

User Experience methods for iTV interface design

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User Experience

*“I invented the term because I thought **human interface** and **usability** were too narrow.*

I wanted to cover all aspects of the person’s experience with the system, including industrial design, graphics, the interface, the physical interaction, and the manual.” Norman (2007)



User Experience

Commonly mistaken with:

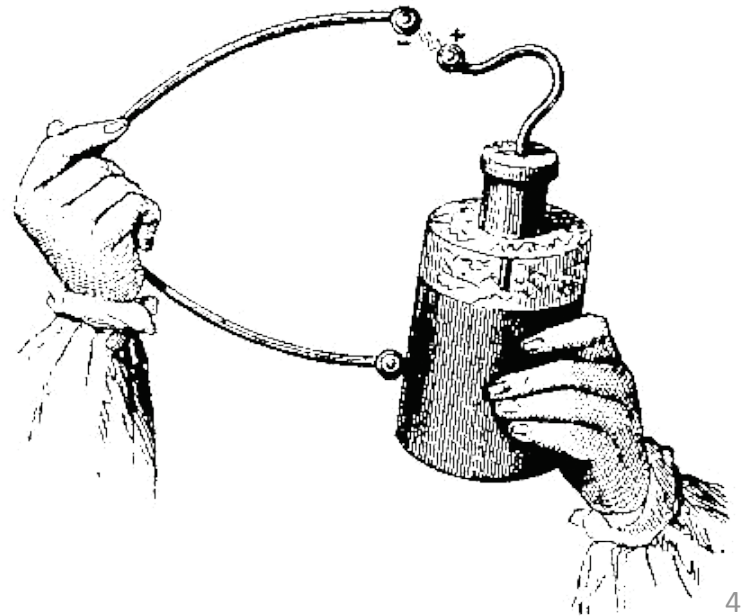
- . Usability*
- . Emotions*
- . Wow effect*
- . Customer Experience*
- . Interaction Design*
- . Interface Design*
- . Sketching*
- . (...)*



User Experience

Main focus:

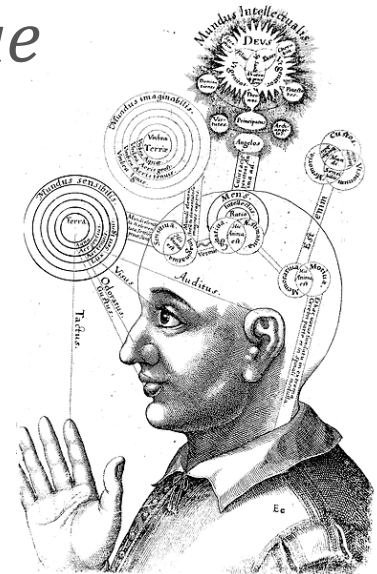
The user and how the user perceives a given interactional experience.



User Experience

Main factors:

- 1. Aesthetic Experience;*
- 2. Emotional Response, Pleasure and Stimulation (Fun);*
- 3. Attachment of Meaning, Value and Identification;*
- 4. Context (Situation, Time, Place, Purpose, Others);*
- 5. Usability*



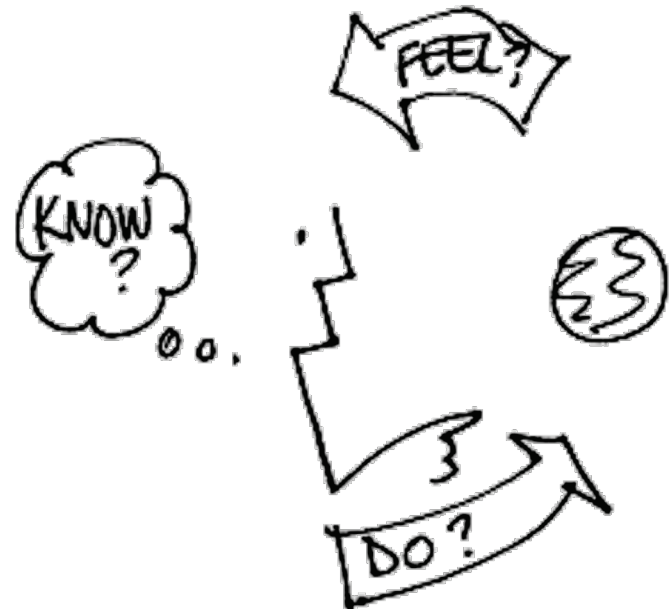
User Experience



User Experience

“Much can still be done in order to offer new experiences and more enthusiastic and participatory entertainment.”

Verplank (2003)



User Experience for iTV

Interactive Television (iTV):

A medium that merges television with digital media technologies;

A TV that goes beyond the passive watching and lets the user take action and make choices.

Jensen (1998)



User Experience for iTV

Interactive Television (iTV):

“A television that incorporates enhanced content or some style of user interactivity, providing synchronized trivia content during broadcast”. Lu (2005)



User Experience for iTV

50's

*"Winky Dink
and You" TV
show.*



User Experience for iTV

60's

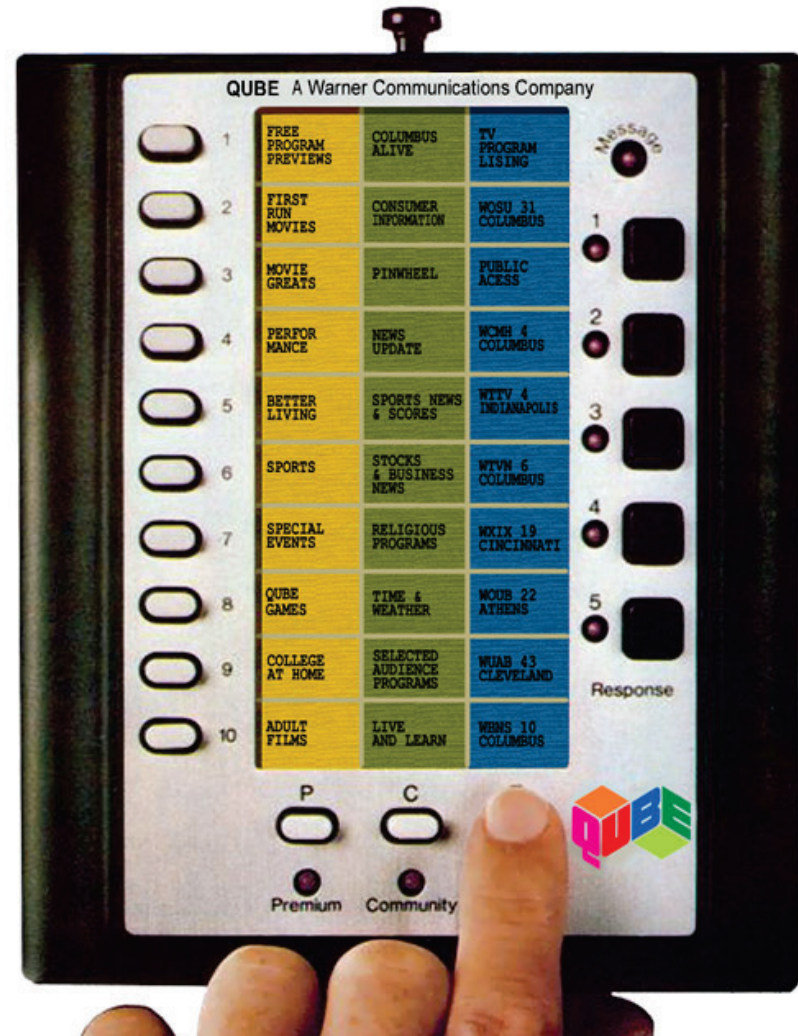
*NBC's Today Show
telephone call-ins.*



User Experience for iTV

70's

First commercial interactive TV service – QUBE.



User Experience for iTV

80's

“What's your Story?”: viewers should phone in with suggestions and the best ideas were then used.



User Experience for iTV

90's

Teletext and first digital interactive services.



User Experience for iTV

00's

*Full internet
access via a
set-top box.*



User Experience for iTV

10's

Vídeo, Music and Games on Demand. Social Media and personalization features.



User Experience for iTV



User Experience for iTV



User Experience for iTV



Samsung SMART TV multiple interaction system

User Experience for iTV



SPB TV Media Platform multi-screen TV solution

User Experience for iTV



Multiplatform

User Experience for iTV



Multiplatform

User Experience for iTV



Multiplatform

Future of iTV



Expo Urban Tv: Milano 2015 Multi-platform TV channel

Future of iTV



Microsoft Research IllumiRoom project

Future of iTV



Minority Report (2002) gestural 10-foot interface experience

Future of iTV



Iron Man 2 (2010) holographic interface experience

Future of iTV



A Day Made of Glass (2011) vision of ubiquitous computation

User Experience Design

*How to design the
User Experience?*



User Experience Design

How to design an interface for immersive interactive television that considers new interactional possibilities with the user experience as its main focus?



User Experience Design

*User Centered Design methodology,
focused on a User Experience approach:*

- 1. Understand and specify the context of use;*
- 2. Specify user requirements;*
- 3. Produce design solutions;*
- 4. Evaluate designs against requirements.*

ISO 9241-210:2010

Research Method

a) Research and Identify:

- 1. Context of use;*
- 2. Identify technological possibilities;*
- 3. Comprehend the state of the art;*
- 4. Apprehend the latest trends;*
- 5. Identify and become aware of the user through the process of creating personas;*
- 6. Research characteristics and specifications to be included in the interactive system.*

Research Method

b) Design and Evaluate:

- 1. Identify metaphors;*
- 2. Define interactional systems and typologies;*
- 3. Develop mental models and test affordances;*
- 4. Design wireframes and prototypes;*
- 5. Evaluate;*
- 6. Establish design guidelines;*
- 7. Re-design;*
- 8. Re-evaluate.*

Design Method

- 1. Define clear objectives;*
- 2. Understand the users, their habits, preferences and expectations;*
- 3. Create Personas;*
- 4. Conceptboards and Storyboards;*
- 5. Sketch the User Experience;*
- 6. Test!*

Understanding the users

Users are more active: No longer just the lean back, couch potato, passive interactional archetype!

Though sometimes still is, and a lazy interaction thus requires a simpler interface involving minimal effort.

Jensen (2005)

Understanding the users

Users prefer a more fun and relaxing interface compared to a most efficient, but yet, boring interface. Druker et al. (2002)

Understanding the users

Viewing television is not in most cases an individual activity/experience.

“TV audience research has shown that watching TV is mostly a group activity, e.g. of families, partners or friends”.

Barwise & Ehrenberg (1988)

Understanding the users

The involvement of television content communities can be characterized by three main concepts:

- 1. Creating;***
- 2. Sharing;***
- 3. Controlling content.***

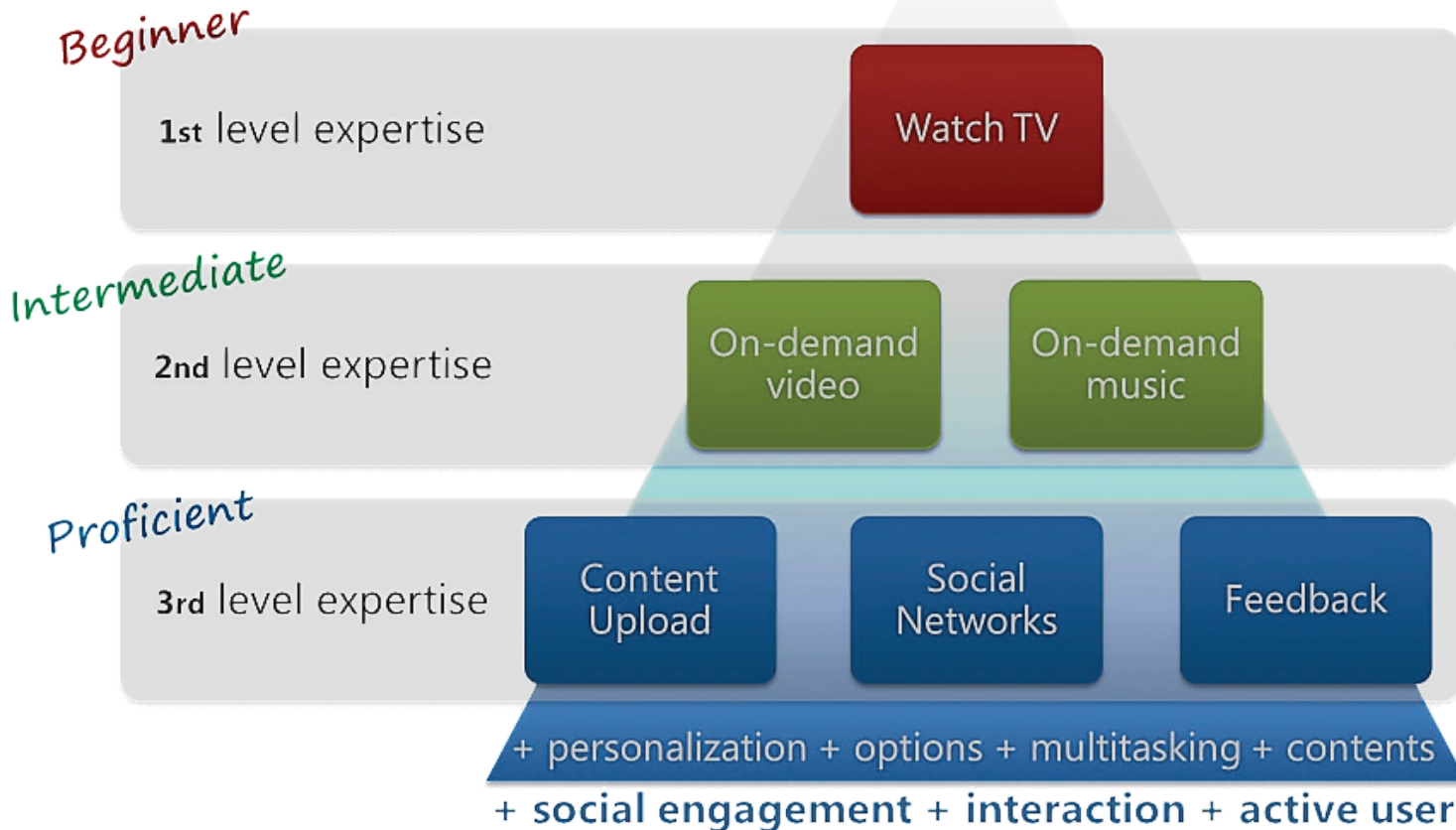
Cesar and Chorianopoulos (2008)

Understanding the users

New on-line social communities are growing and enabling new communicational paradigms, creating new viewing habits “used for shopping, information searching, and interacting with peer-to-peer communities” Oksman, Tammele, & Mäkelä (2009)

Understanding the users

Segment, activities and expertise:



Understanding the users

*“The central concern is **how** to design for people*

– for their physical and emotional needs and increasingly for their intellect.” Bill Verplank (2003)

Understand the users

Assistance is appreciated...

Thank You 😊

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