User Experience methods for iTV interface design
“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
- (...)

3
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

Video, 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
User Experience for iTV
User Experience for iTV
Future of iTV

Expo Urban Tv: Milano 2015 Multi-platform TV channel
Future of iTV

Microsoft Research IllumiRoom project
Future of iTV

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?*
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)
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:

Beginner
1st level expertise
Watch TV

Intermediate
2nd level expertise
On-demand video
On-demand music

Proficient
3rd level expertise
Content Upload
Social Networks
Feedback
+ personalization + options + multitasking + contents
+ social engagement + interaction + active user
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 😊
References


User Experience methods for iTV interface design

This work has been funded by FCT/MEC through grant SFRH/BD/51387/2011, UT Austin | Portugal international research project “ImTV - On- Demand Immersive-TV for Communities of Media Producers and Consumers” (UTA-Est/MAI/0010/2009) and CITI (Pest-OE/EEI/UI0527/2011). Acknowledgments also to Teresa Romão, thesis supervisor, and to the remaining members of the ImTV research group, particularly Nuno Correia and João Magalhães.