Immercity: Communicating about Virtual and Augmented Realities

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INTRODUCTION

With the aim of centralize a technology watch in an original manner and to overcome definitions difficulties, we choose to communicate on the Virtual, Mixed and Augmented Reality technologies by their self. Interacting differently with an unique 3D model, let exploit the differences between those technologies and raise awareness on them. In this work, we also explore several visual clues to highlight key objects.

Explore the idea of Immercity: use of a city metaphor in a cross-platform application

APPLICATION

Cross-platform application

(Technology watch centralization)

Unique 3D metaphor needed

(Definition & difference understandings)

PROTOTYPES

VR prototype

Cardboard prototype:

- Immersion in the city

AR smartphone prototype:

- 2D map → 3D model
  - On the back of a business card

RESULTS

Experiments on 33 Capgemini co-workers

1° experiences: 68 % in VR, 70 % in AR

Experimentation process:

- Observation on free 1st use
- Observation on required selection
- Survey
- Open discussions

4 test sets

4 test sets

Preferences in Virtual Reality

- Custom loading cursor interest confirmed
- Need of a hybrid method for selection

Preferences in Augmented Reality

- Particle system interest confirmed
- Need a lighter and more discreet solution

REFERENCES


PERSPECTIVES

- Other elements need to be analyzed:
  - Novice users behavior
  - Metaphor validity
  - Impact on definitions understanding
- Improvements required: an hybrid method of highlighting must be defined
- Mixed Reality prototype development
- In-depth versions: how to exploit the interactions for representing and access to the information? (within the buildings)

CONCLUSIONS

- Content curation application: share information and structure it within a unique 3D element
- Prototypes helped validating/invalidating visual elements:
  - Loading cursor confirmed
  - Hybrid method (animation/building) for building highlighting needed