# 5G USE CASES

**Perfect Match - Projektideen suchen potenzielle Partner 21.01.2020**

**Kristina Dorsch-Tein Deutsche Telekom AG**

LIFE IS FOR SHARING.

# HUBRAUM PROTOTYPING: WE MAKE 5G AND EDGE TANGIBLE



CO-CREATING WITH STARTUP & DEVELOPER COMMUNITY

PROTOTYPING IN LIVE 5G/EDGE INFRASTRUCTURE

AR/VR - ENTERTAINMENT - ROBOTICS - GAMING

**350**
Startups were scouted

**60**
Potential partners (direct

**18**
Prototypes with partners developed

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# 5G DOME TRIAL: IMMERSIVE EXPERIENCE IN THE STADIUM

## AR STADIUM NAVIGATION

- AR based out- and indoor navigation
- Provisioning of event and information

VISUALIX

**1**

## AR TACTICAL ANALYTICS

- Live Statistics and position of players during the game
- Displayed as AR overlay on camera picture of the phone

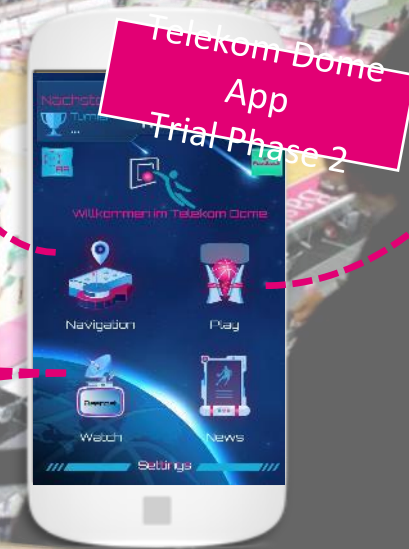KINEXON

immersiv.io

**2**

## BETTER VIEW

- Provides different camera views of the game on second screen incl. 360° perspective
- Display of statistics over camera feed

SMART MOBILE LABS

**3**

Telekom Dome App Trial Phase 2

**4**

## ARENA CHALLENGES

- AR based virtual challenges and games around the arena and the sports event
- Potential enhancement with AR Holograms of the players

FORWARDGAME

LUMIEREVR

## VIP ENTERTAINMENT

- Provisioning of glasses for VIP lounges to provide AR/VR experiences, e.g. Arena Challenges with Holograms or Microstadium View

immersiv.io

LUMIEREVR

**5**

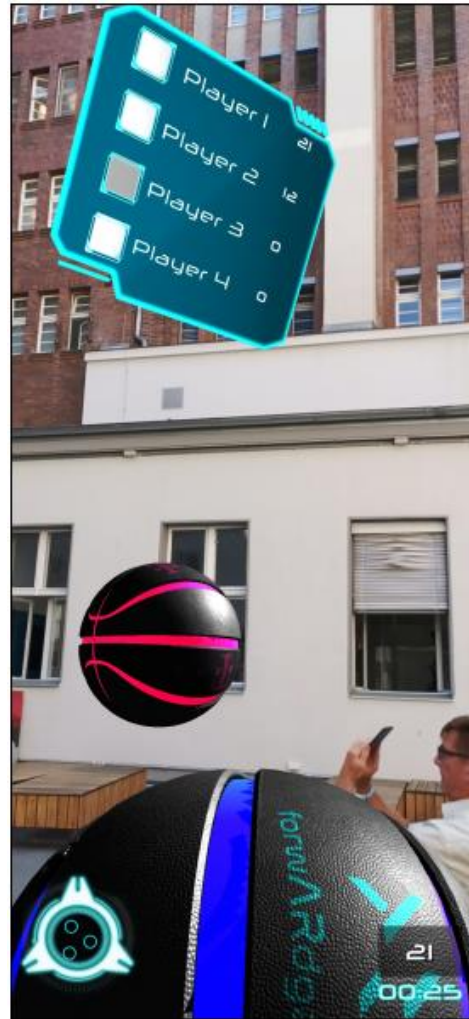LIFE IS FOR SHARING.

# AR TACTICAL ANALYTICS IN REAL TIME



Smartphone

AR glasses

# DEVELOPMENT OF BASKETBALL APP



**Phase 1** (Dome May 2019)
Single player mode. Good LTE performance to have real time player experience

**Phase 2** (IFA Sep 2019)
Up to four player compete in an AR game. The balls from other players can kick each other.
Very low latency, which is needed for synchronization of different players in real time

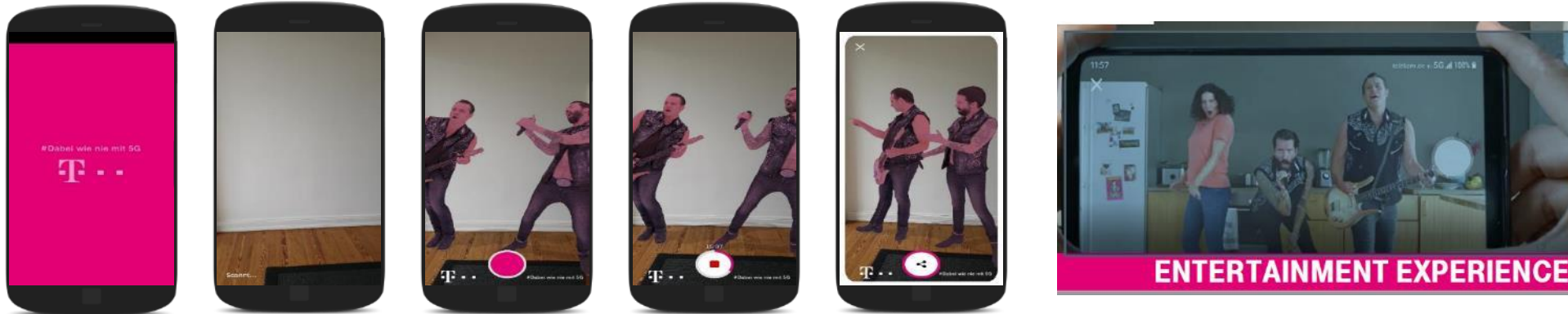**Phase 3** Future Development of Multiplayer Option based on 5G capabilities where available
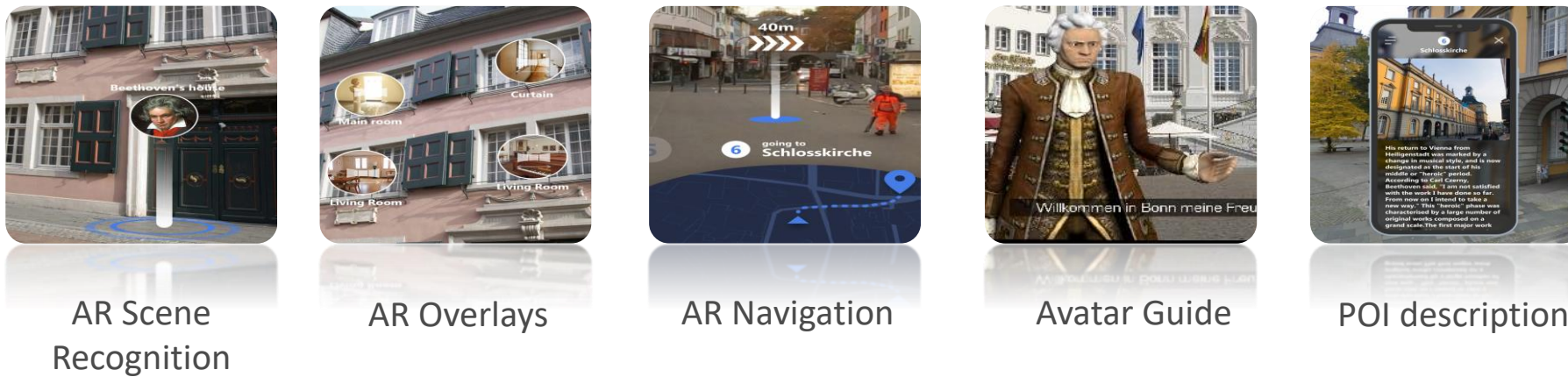
# AR APPLICATIONS

immersiv.io

## AR 3D volumetric content



**ENTERTAINMENT EXPERIENCE**

IFA Showcase App

➡

Real time 3D volumetric content

## AR City Guides with avatar



| AR Scene Recognition | AR Overlays | AR Navigation | Avatar Guide | POI description |

Beethoven App Bonn

➡

AI avatars that recognize speech, tone and mood

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6

# 5G UPLINK TEST FOR TV BROADCAST AT BERLIN MARATHON



5G Smartphones were used as modems on the professional cameras. They transported the camera images via Deutsche Telekom's 5G network to the control room.

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# NRW CO-CREATION PROGRAMM 2020

## OPEN UP

…for new ideas

…for outside views

…for Co Innovation

## CO CREATE

…for real use cases

…to empower NRW ecosystem

…to join forces

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# HOW TELEKOM CAN SUPPORT YOU
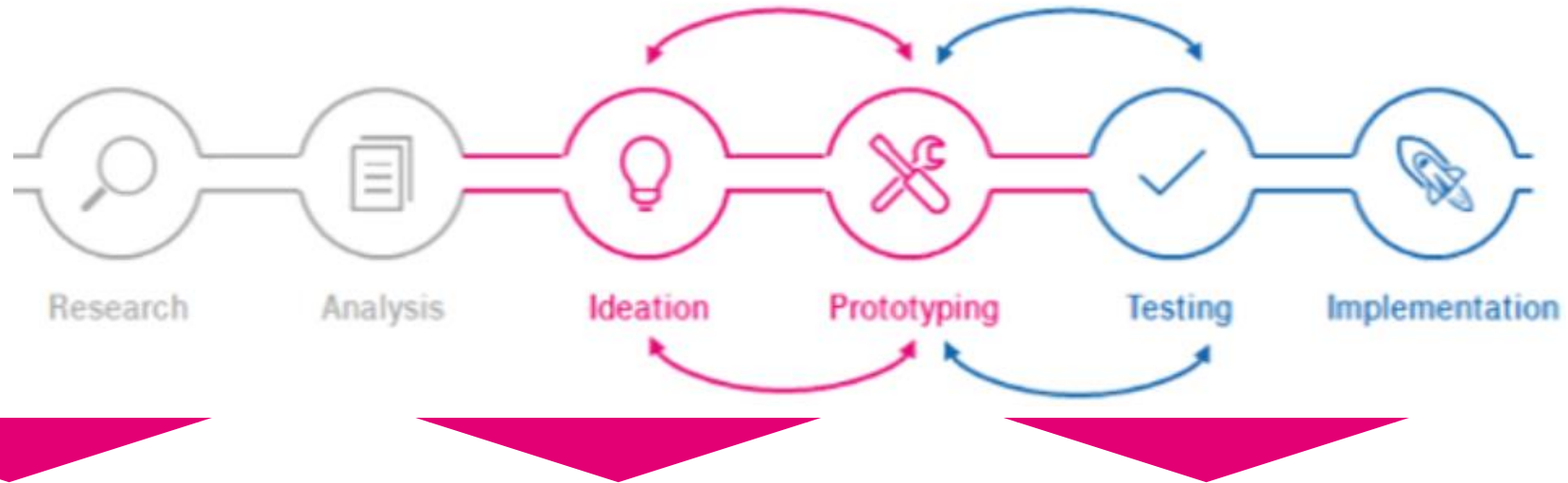


**Support during Ideation**
- Co-Creation Workshops
- Challenges
- Hackathons

**Support during Setup**
- Validation Sprints
- Business Model Sessions

**Offers for Teams**
- Co Working spaces
- Curriculum
- Mentoring
- Coaching

**Offers for Developers**
- Access to Infra-structure
- Expert sessions

# THANK YOU

Contact:

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