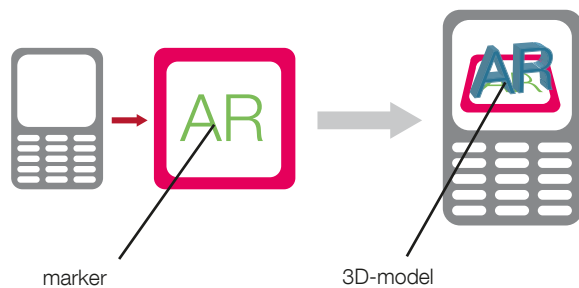


AUGMENTED REALITY COASTER

AZUMA'S DEFINITION OF AUGMENTED REALITY:

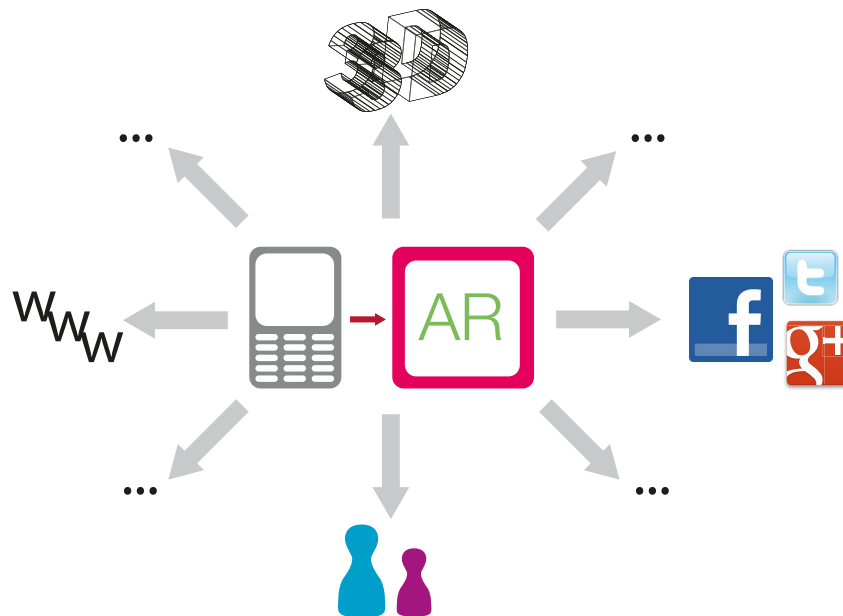
- A combination of the real and the virtual (generally involving an overlay).
- Interactive in real-time
- The real and virtual objects are aligned in three dimensions.



Mobile augmented reality requires an image called a 'marker' plus the associated 3D model. The 3D model must adhere to specific technical specifications and can either be developed by KATZ in collaboration with an agency, by our customer or by you - as long as all the technical standards are met.

APPLICATION

- The marker (image, logo, artwork, etc.) is printed on the coaster (beer mat) using standard offset printing processes (no specialist printing techniques are required).
- The user downloads the specified Augmented Reality Reader software onto their Smartphone (App Store, Android Store, etc.).
- The user scans the marker
- The stored 3D model, game, URL, Facebook link, etc. appears automatically.
- The user enjoys the results and experiences fun and interaction with the brand.



ADVANTAGES OF AUGMENTED REALITY:

- Virtually unlimited ways of enhancing reality (3D, www, games, etc.)
- Easy to link together digital and physical contents
- Powerful emotional experience/emotional presentation of content
- High level of involvement/interactivity
- High degree of attention/interest
- Measurable response rate
- Increases terrifically the significance and value of the print products
- Interactive presentation of complex information
- Only needs to be programmed once, but can be used multiple times on multiple products/formats (coasters, flyers, posters, ads, etc.)

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THE **KATZ** GROUP
Member of the Koehler Paper Group

KEY CONSIDERATIONS

Required specifications for the 'tracked' marker which is used to trigger the display of the 3D model

- The marker must contain enough structures (corners, edges)
- The structures should be distributed across the entire image
- The structures need to be clearly visible (i.e. high contrast)
- JPG or PNG file format
- Minimum resolution 400 pixels per page, ideally 1000

Note:

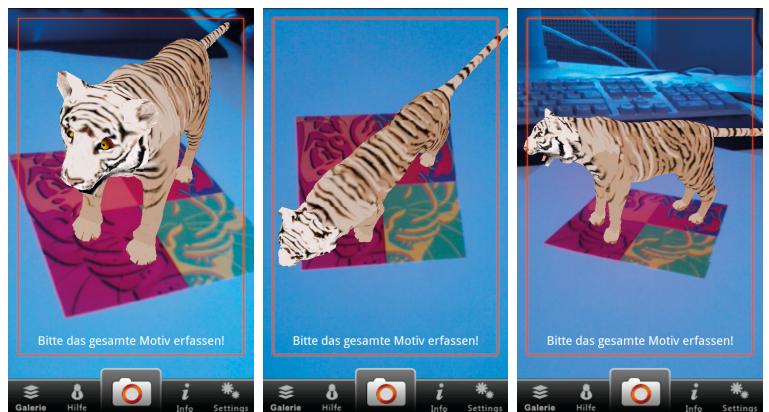
The marker image can either fill the complete coaster or take up just a small portion of the coaster design.



EXAMPLE 1:

In this case only part of the design is used as a marker image – the picture of the tiger (polaroid) is the marker

➔ Reader software: KATZ app (Android only)
<http://www.thekatzgroup.com/produktgruppen/creative/downloads/>



EXAMPLE 2:

The whole coaster is the marker.

➔ Reader software: Snap2Life
<http://www.snap2life.de/>

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before:



← There is sufficient contrast and plenty of structures for tracking in the upper region of the marker layout.

after:



← The contrast in the lower region of the design was originally too low which made tracking virtually impossible, so the colours were changed.

Required specifications for the 3D model

- The object must consist of a mesh and contain only one texture, e.g. in 3ds Max: "Merge to one mesh"
- File format: Wavefront; file extension: obj
- The model must be triangulated, i.e. a network of triangles; quads are not supported
- Maximum texture resolution approximately 1024x1024 in JPG or PNG
- To ensure fluid rendering of the 3D model on Smartphone's it should ideally have approximately 3000 vertices and 3000 faces

Required specifications for the rendering

- Size of 3D model rendering in relation to marker
- Static positioning or dynamic rendering (rotating, moving along a path) of the 3D model

HOW THE PROCESS WORKS

1. You supply us with the image to be used as a marker, the 3D model and instructions on its relative positioning/ rendering (or alternatively our agency carries out this step on your behalf)
2. The information required for tracking is extracted from the image
3. The team checks the quality and suitability of the 3D model and adjusts or optimises it as necessary, consulting with you as required. This generally takes approximately 16 hours.
4. The marker image and the 3D model are linked according to the customer's requirements

The coaster can be released for printing in parallel to this linking process since the marker can be used as soon as the image has been checked by the agency.

ACTIVATION FOR DOWNLOADING AN EXISTING APP FROM A STORE (like for example the snap2life app):

- These are available from the Android store (Google) and take approximately 24 hours
- iOS apps may take between 5 to 10 days to be available in Apple's app store

THE COST OF DEVELOPING YOUR OWN APP DEPENDS ON MANY DIFFERENT FACTORS:

- Development for one or multiple platforms? (iOS, Android, Blackberry)
- Scope of required functionality? (e.g. image recognition, AR, gallery, history, push notifications, dynamic content, etc.)
- Will the design be developed by you or by our agency?

DURABILITY

The design and the marker can be used for an unlimited period. It makes no difference whether you're producing a poster, a coaster or an ad – what matters is the marker image.

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