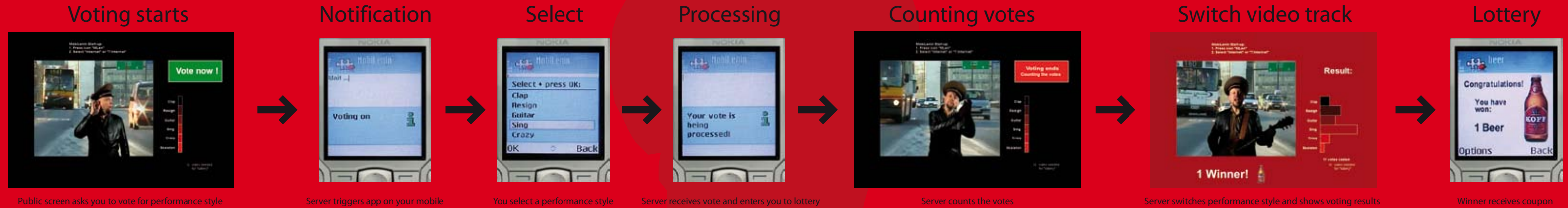


Mobile Group Interaction with Interactive Video on Large Public Display

Jürgen Scheible, University of Art and Design Helsinki, jscheib@uiah.fi Timo Ojala, University of Oulu, Finland, timo.ojala@ee.oulu.fi



The MobiLenin system allows a group of people to interact with an interactive music video on a large public display using their personal mobile phone.

The system provides enriched entertaining and social experiences, by combining the complementary strengths of a public display and a personal mobile phone.

How does the interaction work?

Using a custom application on his / her mobile phone, each user individually votes for one video track by selecting one of 6 choices from the phone's menu. The Server counts the votes and the track that has received most votes is shown.

Interactive music video

- Six linear tracks of exactly the same length played in parallel and in sync
- Each track with a different performance style of the music artist (ranging from instrumental to full scale singing to artist turning into a skeleton)
- One track visible at a time

Server driven voting mechanism

- Opening of pop-up notes and phone menu in each voting round is controlled by the server
- Communication between Mobile device and server via HTTP over mobile network (not SMS or MMS)

Large public display

- Serves as the main user interface for the user's interaction
- Shows the music video
- Indicates the start and end of a voting interval, the voting results
- Notifies the audience of somebody winning in the lottery

Personal mobile phone

- Allows anonymous and mobile participation in a joint social public group interaction
- It provides a reliable return channel for delivering confidential user-specific information to the user

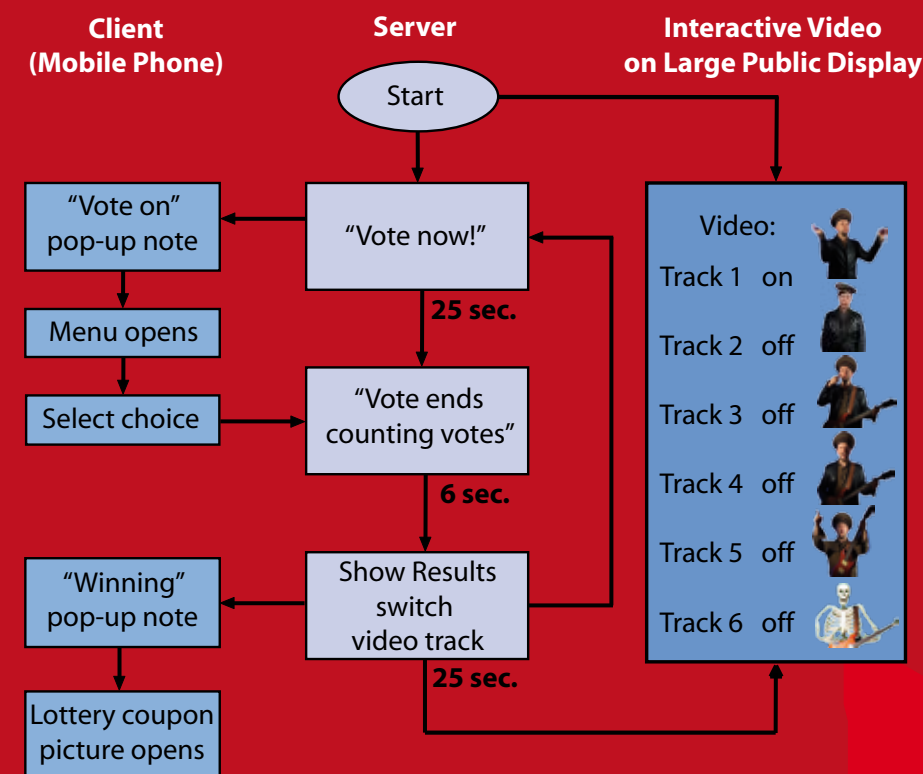
Hybrid interface for interaction

MobiLenin combines complementary strengths and weaknesses of:

- Public display - strong conceptual power, but limits interaction often to 1 user
- Mobile phone - disperses control and access, but has limited conceptual power

Client-Server architecture (multi-user)

1. Symbian client application running on the mobile phone, programmed with Python for Series 60
2. Server application running on a PC, programmed in Lingo
3. Large public display showing the interactive video



State diagram of the MobiLenin system

Strong social experience

Early field test in real world setting with small groups in a pub showed strong social experiences. Expressed by laughing, happy faces, good mood, celebrations upon winning in lottery.

Lottery mechanism - incentive for interaction

- The system can randomly choose a winner among the users having voted in a round.
- A coupon displaying a beer or pizza is sent to winner's phone

Successful field testing

- System is easy to use
- System enticed interaction with the display
- Clearness of what the system has to offer
- Interactive content - rich set of choices is needed
- System stimulated inter-personal social interaction

Future usage

The MobiLenin system could offer a new form of entertainment in pubs and other public places. Contents can be versatile, allowing dynamic choices over time.

