found that the efficiency of Skip-gram is much less than CBOW.

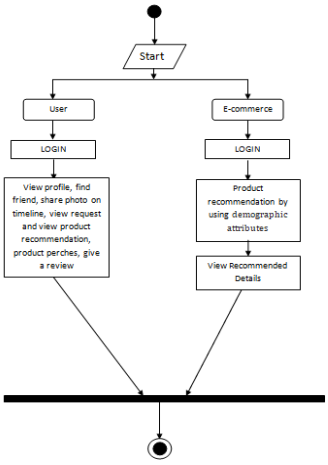


**Fig 1: System Design**

## V. CONCLUSIONS:

We are mainly concerned that, through feature learning with recurrent neural networks, users and products can be represented in the same latent space on e-commerce websites. Using a collection of connected users around eCommerce websites as a bridge, we can use a tweaked gradient boosting approach to draw users attributes derived from social networking platforms into feature representations learned from ecommerce websites.

## REFERENCES:

[1] W. X. Zhao, Y. Guo, Y. He, H. Jiang, Y. Wu, and X. Li, "We know what you want to buy: A demographic-based system for product recommendation on microblogs," in Proc. 20th ACM SIGKDD Int. Conf. Knowl. Discovery Data Mining, 2014, pp. 1935–1944.

[2] J. Wang, W. X. Zhao, Y. He, and X. Li, "Leveraging product adopter information from online reviews for product recommendation," in Proc. 9th Int. AAAI Conf. Web Social Media, 2015, pp. 464–472.

[3] Y. Seroussi, F. Bohnert, and I. Zukerman, "Personalised rating prediction for new users using latent factor models," in Proc.

  

22nd ACM Conf. Hypertext Hypermedia, 2011, pp. 47–56.

[4] T. Mikolov, I. Sutskever, K. Chen, G. S. Corrado, and J. Dean, "Distributed representations of words and phrases and their compositionality," in Proc. Adv. Neural Inf. Process. Syst., 2013, pp. 3111–3119.

[5] Q. V. Le and T. Mikolov, "Distributed representations of sentences and documents," CoRR, vol. abs/1405.4053, 2014.

[6] J. Lin, K. Sugiyama, M. Kan, and T. Chua, "Addressing cold-start in app recommendation: Latent user models constructed from twitter followers," in Proc. 36th Annu. Int. ACM SIGIR Conf. Res. Develop. Inf. Retrieval, 2013, pp. 283–292.

  