

Measurement Study of Video Quality Using Users Feedback

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ABSTRACT

This paper, we analyse users' viewing behaviour and video quality. Understanding user viewing patterns, video popularity and video quality is important to design a VoD system. However, it is still lack of understanding in how users watch video and how the viewing depends on video quality. In this system we provide the quality video to users. Also gives facility to user for comment and feedback on that video quality many more. Feedback is more important factor for improving video quality. Authority person have access to check all details for providing the users on video watching quality.

Keywords: Video Quality, User Behaviour, Video Popularity.

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I. INTRODUCTION

Video content constitutes a dominant fraction of Internet traffic today. Further, several analysts forecast that this contribution is set to increase in the next few years. This trend is fueled by the ever decreasing cost of content delivery and the emergence of new subscription- and ad-based business models. In the spirit of Herbert Simon's articulation of attention eco-nomics, the overabundance of video content increases the onus on content providers to maximize their ability to attract users' attentions.

This knowledge can help providers to better invest their network and server resources toward optimizing the quality metrics that really matter. Thus, we would like to answer fundamental questions such as:

1. How much does quality matter?
2. Impact of the user watching video with feedback?

This paper is a step toward answering these questions. We do so using a dataset which is unique in two respects:

1. Client-side:
We measure a range of video quality metrics using

lightweight client-side instrumentation. This provides the facility to put the comment of feedback on that video.

2. Scale:

We present summary results from over 2 million unique views from over 1 million viewers. The videos span several popular mainstream content providers and thus representative of Internet video traffic today.

II. LITERATURE SURVEY

The It is commonly understood that VoD service on mobile device and that on non-mobile device are different in many aspects, such as user behavior, access pattern and network interface. Based on the data collected from a real mobile VoD system, we conducted a detailed measurement study for the system. Unlike other studies of VoD service, we focused on distinguishing different types of mobile devices in terms of user interests, user engagement level and QoE evaluation. Our work shows that it is valuable for service providers to understand the

dissimilarities and make differentiation for VoD service to different types of mobile devices.

Besides, for the measured system, we noticed the serious level of data waste caused by the Early Departure Behavior of users. By comparing the wastes under different downloading strategies, we also showed that there exists improvement room for the data waste problem.

III. PROJECT OBJECTIVE

1) Data Collection

In our study, the data is collected from server side i.e. uploaded by authority person.

2) Data Overview

Each viewing record we collected contains multiple data fields. Users can view the video on user's panel and check the quality of video.

3) Video Set

Different types of video set are uploaded by authority person for increasing the popularity as well as measurement study of video quality.

4) Video Popularity

Video Popularity is proven to be an important factor for consideration in designing content replication strategy. It can help to predict the demand pattern for videos. The popularity value is usually calculated by ,

- 1) ordering all videos by their viewing counts in a past period;
- 2) Users can put the feedback on video quality.

IV. SYSTEM ARCHITECTURE

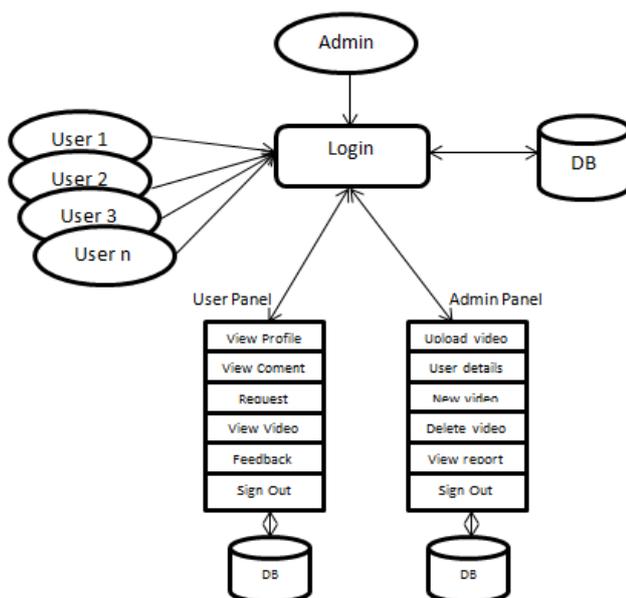


Fig. 1: System Architecture

Fig1 shows that the group of users can check the video uploaded by authority person. For users entertainments. But sometimes users cannot get the better quality of video. So this paper proposed the new concept regarding video quality. Proposed system can measure the video quality from users feedback or comment. Users can also facility to request the better quality video to the server.

Database:

In back end video is stored by authorised person. To display the number of user.

Server:

Server is the interface between users and database. Server can provide the communication link between number of users and fetching the data from database.

V. CONCLUSION

We present the measurement study of video quality by searching the users. Also provide the feedback option on user's side for improving better quality video. In the course of our analysis, we also learned two cautionary lessons that more broadly apply to measurement studies of this video quality: the importance of using multiple complementary analysis techniques when dealing with large datasets and the importance of backing these statistical techniques with system-level and user con-text. We believe our study is a significant step toward an ultimate vision of developing a unified quality index for Internet video.

REFERENCES

[1] Lei Zhan, Dah Ming Chiu, Youwei Huat and Zirong Zhu." A Measurement Study of Mobile Video Streaming by Different Types of Devices" ,IEEE,2015

[2] Cisco visual networking index: Global mobile data traffic forecast update, 2013-2018. In Technical report, Cisco, Feb 2014.

[3] A. Balachandran, V. Sekar, A. Akella, S. Seshan, I. Stoica, and H. Zhang. Developing a predictive model of quality of experience for internet video. In Proceedings of the ACM SIGCOMM 2013 Conference on SIGCOMM, SIGCOMM '13.

[4] N. Balasubramanian, A. Balasubramanian, and A. Venkataramani. Energy consumption in mobile phones: A measurement study and implications for network applications. In Proceedings of the 9th ACM SIGCOMM Conference on Internet Measurement Conference.

ce.

[5] L. Chen, Y. Zhou, and D. M. Chiu. Video browsing - a study of user behavior in online vod services. In Computer Communications and Networks (ICCCN), 2013 22nd International Conference on Computer Communications and Networks, 2013.

[6] F. Dobrian, V. Sekar, A. Awan, I. Stoica, D. Joseph, A. Ganjam, J. Zhan, and H. Zhang. Understanding the impact of video quality on user engagement. In Proceedings of the ACM SIGCOMM 2011 Conference, SIGCOMM '11.

[7] A. Finamore, M. Mellia, M. M. Munafo, R. Torres, and S. G. Rao. Youtube everywhere: Impact of device and infrastructure synergies on user experience. In Proceedings of the 2011 ACM SIGCOMM Conference on Internet Measurement Conference, IMC '11.

[8] M. A. Hoque, M. Siekkinen, and J. K. Nurminen. Using crowd-sourced viewing statistics to save energy in wireless video streaming. In Proceedings of the 19th Annual International Conference on Mobile Computing & Networking, MobiCom '13.

[9] M. G. Kendall. A new measure of rank correlation. In *Biometrika*, Vol. 30, No. 112, pages 81-93, 1938.

[10] Z. Li, J. Lin, M.-I. Akodjenou, G. Xie, M. A. Kaafar, Y. Jin, and G. Pengo. Watching videos from everywhere: A study of the pptv mobile vod system. In Proceedings of the 2012 ACM Conference on Internet Measurement Conference, IMC '12.

[11] F. Qian, Z. Wang, A. Gerber, Z. Mao, S. Sen, and O. Spatscheck. Top: Tail optimization protocol for cellular radio resource allocation. In *Network Protocols (ICNP)*, 2010.