

# Personalization for digitally excluded users through t-learning

Pablo Rebaque

Barcelona Media – Center of Innovation  
Av. Diagonal 177, 9<sup>th</sup> floor, 08018 Barcelona  
+34 932381400

pablo.rebaque@barcelonamedia.org

Raquel Navarro-Prieto

Barcelona Media – Center of Innovation  
Av. Diagonal 177, 9<sup>th</sup> floor, 08018 Barcelona  
+34 932381400

raquel.navarro@barcelonamedia.org

## 1. POSITION PAPER

In recent years several researchers have provided evidence about the impact of personalization on TV [1, 2, 3, 4]. Results show the consumer profits when the content fits a given user profile, age range or social group (independently from viewing device - Internet, TV, mobile, etc). The benefit is related to a higher level of acceptance of content, higher enjoyment, and interest, that is, user engagement.

Also, the application of ITV for learning (t-learning) has emerged with growing interest. For instance, in Spain several studies focused on t-learning have been conducted, dealing with technological platform development and more specifically the development of an ontology that allows linking educational content to entertainment, where this content would be personalized. However, the parameters that have been taken into account in order to define the personalization are not well known. Furthermore, it is unknown if other variables have been considered to provide personalized content.

The discussion topic we would like to bring to the workshop is how to integrate the possibilities of personalization through ITV, educational content through ITV, and a new way of interacting (due to the fact that the content would be presented through TV) into a unique model.

More specifically, our contribution to this workshop aims at the less technical user, such as the elderly and those who fall into the digital divide (+55 in Spain). Considering that this type of user has a large experiences on TV as compared to a small expertise over other technologies such as the Internet, it would seem interesting to focus on how this public perceive the possibility of using a technology such as t-learning to acquire new knowledge. For instance, how to offer the content personalization to this user group, or what type of knowledge they would be interested in purchasing, or whether they would be entertained with the same content items as younger users, and so on.

This workshop could generate discussion about a number of issues or challenges according to different usage scenarios that we are investigating for digitally excluded people:

### ITV usage scenario

How can users profit from the elements from Web 2.0. (for instance, labelling group) in ITV? How can we gather such

information? How could we present this information to users? How to give feedback?

Study the impact of avatars as a mechanism for interaction or as a mechanism for presenting information. How could we adjust personalization and socioemotional effects (to achieve a high level of engagement and entertainment) depending on the avatar?

Analyze the adequacy of formats for a satisfying user experience. How are the contents presented? How to interact with the content? Which is the best way to learn?

### The InternetTV usage scenario

Definition of a successful experience for the digitally excluded user in terms of:

- The adequacy of the Web 2.0 possibilities for the large amount of content available on the Internet
- The multimedia complementarity in terms of:
  - the content topic
  - format (video, image, text ...)
  - user goals
  - personal variables
  - the user context (time, place, alone or accompanied)

Study the impact of avatars as a mechanism for interaction or as a mechanism for presenting information. How could we adjust personalization and socioemotional effects (to achieve a high level of engagement and entertainment) depending on the avatar?

Considering the possibilities of Web 2.0, the large amount of content available on Internet, and aiming at users having a successful experience: what should the formats for content presentation be? How should the user-content interaction be?

### Usage scenario of convergence of IPTV and InternetTV

In what ways do the Internet (lean forward) and TV (lean back) converge? What elements do they have in common and what they do not? - Is it possible to create continuous forward momentum for the user experience?

## 2. REFERENCES

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