



# FROM TECHNOLOGY TO EXPERIENCE



NexTV: New media consumption in Extended interactive Television environment

The major objective of NexTV is to explore the potential of MPEG-4 technology for interactive television applications  
Two applications have been developed: myGuide en TOONS

## USE OF INTERACTIVE CONTENT: MYGUIDE



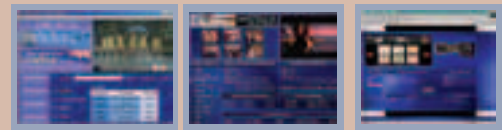
Delivery of interactive content

The myGuide application is an interactive programme guide for a general audience. The application provides personalized TV entertainment and information, integrates web and broadcast on the receiver, and provides E-commerce links via the TV.

Users can choose content from different service providers and of different formats. Broadcast/narrowcast and web content are seamlessly integrated at the client side. Different media formats are combined in myGuide and there are multiple concurrent providers for one client.

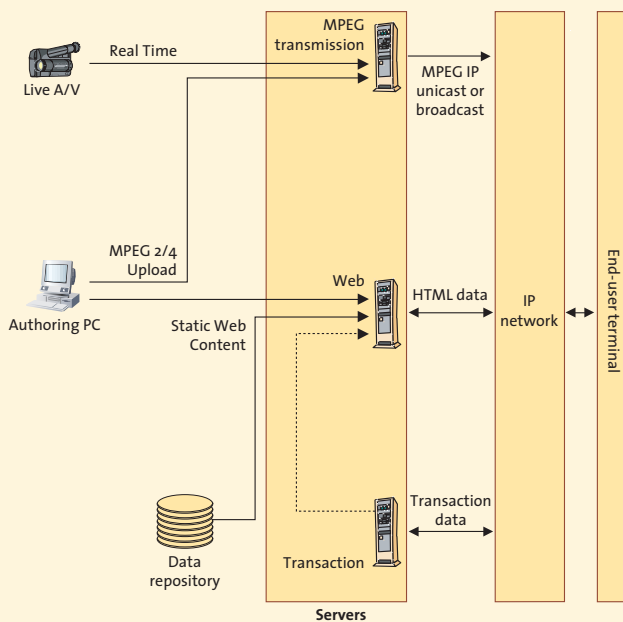


TV Virtual Shopping Centre



Fusion of Web and Broadcast

### MYGUIDE PLATFORM OVERVIEW



### BENEFITS - MYGUIDE

- Users have portals for accessing various services and content.
- Users of the interactive programme guide can receive:
  - information about schedules of programmes from third parties
  - personalized content based on their preferences
  - personal advertisement based on the programme that is being viewed
- Users can shop in the virtual shopping centre and communicate with sales agents via a back-channel.
- Efficient and timely delivery of services is accomplished by means of the seamlessly scene composition of MPEG-2-encoded and MPEG-4-encoded visual information.



Contact Person: Maddy D. Janse, Philips Research, Prof. Holstlaan 4, 5656 AA Eindhoven, The Netherlands, Email: maddy.janse@philips.com, Phone: +31 40 2742863, Fax: +31 40 2744918  
Public project website: <http://www.extra.research.philips.com/europrojects/nexTV>  
NexTV is an IST project (number 11288) sponsored by the European Union



# FROM TECHNOLOGY TO EXPERIENCE

NexTV: New media consumption in Extended interactive Television environment

The major objective of NexTV is to explore the potential of MPEG-4 technology for interactive television applications  
Two applications have been developed: myGuide en TOONS

## USE OF INTERACTIVE CONTENT: TOONS

The TOONS application is an interactive TV program for children aged 8 to 12 years old. It aims at engaging children in the process of telling and enriching stories through television broadcast by providing them with the means for *exploration, manipulation and creation of the content*.

The application was developed in an interactive process in which users provide the input for the development of the story. The story consists of different story elements, such as, decision points, story lines, and characters. The children can choose between these different story elements during the actual broadcast and create a story of their own liking. The effect for the children is:

**What you see is not what I see,  
but we receive the same programme**

The MPEG-4 representation of media objects makes it possible for end-users to interact with the content of TV programmes.

MPEG-4 scenes are composed of multiple media objects, for example, video, audio, animations and graphics. These building blocs together with scene descriptors specify the composition of a scene. This representation allows users to move objects around, modify attributes of objects such as color, or add and remove objects from the scene. The possibilities for this client-side interaction are numerous.

These properties of MPEG-4 were used in developing the components for the interactive story. Three components were developed each addressing a different aspect of the MPEG-4 representation. They provided the end-users with different possibilities for interacting with the story.

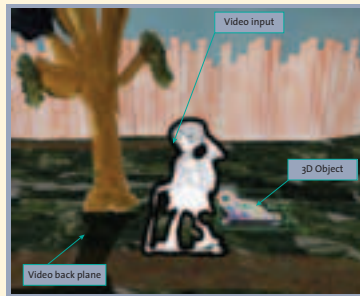
Choose an object to influence the storyline



Edit an object to select an emotion or mood for a specific character in the story

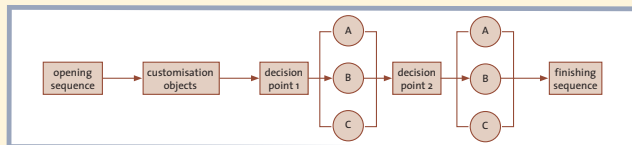


Add an object to be present in the story without influencing the storyline



The content for the story was build from MPEG-4 scenes, which were composed of different objects, for example, 3D objects and video back planes.

An interactive story, in contrast to conventional stories, has a non-linear narrative structure: there are multiple paths that the telling of the story can take, depending on the actions of the viewer. The structure for the Toons interactive story consisted of three different paths and decision points.



Story framework

Children need tangible interaction tools to interact with the onscreen objects and streams. They need to provide feed forward and feedback, be playful and can address different manipulation skills. For example, a PDA is used as bi-directional device, showing key frames from the scene and displaying possible choices. More toy-like is the 'Sticky-sticks' which addresses different motor skills of children who need to position magnets in a certain combination to trigger an event in the story.



Sticky-sticks



Contact Person: Maddy D. Janse, Philips Research, Prof. Holstlaan 4, 5656 AA Eindhoven, The Netherlands, Email: maddy.janse@philips.com, Phone: +31 40 2742863, Fax: +31 40 2744918  
Public project website: <http://www.extra.research.philips.com/europrojects/nexTV>  
NexTV is an IST project (number 11288) sponsored by the European Union