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### Focus Topics

Software-Engineering | AR/VR/Spatial Computing  
Information Retrieval | AI

### Author (Springer Vieweg Publishing)

- Modern Software-Development with Java and JEE
- Multimedia Information Retrieval
- Gamification Design



# Living Photo Print & AR

# What is „Living Photo“

The overlay of real-world printed products with augmented digital content.

“Living Photo“ is based on real-world printed products. These can be magazines, brochures, business cards, poster, fineart pictures, calendars, photo-mugs, large-size ads, etc. Anything, that can be printed can serve as a basis.

When users point their smartphone to such printed content, a video is displayed on the smartphone to replace or augment the printed content.

„Living Photo“ is not just the technical solution. It is a business and business process model, a management decision tree, a AR-project calculation modal, and a set of implementation blueprints.



# What is „Living Photo“

## 1. Business / Business Process Model

This model enables customers to create businesses or business processes based on „Living Photo“. Depending on the original business of the customer, this model discovers the best option to introduce AR.

## 2. Management Decision Tree

To find the best possible solution, a management decision tree guides customers through the process of AR-design.

## 3. AR-Project Calculation Model

Each process step has typical efforts assigned, so that the decisions can be validated against budget constraints before the implementation is started. This ensures reliable project cost.

## 4. Implementation Blueprint

Blueprint implementations for IOS, Android, Unity, and Unreal show how to integrate AR techniques into existing Apps & Devices (like Meta Quest or Apple Vision Pro) or how to build new apps based on „Living Photo“.

# Use Case: Politics

## Use-Case:

Politicians sharing their favourite messages in video and audio to anyone pointing the Smartphone to a poster!

## Imagine:

Users get different speeches, daily updates, personalized content

## Imagine:

Introduce Gamification. Send rewards to your viewers, make them collect different posters (and videos), reveal special content



# Use Case: Newspapers

## Use-Case:

Users can watch videos while hovering with the smartphone over the images shown in your newspaper.

## Imagine:

Show background information, additional articles, archive content. Provide translations in different languages.

## Imagine:

Introduce Gamification. Send rewards to your viewers, make them solve riddles or let them discover further content on other pages.

### 'Build-to-rent' trend grows as home prices stay high

Developers target communities for younger tenants who can't afford to own yet. **In Money**

### Robert Plant, Alison Krauss trade quips ahead of tour

Rock 'n' roll legend and bluegrass great share laughs, mutual admiration in interview. **In Life**

### Texas edges closer to national softball title

Teagan Kavan and the top-seeded Longhorns have still not given up a single run in this Women's College World Series. **In Sports**



BRYAN TERRY/  
USA TODAY NETWORK

62

## First major heat wave of 2024 is on way

The heat in Death Valley, Calif., could reach 124 degrees by the end of the week, a record for this early in the year, forecasters say. **DAVID McNEV/GETTY IMAGES**



Temps could be deadly in parts of the West

Doyle Rice  
USA TODAY

The USA's first major heat wave of the summer will overspread the West over the next few days, forecasters said, pushing temperatures to dangerous and even "life-threatening" levels across several states, including California, Nevada and Arizona. By later this week, temperatures in Phoenix and Las Vegas could reach 113

degrees, the National Weather Service said. Many record highs are possible. Notorious hot spot Death Valley, California, could reach 124 degrees by the end of the week, which would be a record warm temperature for this early in the year. In Phoenix, where an excessive heat warning was in effect, the National Weather Service warned that "extreme heat will significantly increase the potential for heat-related illnesses, particularly for those working or participating in outdoor activities." **See HEAT, Page 3A**

HUNTER BIDEN TRIAL

## Both sides lay out arguments in gun case

Prosecutor: President's son lied about purchase

Xerxes Wilson, Swapna Venugopal Ramaswamy, Esteban Parra, Bart Jansen, Kinsey Crowley and Rachel Barber  
USA TODAY NETWORK

## Give addicts alcohol? Plan aims to save lives



# Use Case: Education

## Use-Case:

Provide video or animated content in addition to educational printouts.

## Imagine:

Students can view not just the written and printed text, but also additional content. In different languages, from different teachers.

## Imagine:

Introduce Gamification. Provide tests, self assessments, internet links, etc.



# Use Case: Magazines

## Use-Case:

Augment high quality pictures with corresponding videos.

## Imagine:

Sell your advertising clients additional space for augmented video.

## Imagine:

Add website links, add booking facilities.

## Imagine:

Start from video content you want to show and just print a screenshot.



# Use Case: Business Card

## Use-Case:

A classical business card with your contact details. Augmented with a personal introduction video of yourself.

## Imagine:

Directly explain „your“ message to others.





# Use Case: Fotos / Gifts

## Use-Case:

Printing your own photos is very popular. Bring your calendars, mugs, towels, prints to life by attaching videos or slideshows.

## Imagine:

Print your favorite picture as a gift and attach a personalized video.

## Imagine:

A screenshot of your best Smartphone video printed and attached to your wall to play this video.



# Use Case: Products

Use-Case:

Use physical products to enhance the buying experience by augmented videos.

Imagine:

A bluray that automatically plays its trailer.

Imagine:

Any product displaying its public reviews.



# Use Case: Advertising

## Use-Case:

Large scale prints used for advertising are perfect for augmentation. They are visible and easy to point at.

## Imagine:

Simply reuse existing campaigns or even extend the augmentation for whole buildings, real-world objects, or sceneries.

## Imagine:

Simply stick empty pink poster all over the town. Every poster will show a different video. Make a game out of your brand.



# Use Case: Branding

## Use-Case:

„Living Photo“ is not limited to print products. Anything with a detectable logo can be used.

## Imagine:

Show brand information as overlay or next to your company's logo.

## Imagine:

Apply augmentation for each of your physical products and show additional information or buying links.



# Use Case: Events

## Use-Case:

Use „Living Photo“ to enhance your public appearance at shows, events, conferences, show-rooms, at your event location or your company's facilities.

## Imagine:

Users get different speeches, daily updates, personalized content

## Imagine:

Introduce Gamification to keep users “playing” with your conference booth.



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