

# Video Recommendation Based on User Preference on the Web

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## Introduction and Intention:

IPTV has arrived in the market as the next generation of Television. IPTV stands for Internet Protocol Television. Users who have IP functionality are able to watch TV wherever they are. As long as IPTV connects to Internet, video on the web could be a good resource to be used for an IPTV application. Although video is a good resource for IPTV, it is not easy for users to search for attractive videos from the web because of the sheer quantity of video resources. Each user has his/her own preference as well as interests, and expects to watch selected videos on the screen according to these preferences. There is no need to watch uninteresting videos anymore. This paper discusses making video recommendations based on the idea of using user preferences and interests on the web.



<Overall architecture for video recommendation on the web>

## Brief introduction to video recommendation process:

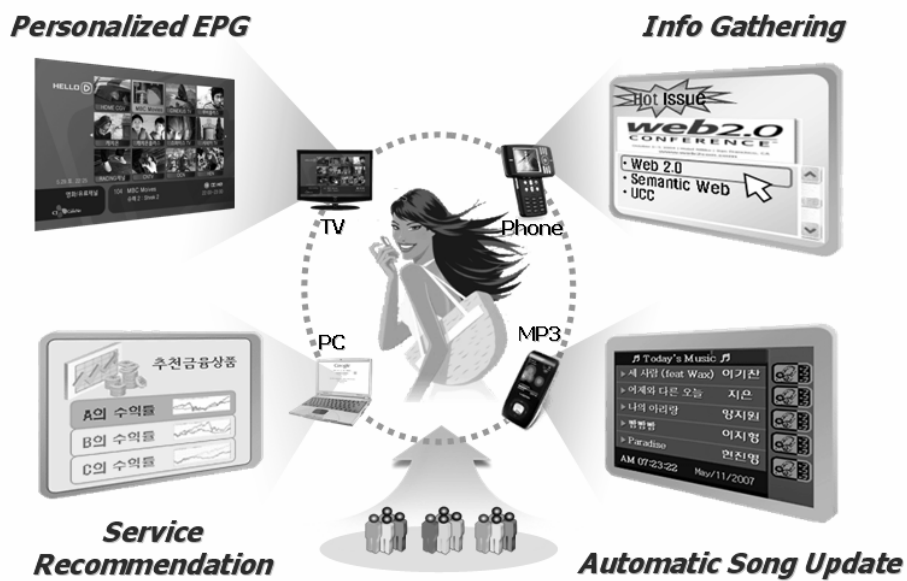
A brief description of a process flow for Video Recommendation on the Web according to user preference is as follows;

1. Video on the web is expanded to a new Video source according to user preference using metadata or descriptive information.
2. The new video source expanded by Step [1] is sent to a repository located in any server or client (in case of peer-to-peer communication), and then the repository manages to the video and retrieves user preferences from it. How to manage to the repository information is somewhat

problematic with respect to contents provider managed contents and needed to be considered from the business perspective.

3. Users can send their own preferences to the repository whenever available. There are several privacy problems by sending user information to a 3<sup>rd</sup> party, therefore security mechanisms must be used for those communications by default.
4. Given the preference information supplied by users, server/client can transmit the list of preferred video in specific users as well as filter out uninteresting videos not to be sent to users.

**What advantages we can expect:**



<Applicable use cases in conjunction with video recommendation>

- It can recommend preferred videos to each user according to his/her preference as well as need. At the same time, it can filter out unnecessary and uninteresting videos from user's point of view.
- It can be widely applied to various web applications such as audio, text, pictures, and all kinds of information on the web.
- It can be flexibly merged and leverage use of semantic web approach.

**Concluding remarks:**

“Video on the Web” is pretty much interesting in IPTV as well as various Consumer Electronics domains. So far, it is, however not easy for users to search for attractive videos from the web due to the sheer quantity of video resources on the web. Therefore, this paper proposed the new web architecture for video

recommendation based on the idea of using user preferences and interests on the web. Video recommendation based on user preference will expand the value of video on the web.