

# PHILIPS

## The Interactive User

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# Content

- Challenge
- Ingredients
- Application Flavours
- User requirements
- Conclusion

# Challenge

- What end-users *view*, *receive* and *retrieve* is determined by
  - what is produced and processed
  - in the end-to-end chain
- End-user experience is *key*
  - created by all stakeholders in the value chain
- *Learning curve* for all, also end-users

# User Experience is Key

Determined by the quality of the

- User interaction
  - Control over the content
  - Feedback in the user interface
  - Participation in the program content
  - Ability to produce something useful and fun
- Program and services



*Compelling* experiences rely on carefully *staged* presentation

# Application Ingredients

- Platform and tool technology
- Development of business models
- Content manipulation and enhancement
- Interaction possibilities for users

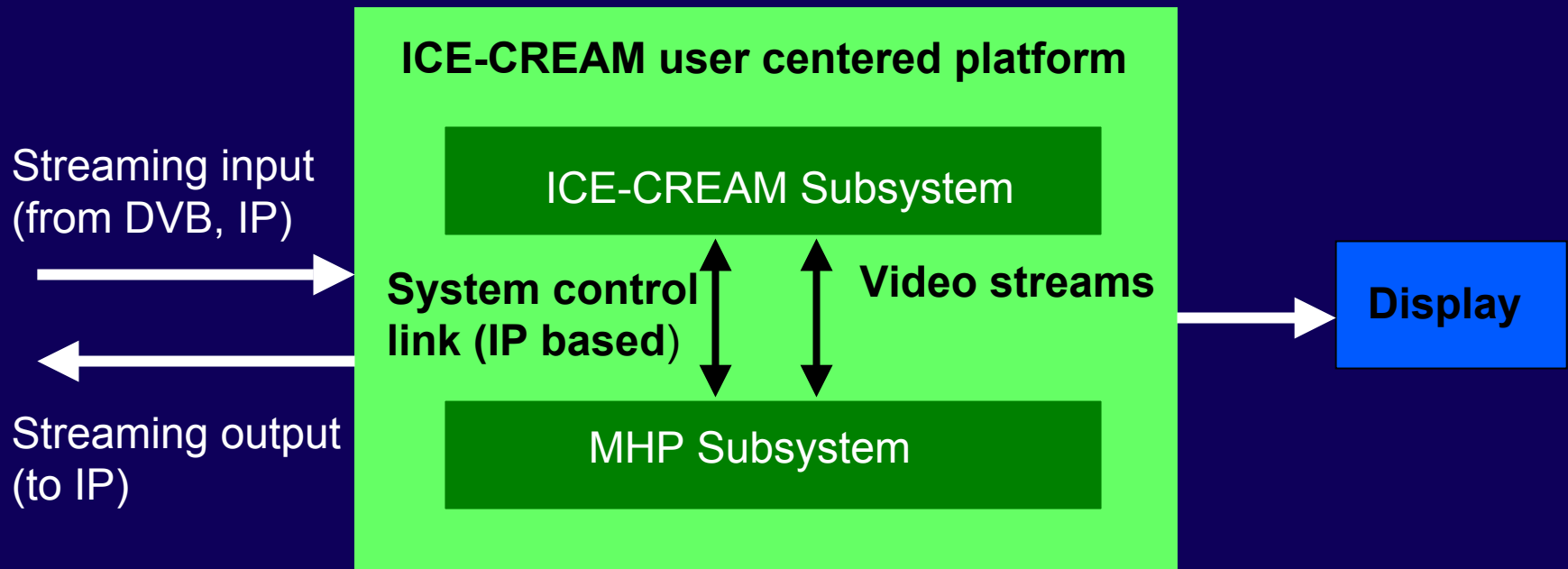


Different application flavours

# Platform and Tool Technology

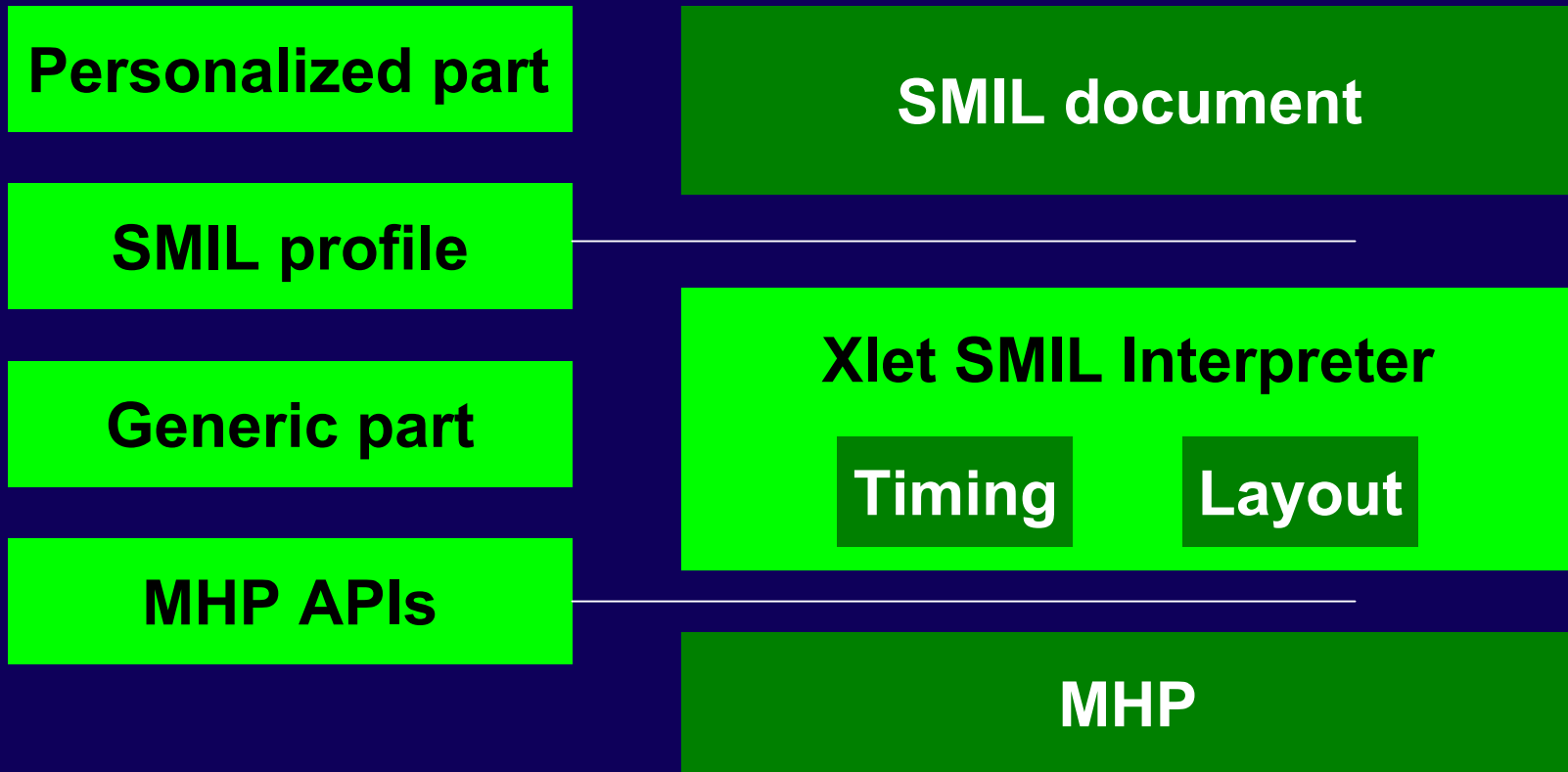
- Migration of DVB-MHP and MPEG-4
- Integration of Internet technologies
- Integration of 3D Graphics

# Platform and Tool Technology



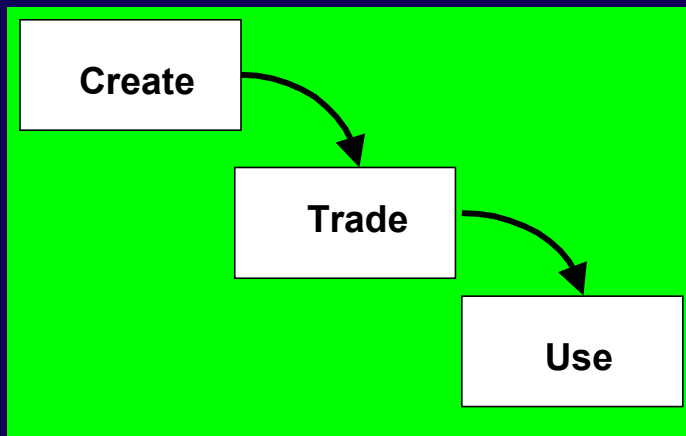
# Platform technology

## Integration of Internet technologies

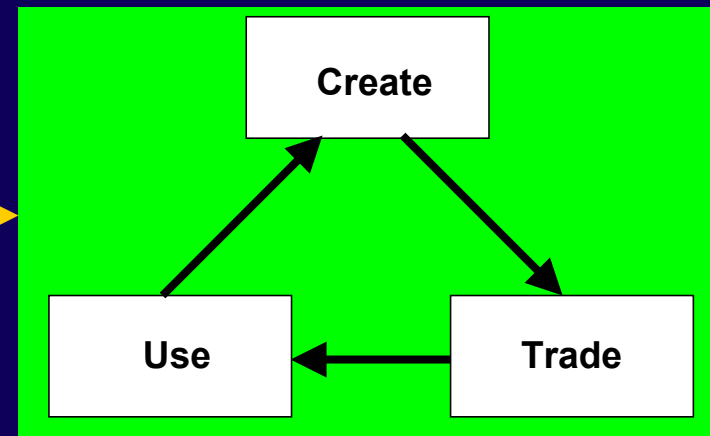


# Business Models

## Waterfall models



## Life-cycle models



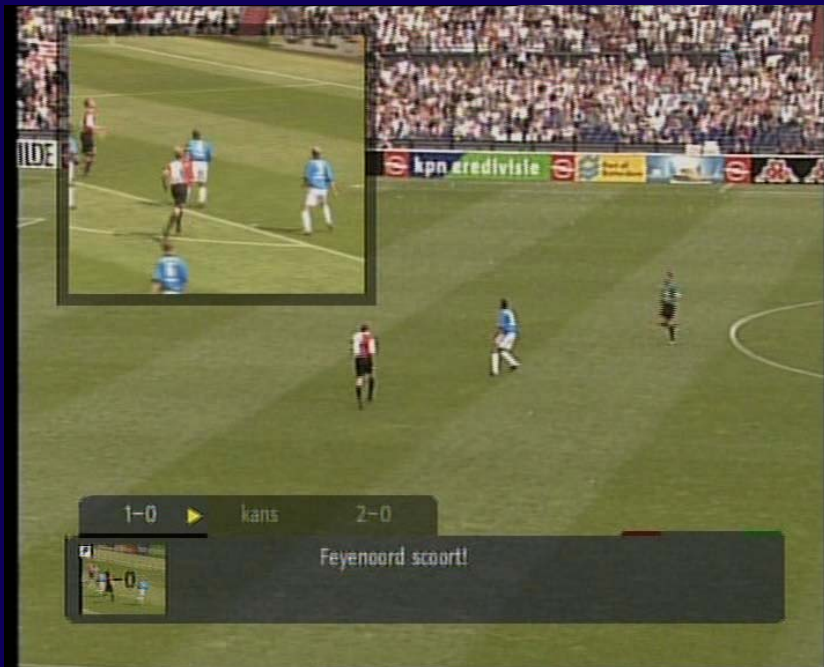
Driving forces:

Changing roles of stakeholders

Personalization of content

# Live Sports: Annotations, Analyses and Measurements

On demand data about  
Football players: cold statistics  
Game: hot statistics



# Compose your Program

Personalized content

Any combination of broadcast, local storage, Internet content

feature player:  
**The Loveparade in Berlin**  
 / Route and Location

Die Route ist dieselbe, wie im letzten Jahr.  
 Um 14 Uhr starten die Wagen vom Brandenburger Tor und vom Ernst-Reuter-Platz in Richtung Siegessäule.  
 Um 20 Uhr wird dann dort die Abschluss-Kundgebung stattfinden. Falls ihr noch mehr Orientierung braucht, werft einen Blick auf den Stadtplan

● turn PIP off  
 [OK] to selection screen

**The Loveparade in Berlin** - features: ◀ movie ▶ Interview ++ map ++

History of the Loveparade

press: ● view selection now ● mark selection for later  
 [OK] watch main programme ● mark whole topic for later

City travel video with info on attractions, tours, events, maps, ....

# But, what about our Users?

## Interactions between

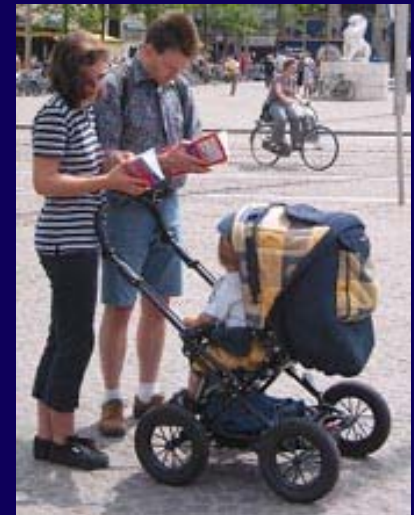
- User goals and requirements
- Content and its availability
- Appropriateness of display
- Usefulness
- Ease of use

—————→ Factorial explosion

# Where am I? Where shall I go? How do I get there? What to do there?



# Our Users...



## ...and Their Problems

Navigation with maps:

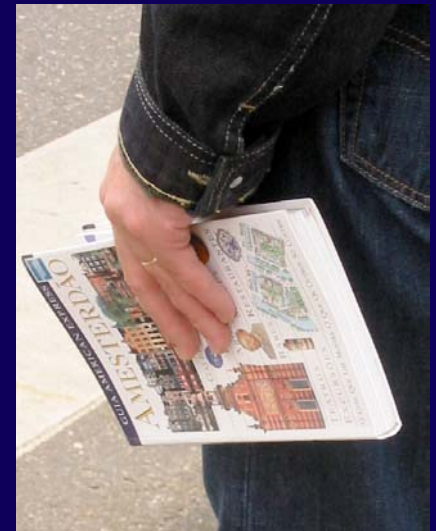
- find street names
- find current position
- need to fold/unfold a map

Using an electronic device:

- zoom in => destination is not visible
- no function supporting plan route
- don't show direction

Tour

- usually no plan



# Activities to Support

## Navigation:

- Get oriented in the town
- Find places  
(meeting points, hotel, station etc.)
- Find route
- Find own position on the map (with direction)
- Mark the places

## Information Support: Up-to-date, Location-Based

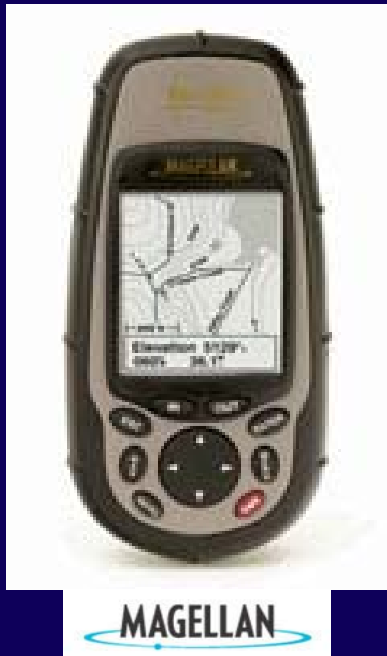
### Navigation

- Transport (Public)
- Map
  - Scale
  - Distance between places
- Streets
  - Tips: to walk or not

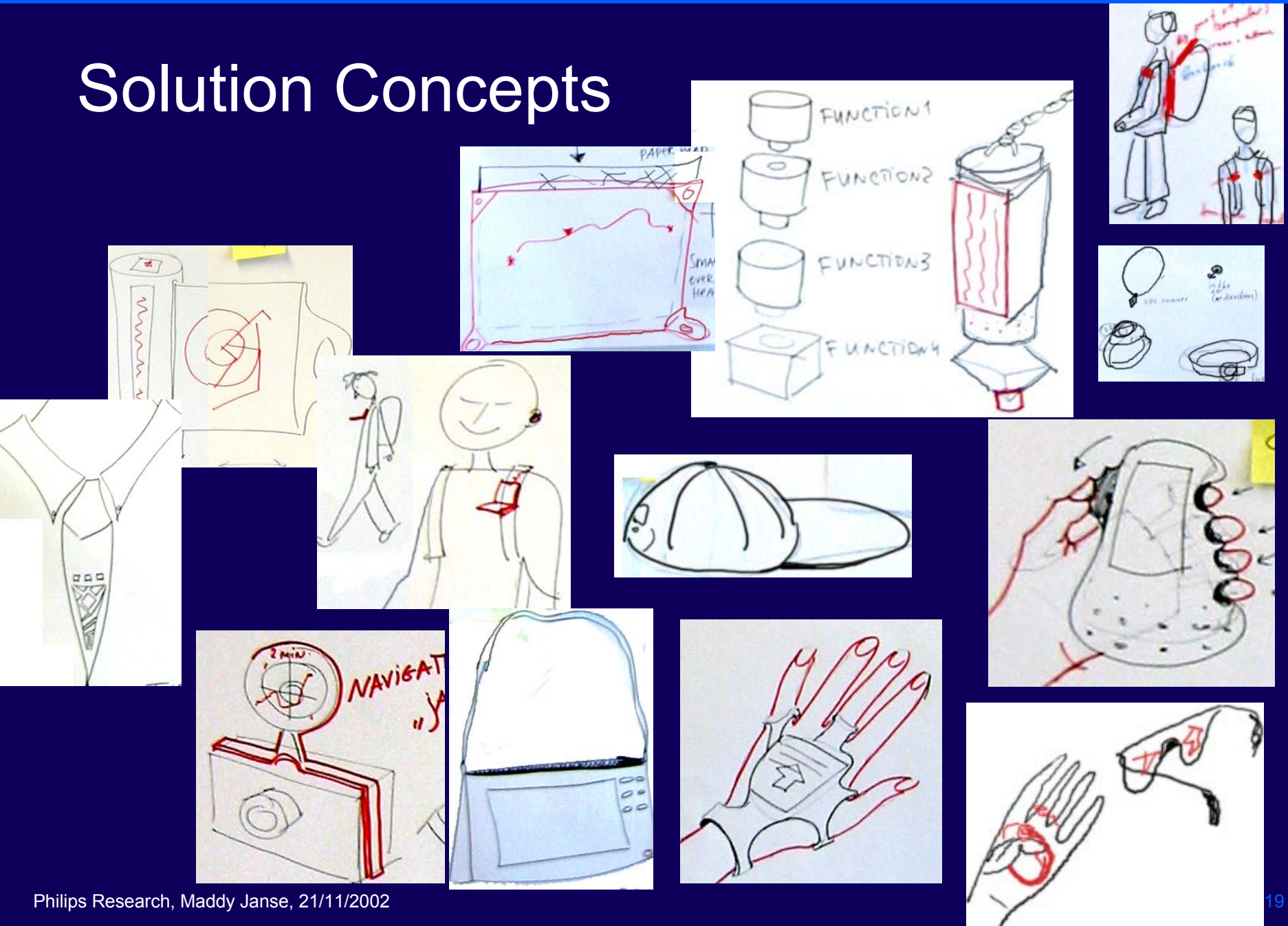
### Top ten places

- Information centers
- Hotels, restaurants, bars
- Currency exchange
- Places of interest
  - Landmarks, museums,
  - Shopping, markets

# Potential High-tech Systems & Devices

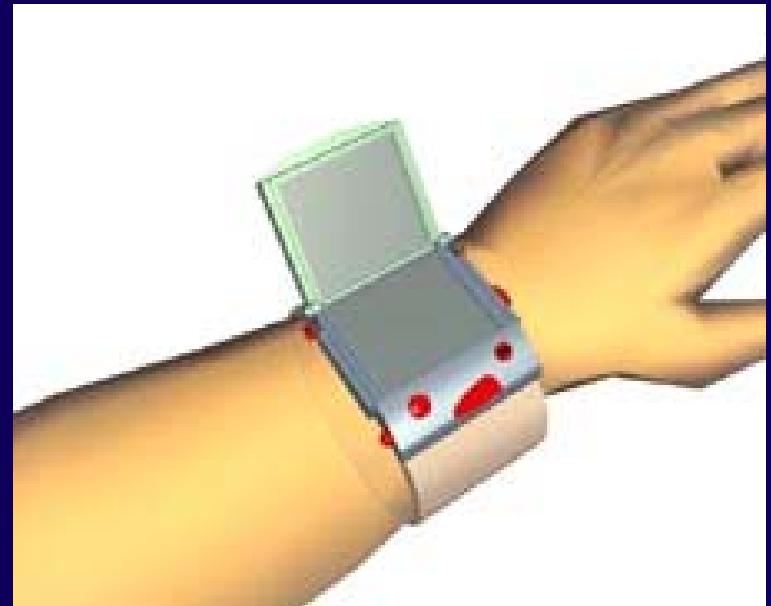


# Solution Concepts



# A Solution - "NaviPal"

Wrist-wearable device  
integrated GPS  
wireless Internet  
connection



# Evaluation: “NaviPal”

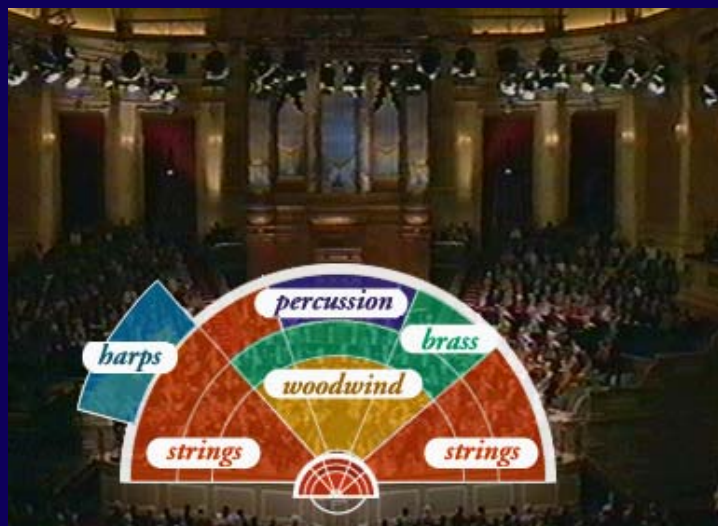
Paper prototypes  
Flash prototypes  
Experience prototype



# Bookmark and Retrieve Information

Trigg&link: Users react on profile-based visual & aural alerts to get enhancements – Alerts time out

Internet connectivity



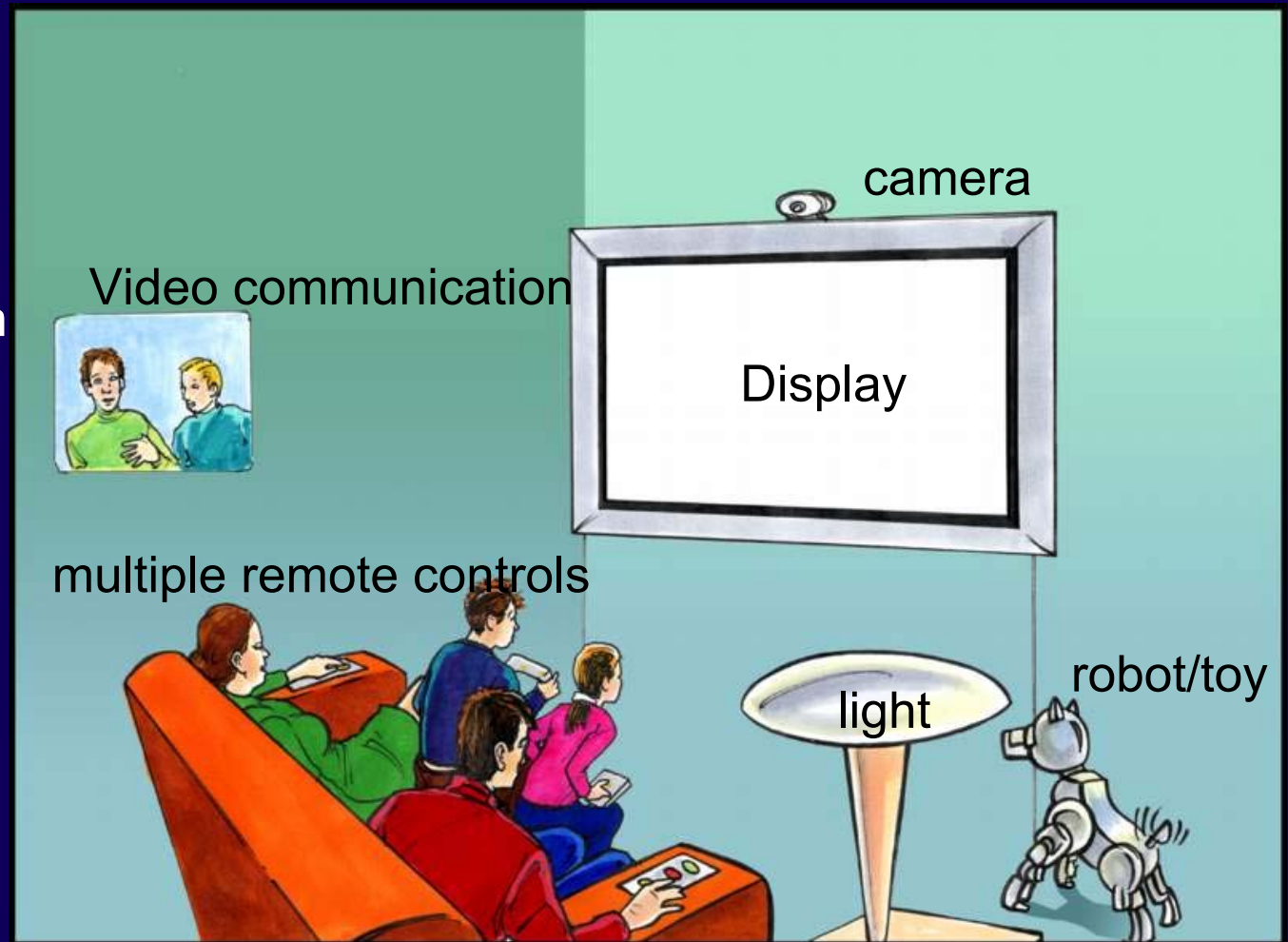
# Experience for 'All in the Family'

Cinema at home

Show interacts with  
Environment  
Objects

Multi-user

Multi-usage



# Different layers of interaction



Different layers of interaction

Fictional effects: 3D GFX, sound, text enhancements, stills, video streams

# Conclusion

- New ways for enjoying interactive media and services
  - From the user's perspective and environment
    - Extend the notion of interaction
    - Exploit domestic activities and the natural role of TV
    - Play and entertainment in the home context

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Tomorrow Focus



