Multi-Screen Social TV over Cloud-Centric Media Platform

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ABSTRACT

Multi-screen social TV is an innovative application for transforming the traditional "laid-back" video watching behavior with the emerging "lean-forward" social network experience. In this video, we demonstrate a set of use cases in which the multi-screen social TV, developed over our patent-pending cloud-centric media platform, is leveraged to change the way we work, study and play in future.

Categories and Subject Descriptors

C.2 [**Computer-Communication Networks**]: Distributed Systems

Keywords

Social TV, Multi-Screen, Mobile Cloud Media

1. INTRODUCTION

The multi-screen Cloud Social TV would transform the traditional "laid-back" video watching with a "lean-forward" social networking experience, marrying TV to the social networking lifestyle of today. In this video clip, we illustrate a few use cases of multi-screen social TV, built upon our patent-pending cloud-centric media platform (CCMP), to understand its power in shaping the way we work, study and play in future. This system, upon its debut in 2012, has been featured in more than 1600 news articles from over 29 countries.

2. USER FEATURES FOR SOCIAL TV

In the cloud-centric media platform, we have implemented the following user features, as illustrated in Figure 1, including:

1. Content acquisition from diverse sources: the platform provides a "one-button" method, with flexible configuration capability, for the consumers to acquire video contents from different sources, including local

Figure 1: GUI for Multi-Screen Cloud Social TV

   DVRs, OTT content portals, shared resources from friend/family, and live TV streams.

2. Adaptive video streaming player: the video playback feature has self-adjusting capability to match the conditions in the network, screen size, content format, and user preference.

3. Communication by text, voice and video over private and public social networking: the platform allows the end users to communicate their friends from private group and public social networking profiles, while consuming the content of interest.

4. Video session migration across multiple screens: the platform leverages our proprietary video teleportation technique to enable the viewers to migrate video sessions across multiple screens with intuitive human-computer interaction (HCI) techniques, minimizing the learning process.

5. Collaborative content overlay: the system allows multiple viewers to edit the video program on the main screen collaboratively, and these changes are published for differentiated consumption.

3. CONCLUSIONS

This article presents the set of user features built into the cloud-centric media platform. We have designed and implemented an emerging multi-screen social TV application over the cloud-centric media platform, and the video clip illustrates potential use cases in changing the way we work, study and play.