1 Prepare group meeting presentation

to be presented on Nov. 16

2 Mobile Video Streaming

2.1 Codec 101

http://en.wikipedia.org/wiki/Codec http://en.wikipedia.org/wiki/List_of_open_source_codecs http://desktopvideo.about.com/od/glossary/g/codec.htm

2.2 SVC(Scalable Video Coding)

http://en.wikipedia.org/wiki/Scalable Video Coding

SVC is an extension of the H.264/AVC standard. With SVC, a scalable stream can provide adaptively different numbers of video layers to heterogeneous clients, according to the client's processing capability and available bandwidth.

2.3 Paper review

MMEDIA 2011: Context-Aware Scalable Multimedia Content Delivery Platform for Heterogeneous Mobile Devices

2.3.1 Summary

This paper aims to solve two major problems(to a certain extent) of multimedia delivery in heterogeneous mobile devices:

- 1. The network capacity limits the amount and the quality of multimedia content that can be made available to every user at each time slot.
- 2. It is difficult for the user to browse and search for the desired content from the huge multimedia database.

The proposed solution:

- 1. Using SVC and adaptive layered streaming approach
- 2. Utilizing context-aware personal content adaptation and efficient metadata processing to reduce the burden of user to navigate in media database

2.3.2 Strength

A Scalable Multimedia Platform is developed. It transforms the traditional non-scalable media content into a new mobile multimedia streaming solution: scalable media content + live layered streaming + server content management + client device decoder.

A proof-of-concept implementation of such platform(SMP) makes use of the context information for video recommendation service and to decide at the client side the number of scalable layers to be streamed.

2.3.3 Weakness

In the context discovery and personalization part, the author seems to consider too many factors to determine the user's context. The detailed scheme of how to use those factors to form the context information is not given.

The scalable multimedia platform proposed in this paper, which consists of Ingestion, Transcoding, Streaming, and Player modules, fails to describe the Ingestion part.