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

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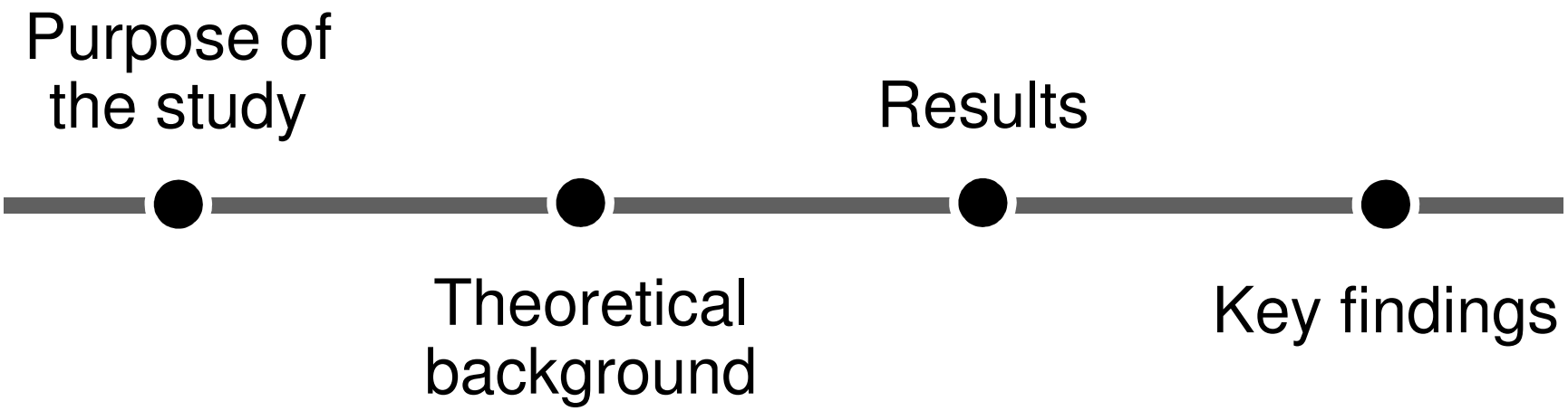
www.tourism-student-conference.com

Content


Purpose of the study
Theoretical background
Results
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

Showing information which fits to the user's interests

Filtering content

Retrieve further information, book tickets…

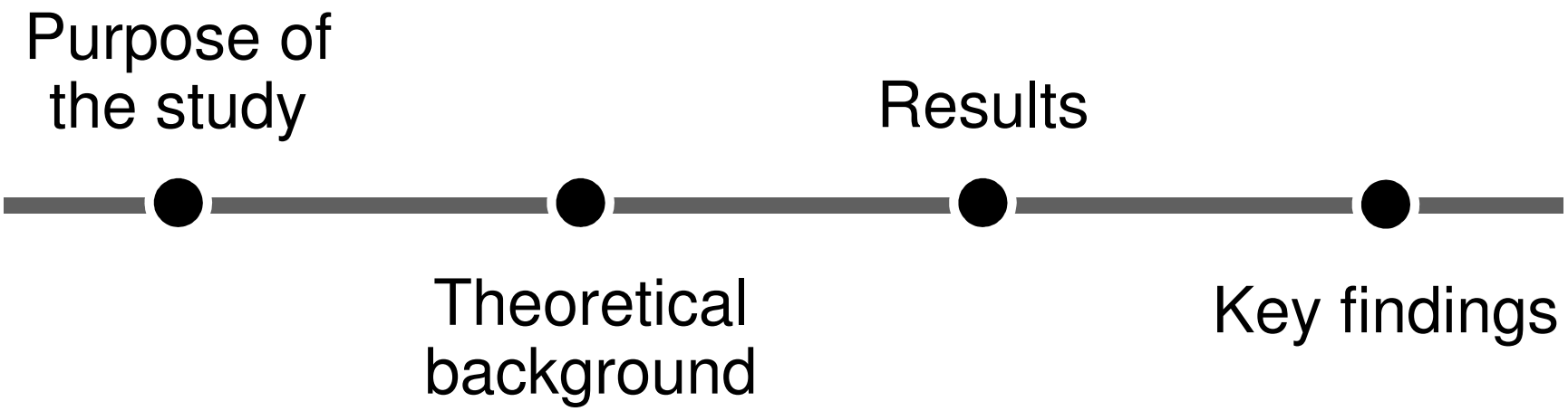
Supported by images, videos or 3D animations

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

Content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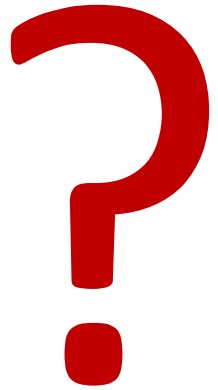
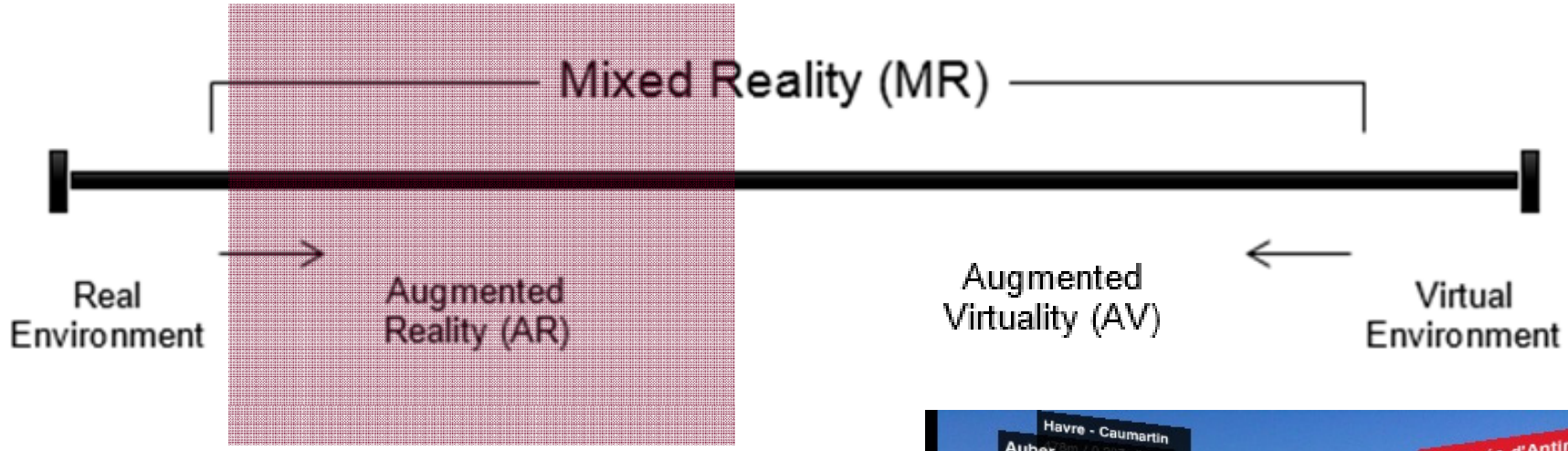
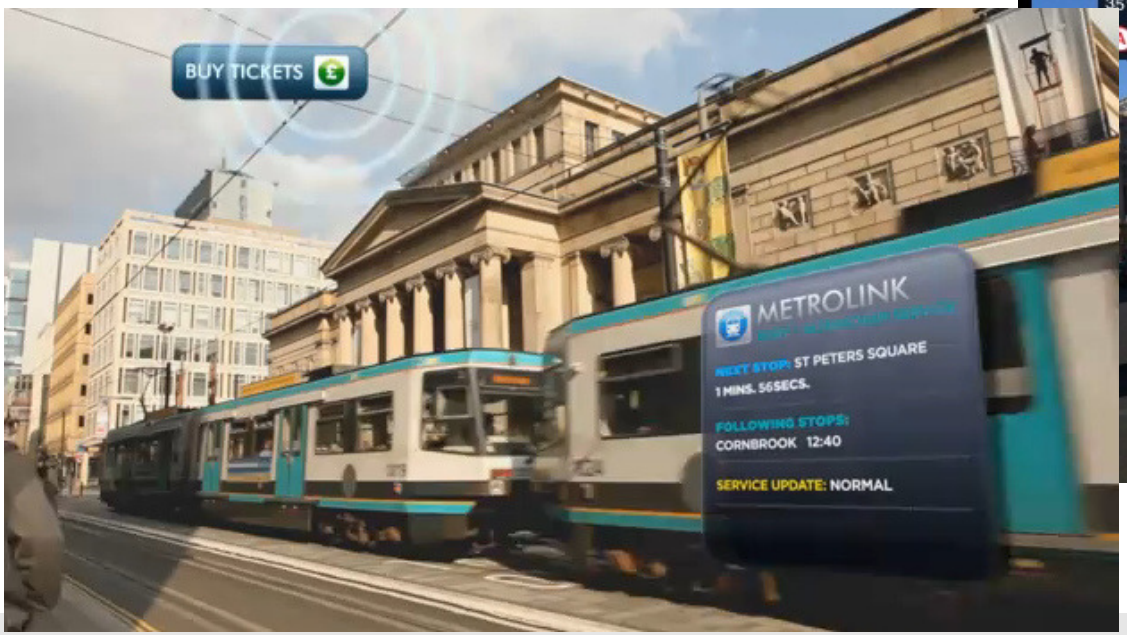
Augmented Reality

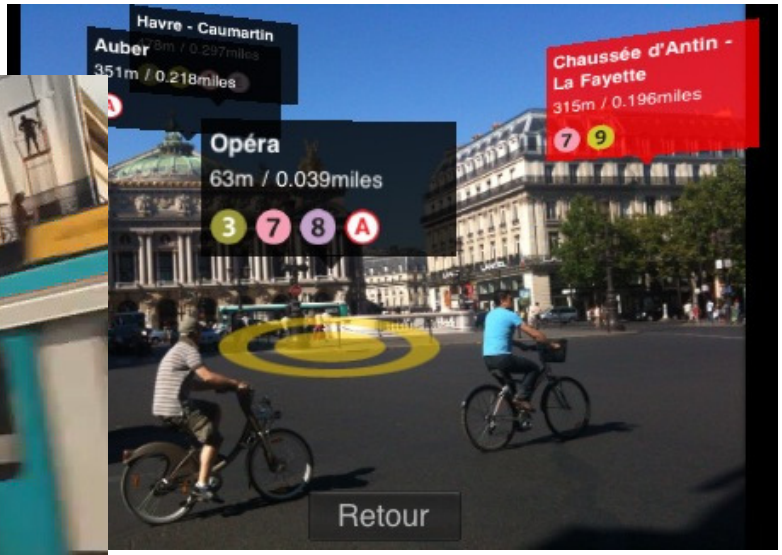


Augmented Reality





Source: http://www.united-academics.org

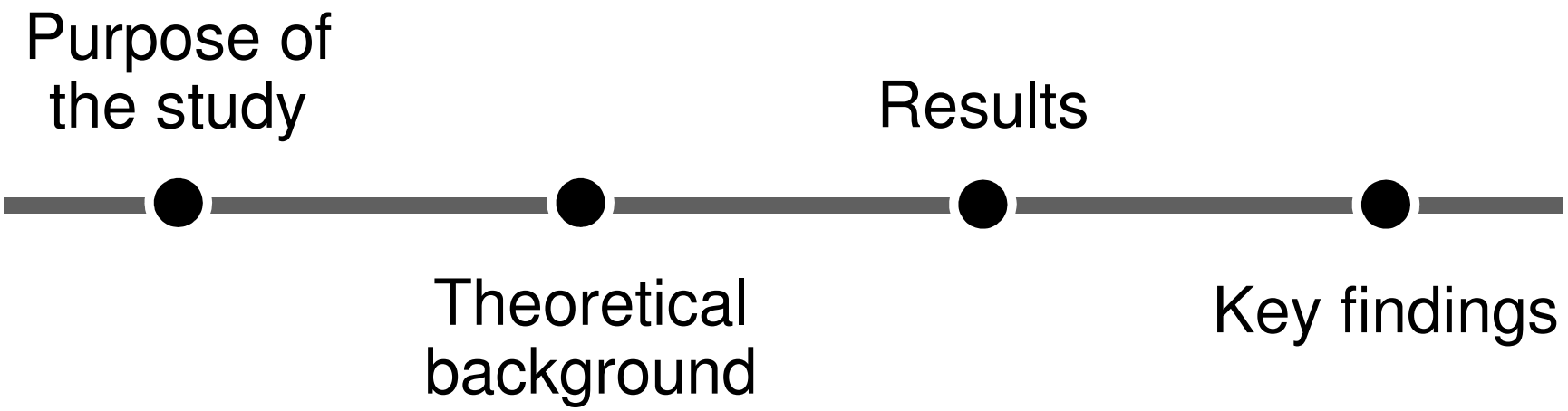


Source: http://www.doit-mobile.com

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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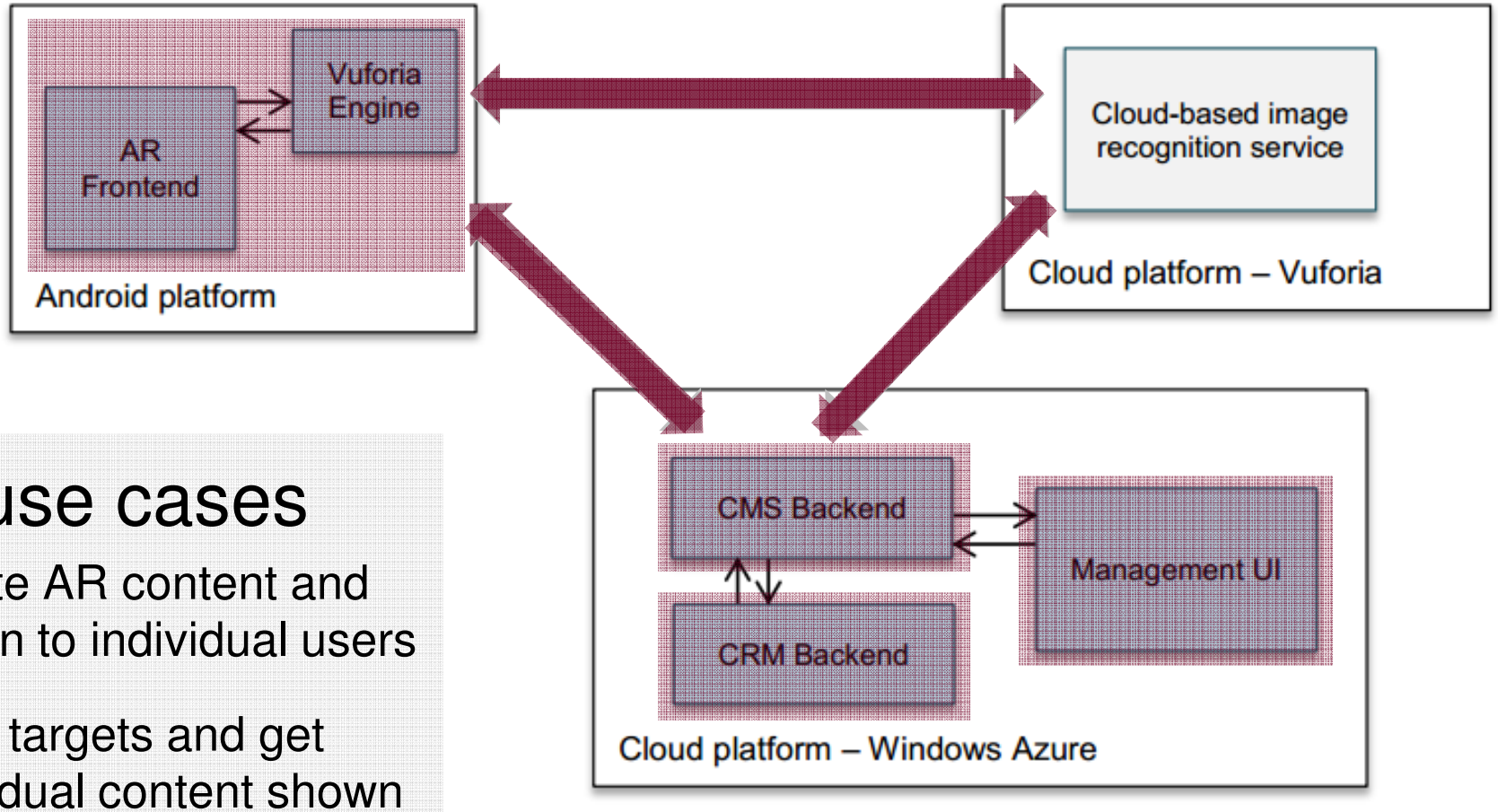
Components and use cases



Two use cases

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

Context information used

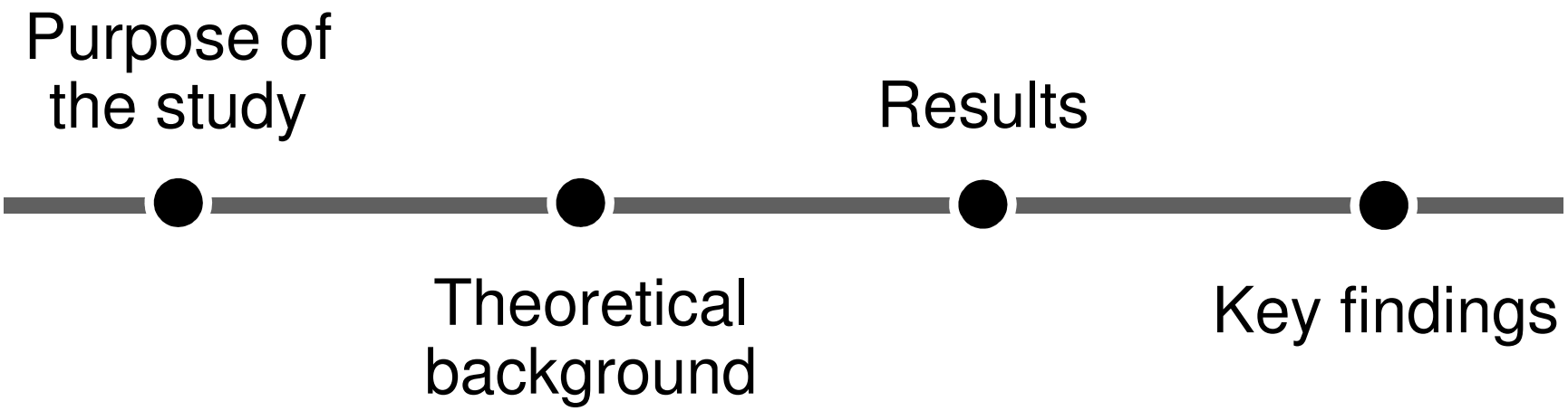
Location

Language

User's age, interest, gender…

Date, Time, Weekdays…

Content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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

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Thank you for your attention

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