Content Management Systems for mobile, context-dependent augmented reality applications

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Content

Purpose of the study

Results

Theoretical background

Key findings
Challenge

- Provide augmented reality (AR) technologies to enhance mobile marketing activities
- Different persons → different ages, different interests
...in the context of tourism

Lack of information .. events, exhibitions, sights, special offers

No filtering possible with common advertisements

Enhance advertisements on billboards

Little information and/or information overload

Challenge

Solution

Scanning advertising space with mobile device

Filtering content

Retrieving further information, book tickets...

Showing information which fits to the user’s interests

Supported by images, videos or 3D animations
Purpose

Design and develop an overall system architecture, to...

- manage AR content using contextual and personal information
- enhance marketing activities
- reach high acceptance and high customer value
Augmented Reality
Augmented Reality

Source: http://www.doit-mobile.com

Source: http://www.united-academics.org
Available systems and features

- Few content management systems exist
- Only one content for one target
- No combination with customer relationship management
- Not context-dependent
- Not personalized
Content

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Components and use cases

Two use cases

- Create AR content and assign to individual users
- Scan targets and get individual content shown
Context information used

Location

Language

User’s age, interest, gender…

Date, Time, Weekdays…
Content

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# Key findings

## Findings

- **Necessity of reducing information overload**
- **No systems** for creating personalized AR content available on the market
- **Proven system architecture** to manage individual AR content

## Challenges

- **Necessity of being always online**
- Requires high speed (3G) connection
- Make value transparent to end users and **increase awareness**
- Create standard interfaces
Thank you for your attention

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