

PHILIPS

End user development for
Consumer Electronics

Boris.de.Ruyter@philips.com

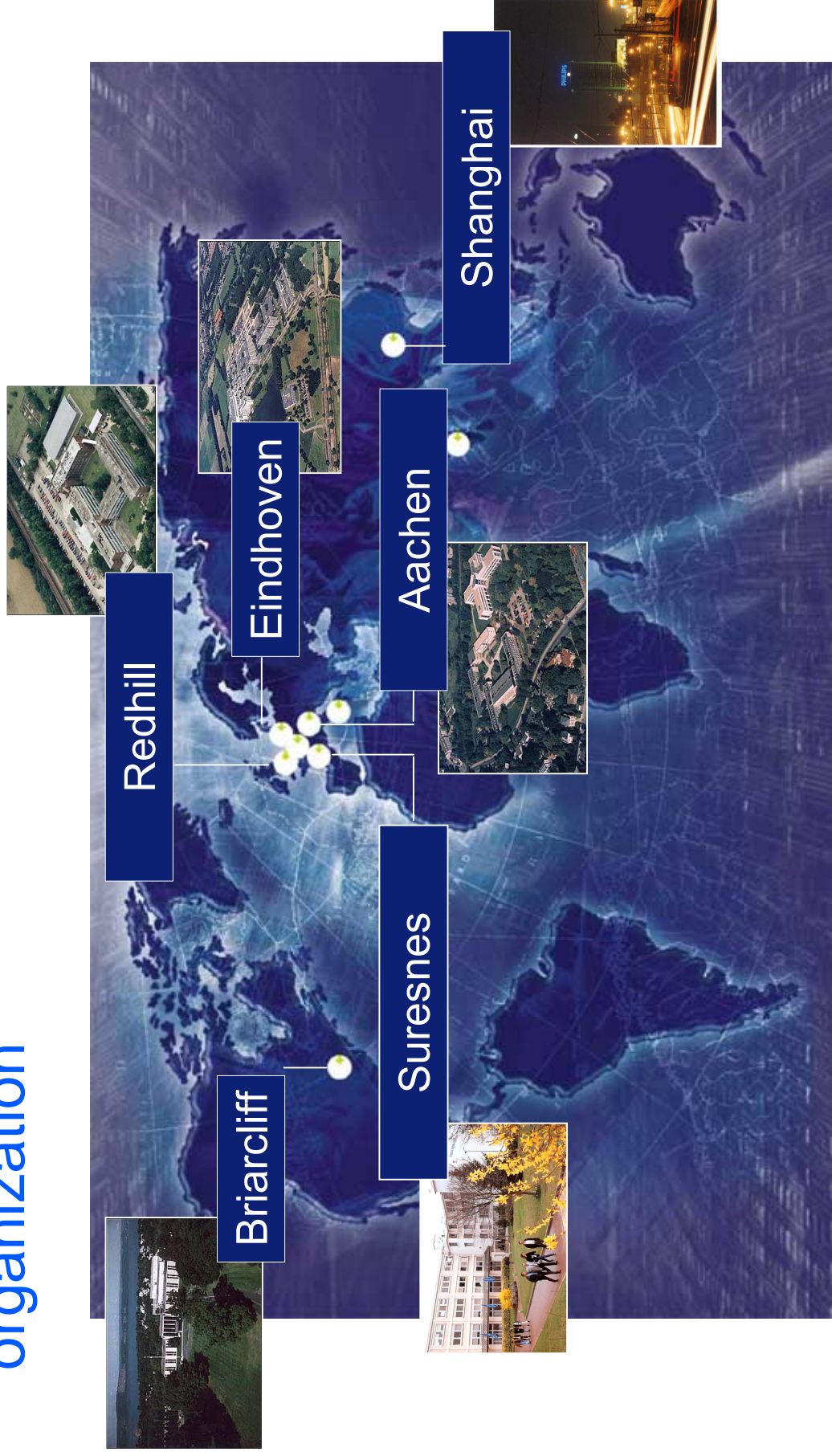
*Network of Excellence
on End-User Development*

EUD-NET workshop 23 & 24 September 2002

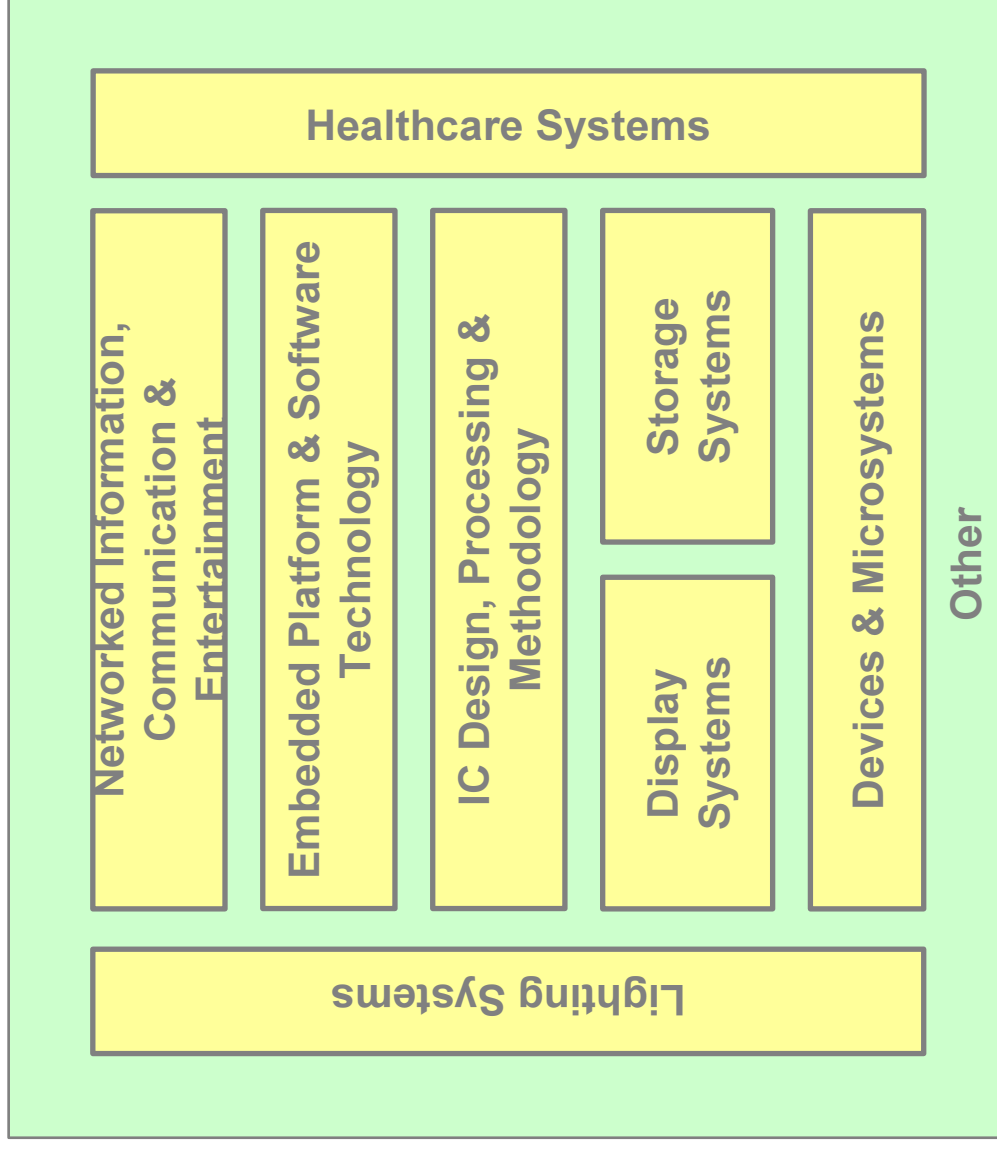
Overview

- Who we are
 - Organization
 - program
- The vision
- The trends
 - technology
 - convergence
- The challenges
 - Adaptive: intelligent devices
 - Personalized; composing experiences
 - Embedded: social devices

Philips Research organization



Philips Research program



The vision

- Ambient Intelligence refers to electronic environments that are sensitive and responsive to the presence of people

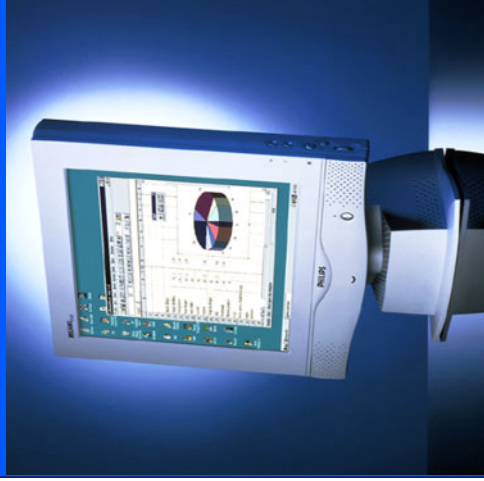
Ambient intelligence

=
Ubiquitous computing
+
Intelligent social user interfaces

- Embedded
- Personalized
- Adaptive
- Anticipatory

Trends technology

Display



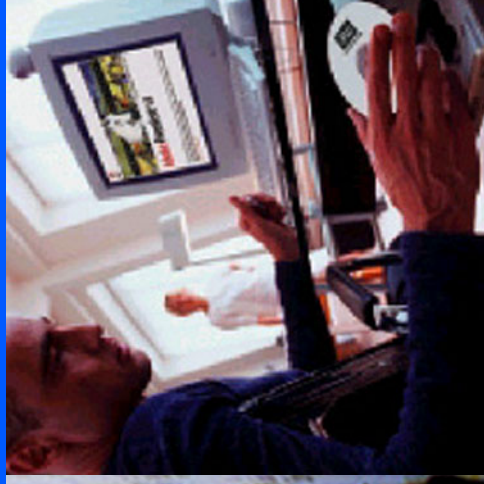
- Flexible displays
- LCoS Projection TV
- PolyLED

Connectivity



- ZigBee
- Bluetooth
- 802.11/HL2
- Home Networking
- Wireless 1394
- Context aware devices

Storage



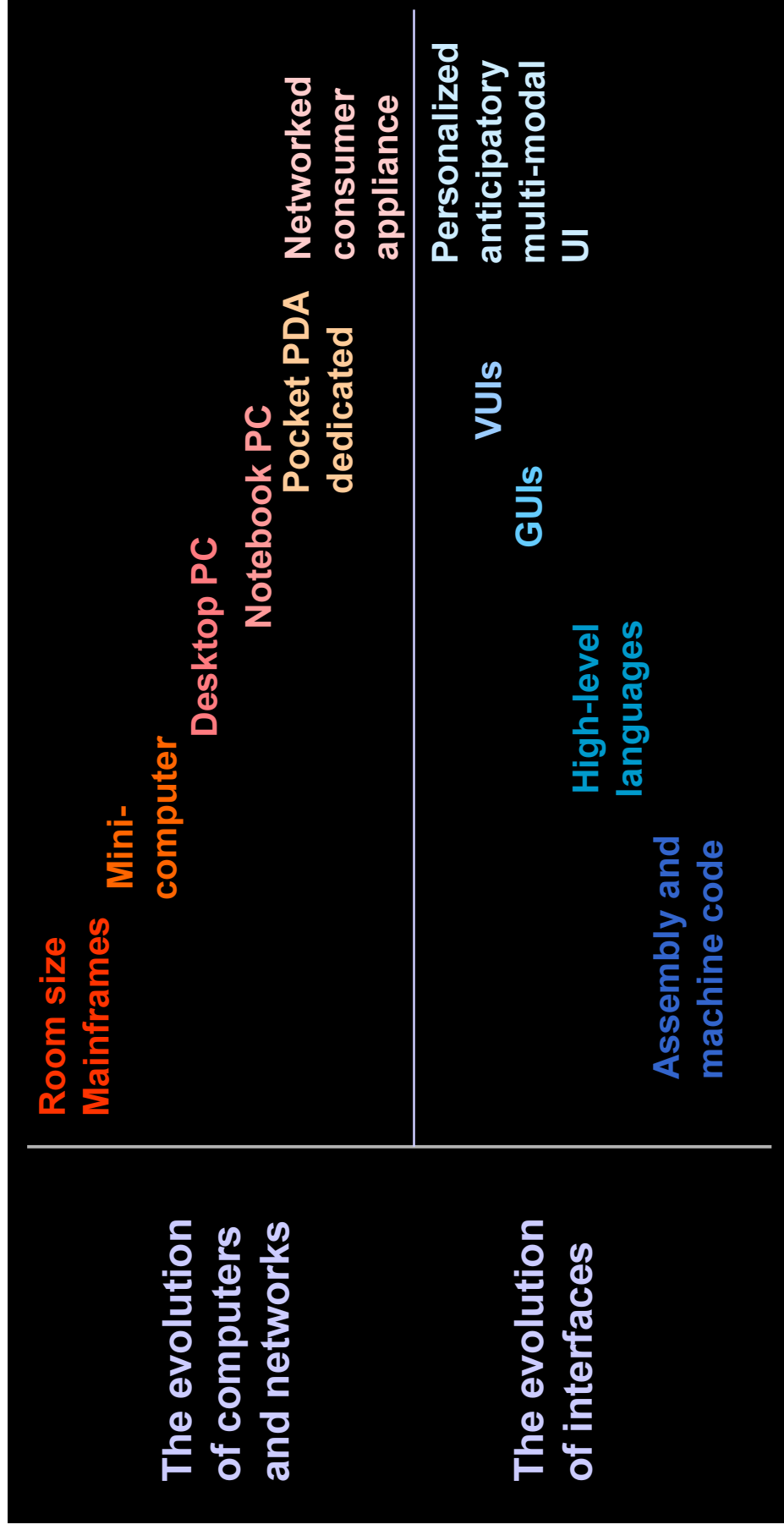
- DVD+RW
- Blu-ray Disc
- PVR+smart retrieval
- Content augmentation
- SFFO

Digital Video



- Nexperia Digital Video Platform
- Home Media Center
- Digital TV
- 3-D TV

Trends convergence of computing and programming

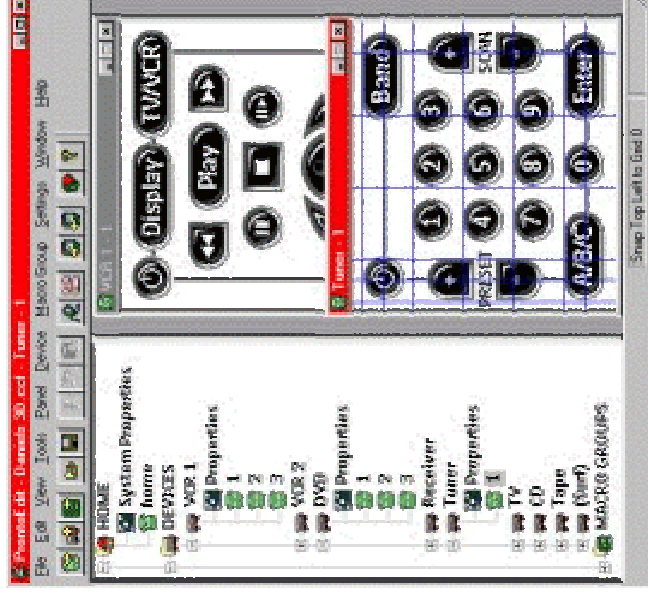
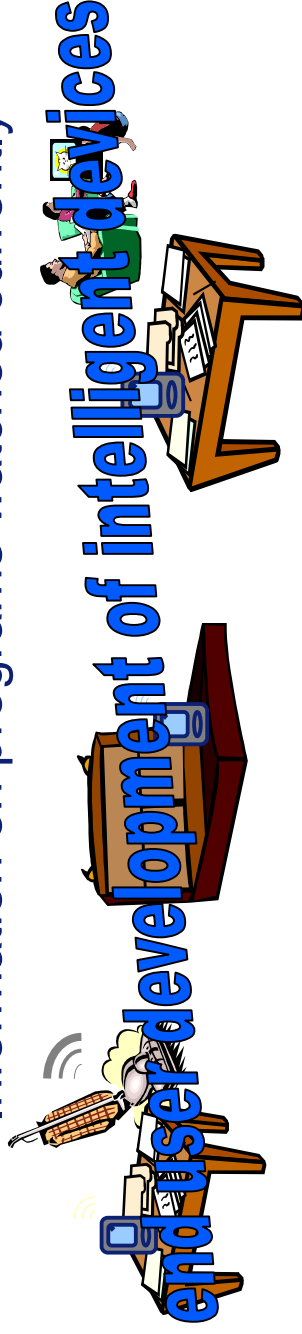


the challenges ???



The challenges adaptive: intelligent devices

- Context aware remote control with:
 - Personalized EPG and recommendations
 - Possibility to send tips to others and receive tips from others
 - Reminders for selected programs
 - Remote control functionality for available appliances only
 - Information on programs watched currently



The challenges personalized: composing experiences

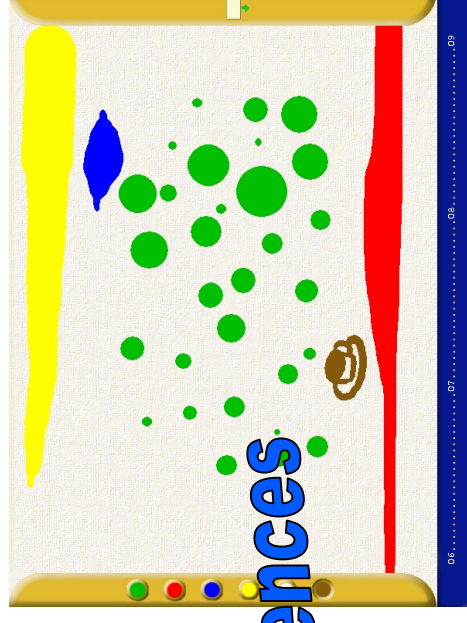
- How would you like to wake up in your dream house?

“The gradual and eventually rich strong aroma of coffee you get in cafes and the sound of birds chirping ever so slightly and gradually increasing in level. The lights will be very dark initially but the ceiling will illuminate to eventually produce a soft but bright light. The room temperature would regulate in concert with the temperature within the covers of the bed so that there is little temperature variance when first placing that foot on the floor...”

- Main question:

How can people ‘program’ their desired wake-up ambience in a simple way?

end user development of experiences



The challenges

embedded: social devices

- Creating social presence through connected CE devices:
 - participants think that visual information about remote friends would enrich the interaction
 - important aspects in communication with remote friends are: emotional reactions, opinions, expressions, environment
 - activities participants want to share: communication, gaming, eating/drinking together, watching TV, cooking, doing the dishes, listening to or making music

end user development of intelligent environments

