

# FEATURES FOR THE FUTURE LIBRARY

Designing an Augmented Reality App

# Structure

## 1. Augmented Reality

- The Concept of AR
- AR as an Emerging Technology
- AR in Libraries

## 2. Project „mylibrary“

- Introduction
- User Study
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# The Concept of Augmented Reality (AR)

Azuma:

„AR combined the real and the virtual world, interactive, in real-time and 3D in a real environment“

Zappar (British company):

If you're explaining it to your granny  
maybe just say it's magic for your phone.

Information science: “Showing context-sensitive information at the point of need in a way the user can work with it and share it“



Already used in:

- Medicine
- Aeronautics
- Automobile Industry
- Publishing
- and Libraries!



Fig. 1 Toronto Public Library

# AR as an Emerging Technology

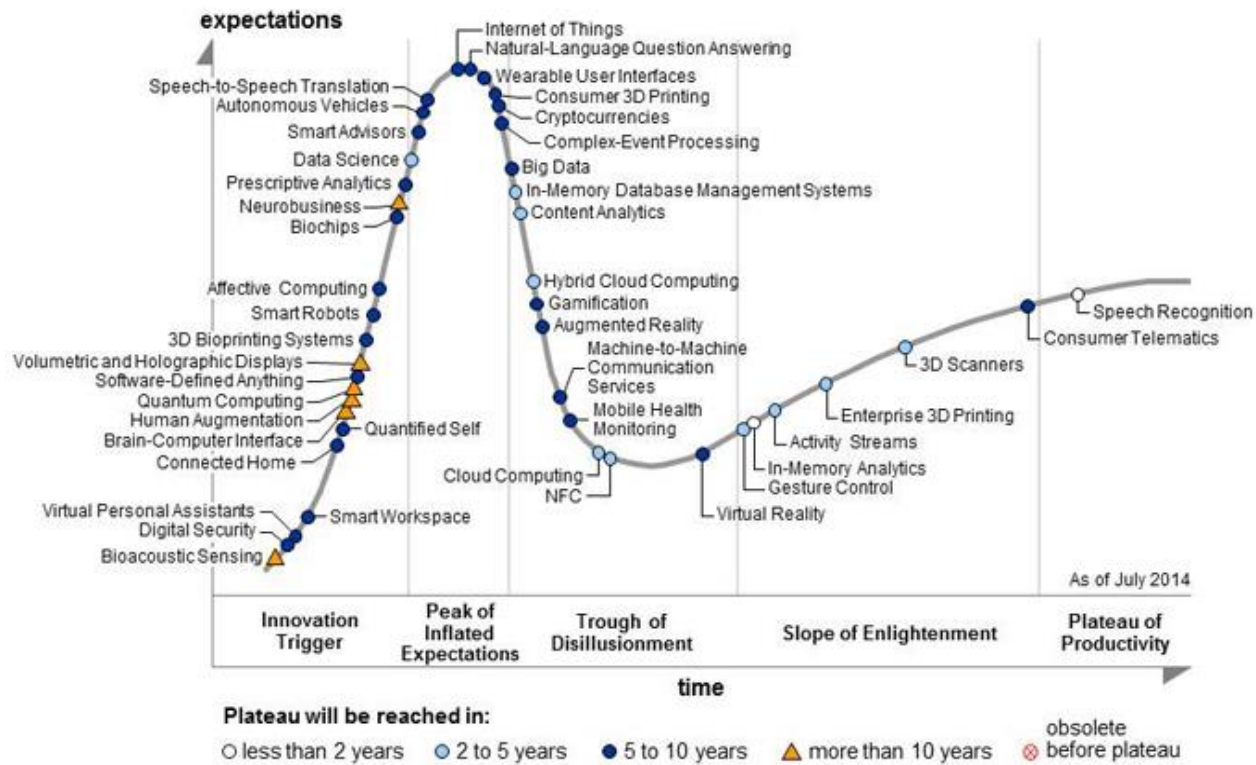


Fig. 2 Gartner's Hype Cycle 2014

# AR in Libraries

Guided tours to POIs:

Bayerische Staatsbibliothek (Ludwig II.)

NCSU Libraries (WolfWalk)

Shelving:

Wertz Art & Architecture Library,

Miami University (ShelvAR)

Library App

Public libraries of Barcelona: To gain younger library users by directing them via QR-codes to the library website or to the profile on Facebook or the closest library

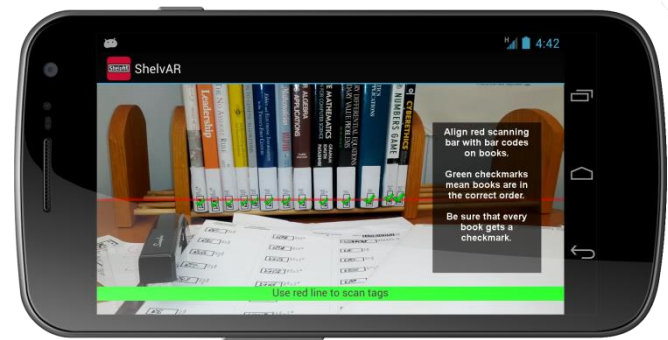


Fig. 3 ShelvAR-App

# Project „mylibARy“

Innovative und application-oriented scenarios for Augmented Reality in libraries (June 2014 – June 2016)

Aim: Development of a *customer-oriented* app for library users and connect the digital and the haptic collections

## Our Partners & Funders

**metaio**  
AUGMENTED SOLUTIONS



metaio GmbH  
(Two full time developer)



Library Network of Berlin and  
Brandenburg (VÖBB)  
Egon-Erwin-Kisch Library in Berlin-  
Lichtenberg



German Federal Ministry of Economic Affairs and Energy

# User Study

## Online Survey

### Question design

#### Library behavior Questions

Are you a library user?

How often do you use libraries?

Which types of media do you borrow?

#### Behavior towards technology

How much of a technophile are you?

Do you own a smartphone and are you using apps?

Rating of features: Social reading, Sharing via Social media, Recommender service, Information about the library itself (Website, events etc.), Semantically similar Media, Rating of the library, Information service within the library, Management of the own library account (With reminder service), Reference to other type of media (Film, Audiobook etc.)

Open question: What features do you like to have?

#### Personal information (Sex, Age)

# Results I

- Conducted in October and November 2014 via Unipark
- Within five weeks around 380 participants
- Attendees mainly from the LIS-Community and 78% female
- Average age of the participants is 32,55

Daily library users of 25 %  
(See Fig. 4).  
Monthly (30%)  
and weekly (27%) users

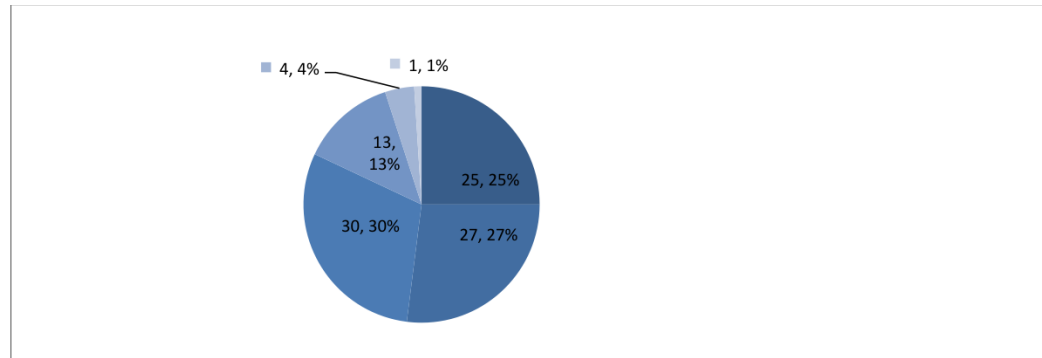


Fig. 4 How often do you use libraries?

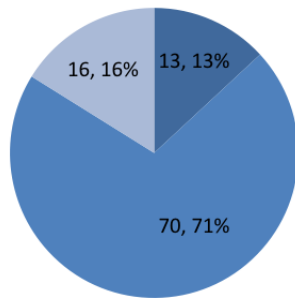


Fig. 5 : Do you own a smartphone and are you using apps?

Smartphone and  
app-users of around 70%  
16,14% do not own a  
Smartphone (See the grey part  
in Figure 5).



# Results II

## Cluster of Favorite Features

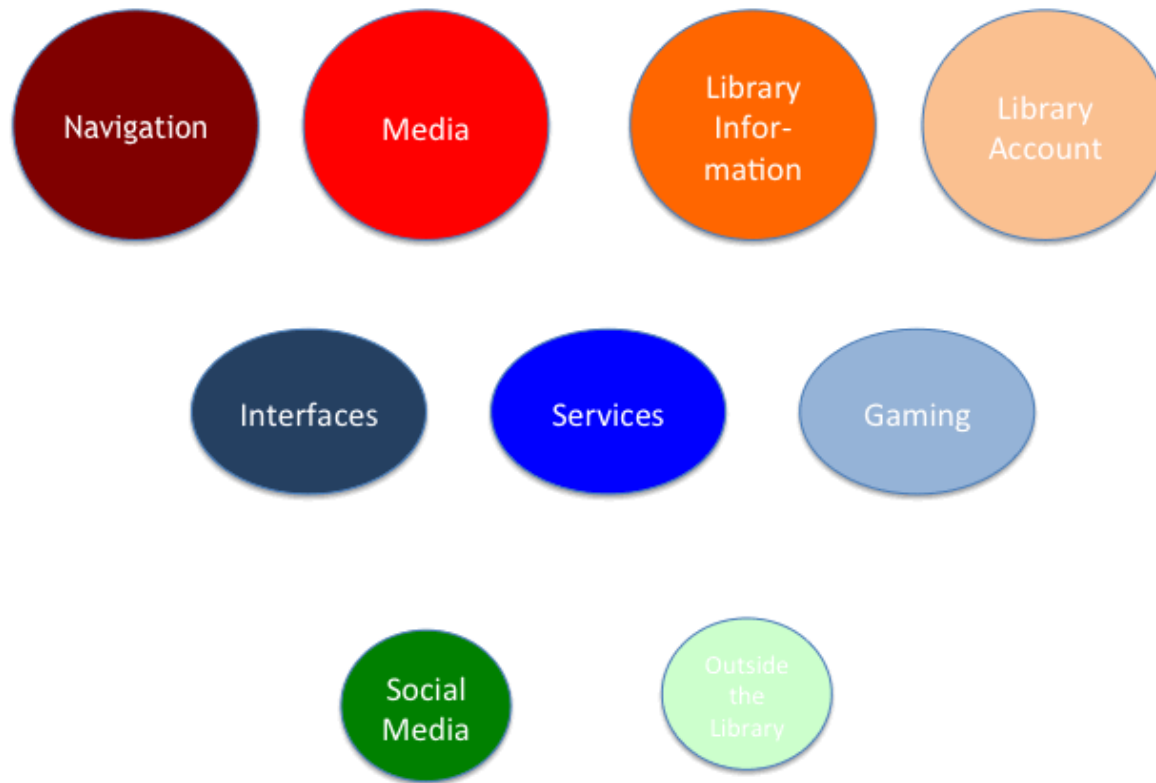


Fig. 6: What features do you like to have?

# Status quo of the App I

## Functionality

- Download of the metaio Junaio-AR browser to mobile device
- Select the “MylibrARry” channel,
- Optical recognition using the cover or the bar code
- Scan of a QR-code or recognition of the ISBN
- The operation with RFID-codes is planned
- The App recognizes the medium in the background
- Communication with APIs, which were implemented earlier

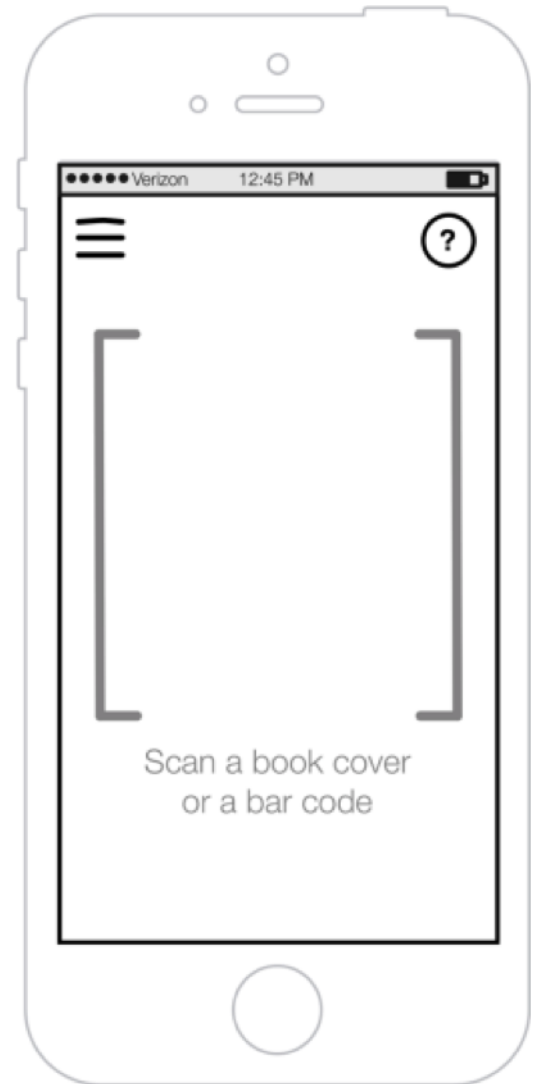


Fig. 7: Display Scan

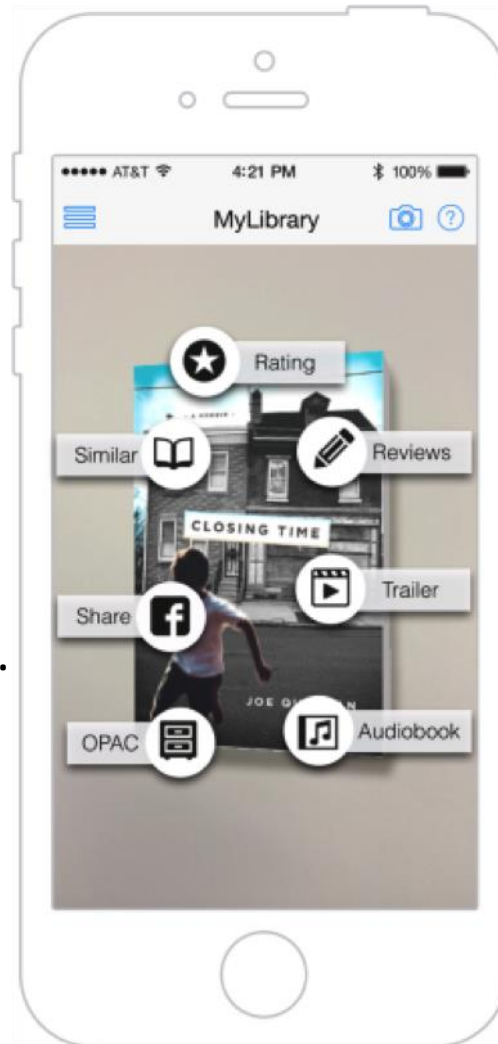
# Status quo of the App II

## Implemented Features

Similar (via OPAC)

Share (via Facebook etc.)

OPAC (The library catalog)



Rating and Reviews  
(via Goodreads)

Trailer (Imdb)

Audiobook (Local Library  
OPAC)

Fig. 8: Display Features

# Future Challenges & Tasks

## Further implements

- Wikipedia categories using the GND of the German National Library as an unique identifier
- Friend-finder-option
- Local Library Game with tasks and batches
- Recommender service *BibTip*

## Main challenges

- Improve the design of the app
- Define the balance of an ambitious and innovative product and the simple handling for the local library
- Integration of the theoretical framework in the features of the app: Creation of features, which enable the creation of new knowledge through (visual and semantic) contextualization

# THANKS FOR YOUR ATTENTION!

## Resources

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Gartner's (2014). Hype Cycle for Emerging Technologies, <http://www.gartner.com/newsroom/id/2819918>.

# For further information

Participate at our symposium “AR for Libraries and Publishers” in April 2015

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Or scan the QR code