Engagement dynamics and sensitivity analysis of YouTube videos

Abstract

The video view count is a key metric of the measureof popularity or "user engagement" of a video and themetric by which YouTube pays the content providers. The YouTube social network contains over 1 billion userswho collectively watch millions of hours of YouTube videosand generate billions of views every day. Additionally, usersupload over 300 hours of video content every minute.YouTube generates billions in revenue through advertisingand through the Partner program shares the revenue withthe content creators.

Existing System:

The study of popularity of YouTube videos based on meta-level features is a challenging problem given the diversity\ of users and content providers. Several models on characterizing the popularity of YouTube videos are parametric in form, where the view count time series is used to estimate the model parameters. The popularity of videos also depends on the social dynamics, i.e. the interaction of the content creators (or channels) with YouTube users. YouTube also has a social network layer on top of its media content to get popularity. Does not allow the classification of a videos view count dynamics which results from subscribers, migration, and exogenous events. By this popularity of YouTube channels will be low and interaction of users is not good with the YouTube channels.

Disadvantages:

- Less interaction about YouTube channels to users.
- No optimization of Meta data after video is posted
- Less popularity of videos and channel.
- Does not allow the classification of a videos view count dynamics which results from subscribers, migration, and exogenous events.

Proposed system:

In this paper, we conducted a data-driven study of YouTube based on a large dataset. We investigate the sensitivity of the videos meta-level features on the view counts of videos. It was found that the most important meta-level features include: first day view count, number of

subscribers, contrast of the video thumbnail, Google hits, number of keywords, video category, title length, and number of upper-case letters in the title respectively. Additionally, optimizing the meta-data after the video is posted improves the popularity of the video. The social dynamics also affects the popularity of the channel. Using the Granger causality test, we showed that the view count has a casual effect on the subscriber count of the channel. A generalized Gompertz model was also presented which can allow the classification of a videos view count dynamics which results from subscribers, migration, and exogenous events. This is an important model as it allows the views to be categorized as resulting from the video or from exogenous events which bring viewers to the video. It was found that going "off schedule" can actually increase the popularity of a channel.

Advantages

- User's interaction with YouTube channels is high.
- There is optimization of Meta data after video is posted
- Increases popularity of videos and channel.
- Allow the classification of a videos view count dynamics which results from subscribers, migration, and exogenous events.

SYSTEM REQUIREMENTS

H/W System Configuration:-

Processor	-	Pentium –III
RAM	-	256 MB (min)
Hard Disk	-	20 GB
Key Board	-	Standard Windows Keyboard
Mouse	-	Two or Three Button Mouse
Monitor	-	SVGA

S/W System Configuration:-

Operating System	:	Windows95/98/2000/XP
Application Server	:	Tomcat5.0/6.X
Front End	:	HTML, Jsp
Scripts	:	JavaScript.
Server side Script	:	Java Server Pages.
Database	:	MySQL 5.0
Database Connectivity	:	JDBC