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Video Promotion On Cross Platform Network

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Abstract: Nowadays online videos can be accessed from far beyond the internal mechanisms of the video sharing portals, such as internal search. Recent studies have found that external referrers, such as external search engines and other social media websites arise to be the new and important portals to lead users to online videos. In this paper, we introduce a cross-platform network to help drive the online traffic for given videos in traditional video portal. External platform are used to promote and engage with the audiences and distinguished itself with significant information propagation efficiency. In this paper, traditional username and password authentication verification is implemented. In cross platform, we develop different platforms and Videos are uploaded to these different platforms through the Video Uploading phase we can upload either same or different videos. Here we store the video as frame by using a video to frame converter. Also we can handle the memory management efficiently by use a pixel based matching algorithm for matching each video frames and to avoid the duplication of videos.

Index Terms: video promotion, cross-platform network, social media, pixel based matching algorithm, video to frame converter.

I. Introduction

The emergence and rapid proliferation of various social media networks have reshaped the way how video contents are generated, distributed and consumed in traditional video sharing portals. Nowadays, online videos can be accessed from far beyond the internal mechanisms of the video sharing portals, such as internal search and front page highlight. Recent studies have found that external referrers, such as external search engines and other social media websites arise to be the new and important portals to lead users to online videos. To establish a reasonable cross-network association between social media websites i.e. the fact that the same individual usually involves with different social media networks and different social media networks share remarkable percentage of overlapped users. If we know different users who show interest to a given video (e.g., upload, favourite, add to playlist), it is confident to identify the video that will be already uploaded by the same person in different social media networks and it will reduce the memory consumption. Therefore, introducing a brand new way to establish the cross-network association by leveraging the collective intelligence of the observed overlapped users. The aim of the paper is to create a cross network association for identifying the overlapped users. Identify all the videos in a social media network and there by avoid duplication in a video content. In recent years massive videos generated in social media websites, it exhibits limited propagation efficiency with the internal video-centric mechanisms and many high quality videos may remain unknown to the wide public. Most videos have a short active life span, receiving half of the total views in the first 6 days after being published, and with fewer and fewer access there after. The key lies in how to establish a reasonable cross-network association between social media network. Inspired by the fact that the same individual usually involves with different social media networks and different social media networks share remarkable percentage of overlapped users. Since social media network generally distributes on specific semantic level, a direct way to associate the social media website is from the content level where them association. However, this kind of association can only capture the semantic correlation between the two spaces and still suffers from the discrepancy issue in topic granularity. Therefore, we also make further exploration with a more flexible and heterogeneous kind of association under which website video content. Introduce a new problem of websites promotion on other platform. There exist both trends and demands in exploring external referrers towards promoting social media content. A cross-network association-based solution framework is presented, under which different kinds of associations are explored and integrated. Alternative methods have been examined and we have introduced a novel and promising perspective by exploiting the overlapped users as bridge to obtain the association. To the best of our knowledge, this is the first attempt to mine the cross-network association under a user-bridged scheme. After the related studies in Section II, proposed methodology is discussed in Section III. Section III consists of user registration module, cross platform module, video uploading module, memory management module i.e.; first upload the videos into different cross platform. Video are uploaded to these

different platforms through the Video Uploading Module we can upload either same or different videos. Next we use a FFmpeg software library that is used to manipulate videos. Each uploaded video is then converted into frame using a video to frame converter here we use FFmpeg software library. Then in memory management module or in sample matching algorithm we use a pixel based matching algorithm for matching each video frames and to avoid the duplication of videos. Here the works as follows: find the width and height of each frames is compared and also the RGB component. In Section IV, the conclusion summarizes the paper.

II. Related Studies

This section reviews the related topics. Instead of a complete coverage, we only review the representative works in each topic, with the goal to position this work in the coordinate of existing works for better understanding the addressed problem and the proposed solution. With various social media networks growing in prominence, netizens are using a multitude of social media services for social connection and information sharing. Cross-network collaborative applications have recently attracted attentions. One line is on cross-network user modeling, which focuses on integrating various social media activities. In [1], the authors introduced a cold-start recommendation problem by aggregating user profiles in Flickr, Twitter and Delicious. Deng *et al.* has proposed a personalized YouTube video recommendation solution by incorporating user information from Twitter [10]. Another line is devoted to taking advantage of different social networks' characteristics towards collaborative applications. For example, Suman *et al.* exploited the real-time and socialized characteristics of the Twitter tweets to facilitate video applications in YouTube [30]. In [26], Twitter event detection is conducted by employing Wikipedia pages as the authoritative references. Our work belongs to the second line, where a collaborative application is designed to exploit the propagation efficiency of Twitter to meet the YouTube video promotion demand. As mentioned by Fabian Abel, Samur Araújo, Qi Gao, Geert-Jan Houben "Analyzing cross-system user modeling on the social web," analyze tag-based user profiles, which result from social tagging activities in Social Web systems and particularly in Flickr, Twitter and Delicious. Investigate the characteristics of tag-based user profiles within these systems, examine to what extent tag-based profiles of individual users overlap between the systems and identify significant benefits of cross-system user modeling by means of aggregating the different profiles of a same user. Presenting a set of cross-system user modeling strategies and evaluate their performance in generating valuable profiles in the context of tag and resource recommendations in Flickr, Twitter and Delicious. The evaluation shows that the cross-system user modeling strategies outperform other strategies significantly and have tremendous impact on the recommendation quality in cold-start settings where systems have sparse information about their users. As mentioned by S. Bhagat, A. Goyal, and L. V. Lakshmanan, Maximizing product adoption in social networks, "One of the key objectives of viral marketing is to identify a small set of users in a social network, who when convinced to adopt a product will influence others in the network leading to a large number of adoptions in an expected sense. The seminal work of Kemp approaches this as the problem of influence maximization. This and other previous papers tacitly assume that a user who is influenced (or, informed) about a product necessarily adopts the product and encourages her friends to adopt it. However, an influenced user may not adopt the product herself, and yet form an opinion based on the experiences of her friends, and share this opinion with others. Furthermore, a user who adopts the product may not like the product and hence not encourage her friends to adopt it to the same extent as another user who adopted and liked the product. This is independent of the extent to which those friends are influenced by her. Previous works do not account for these phenomena. Proposing a model that factor in a user's experience (or projected experience) with a product. Adapt the classical Linear Threshold (LT) propagation model by defining an objective function that explicitly captures product adoption, as opposed to influence.

III. Proposed Methodology

In this section proposed system is explained. The key lies in how to establish a reasonable cross-network association between different platforms. Inspired by the fact that the same individual usually involves with different social media networks and different social media networks share remarkable percentage of overlapped users 3, if we know the corresponding accounts of users who show interest to a given video (e.g., upload, favorite, add to playlist). Therefore, we propose a brand new way to establish the cross-network association by leveraging the collective intelligence of the observed overlapped users. Since video generally distributes on specific semantic level, a direct way to associate the different platform spaces is from the content level where the video content and users' generated tweets are used to capture the association. However, this kind of association can only capture the semantic correlation between the two spaces and still suffers from the discrepancy issue in topic granularity. Therefore, we also make further exploration with a more flexible and heterogeneous kind of association under which the video content and the network structure of the users is correlated. In the proposed Architecture we first upload the videos into different cross platform. Each uploaded video is then converted into frame using a video to frame converter here we use FFmpeg software library. For example if a video is uploaded by website 1, then the same video is uploaded by website 2 then we compare

these two algorithm with the help of matching algorithm. If the new video is unique then we store it into the datastore else we update with the existing one. The main Implementation Modules are user registration module, cross platform module, video uploading module, memory management module. Each modules performs it own operations. In the first module traditional username and password authentication verification is implemented. In cross platform module we develop different platforms. Video are uploaded to these different platforms through the Video Uploading Module we can upload either same or different videos. Here we store the video as frame by using a video to frame converter. Then in memory management module we use a pixel based matching algorithm for matching each video frames and to avoid the duplication of videos.

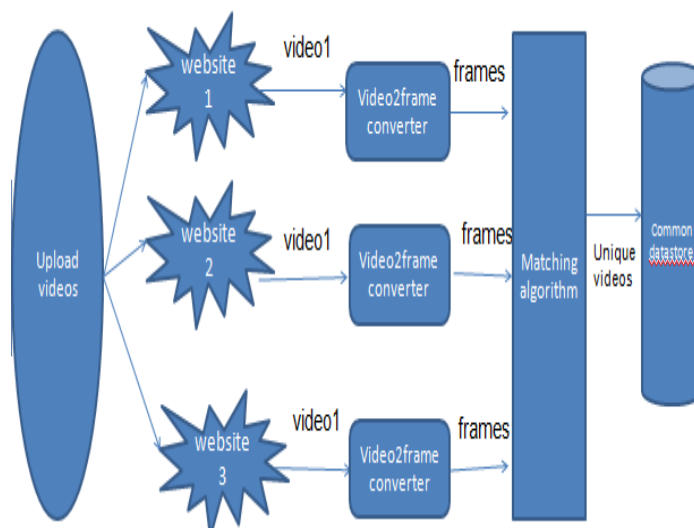


Figure 1: Proposed Architecture

STEP 1: USER AUTHENTICATION

Here traditional username and password authentication verification is implemented. This is done by Login and Registration mechanism.

STEP 2: UPLOADING VIDEO TO DIFFERENT PLATFORM

Here we first upload the videos into different cross platform. Video are uploaded to these different platforms through the Video Uploading Module we can upload either same or different videos. The uploaded can be any size and support format are mp4,kb,mp3. Here videos are uploaded to each platform through our user browser.

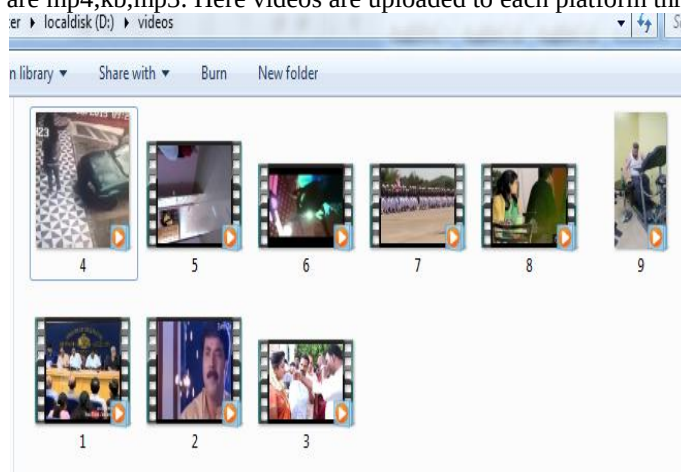


Figure 2: Uploaded Video

STEP 3: VIDEO TO FRAME CONVERTER

Here we use a FFMPEG software library that is used to manipulate videos .Each uploaded video is then converted into frame using a video to frame converter here we use FFMPEG software library.

STEP 4: SAMPLE MATCHING ALGORITHM

Then in memory management module or in sample matching algorithm we use a pixel based matching algorithm for mathching each videoframes and to avoid the duplication of videos. Here the works as follows:

find the width and height of each frames is compared and also the RGB component. For example if a video is uploaded by website 1 ,then the same video is uploaded by website 2 then we compare these two algorithm with the help of matching algorithm. If the new video is unique then we store it into the datastore else we update with the existing one.

FRAME_MATCHING ALGORITHM

1. Initially set key frames=empty ,temp frames=empty
2. Upload video to website
 - a. Perform Video2Frame_Conversion
 - b. Frames temporarily stored in the temp frames
 - c. Compare Key frames and temp frames
 - d. If matching ratio=0 video is new
 - i. Add frames to Key frames
 - e. Else video is existing
 - i. Remove frames from temp frame
 - ii. Set a reference pointer to first uploaded website by any user
 - f. End
3. End

Sample matching algorithm

IV. EXPERIMENTAL RESULTS

Using the cross platform online videos can be accessed from far beyond the internal mechanisms of the video sharing portals, such as internal search. Recent studies have found that external referrers, such as external search engines and other social media websites arise to be the new and important portals to lead users to online videos. In this paper, introduce a novel cross-network collaborative application to help drive the online traffic for given videos in traditional video portal. External platform are used to promote and engage with the audiences and distinguished itself with significant information propagation efficiency. A performance evaluation is done between the Existing and the proposed system. The elapsed time or the run time for existing system is large because it doesn't perform the memory management module and sample matching module. For our System they use these module hence the proposed system achieve efficient runtime. The elapsed time for three runtime execution for same video in different site is shown in the graph.

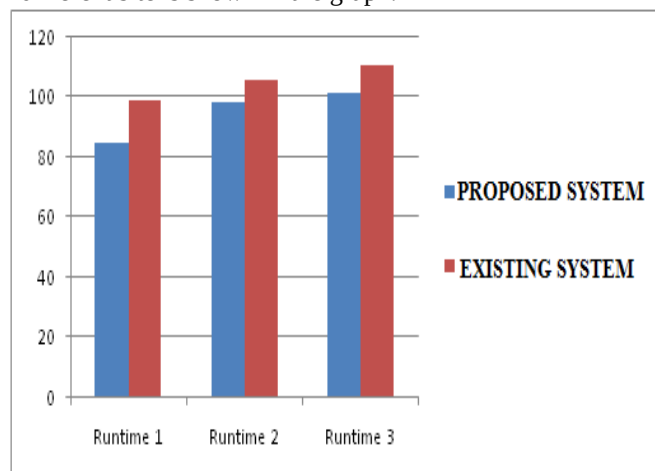


Figure 3: Performance evaluation

Figure 3 represent the performance evaluation of three different social media sites which indicate the different run time.

V. Result



Figure 4 Video uploading

Figure 4 shows the result of a proposed system, we can upload the video in different 3 sites and the video can be stored on the database. If one person can upload the video in one site and the same people can the video in another website, in this case normally the database stores the two video independently. In such a situation there is a duplication take place in the database. The proposed system avoid the duplication in database and it manage the storage memory by implementing video matching algorithm, In video matching algorithm it check whether the given video is uploaded already or not. If the video is already uploaded we copy the already existing video from the database.

VI. CONCLUSION

An overlapped user-based association solution framework, to address the cross platform network social websites video promotion problem. To better capture the cross platform network association from different perspectives. Alternative methods have been developed and evaluated, to demonstrate the effectiveness of exploiting user collaboration towards heterogeneous knowledge association. The proposed framework is quite flexible, and can be generalized to other cross-network collaborative problems. A cross platform network association helps to coordinate different accounts of a unique user video segmentation algorithm and Video Comparison algorithm helps to avoiding replication of video. A common data store is used for memory management in network.

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