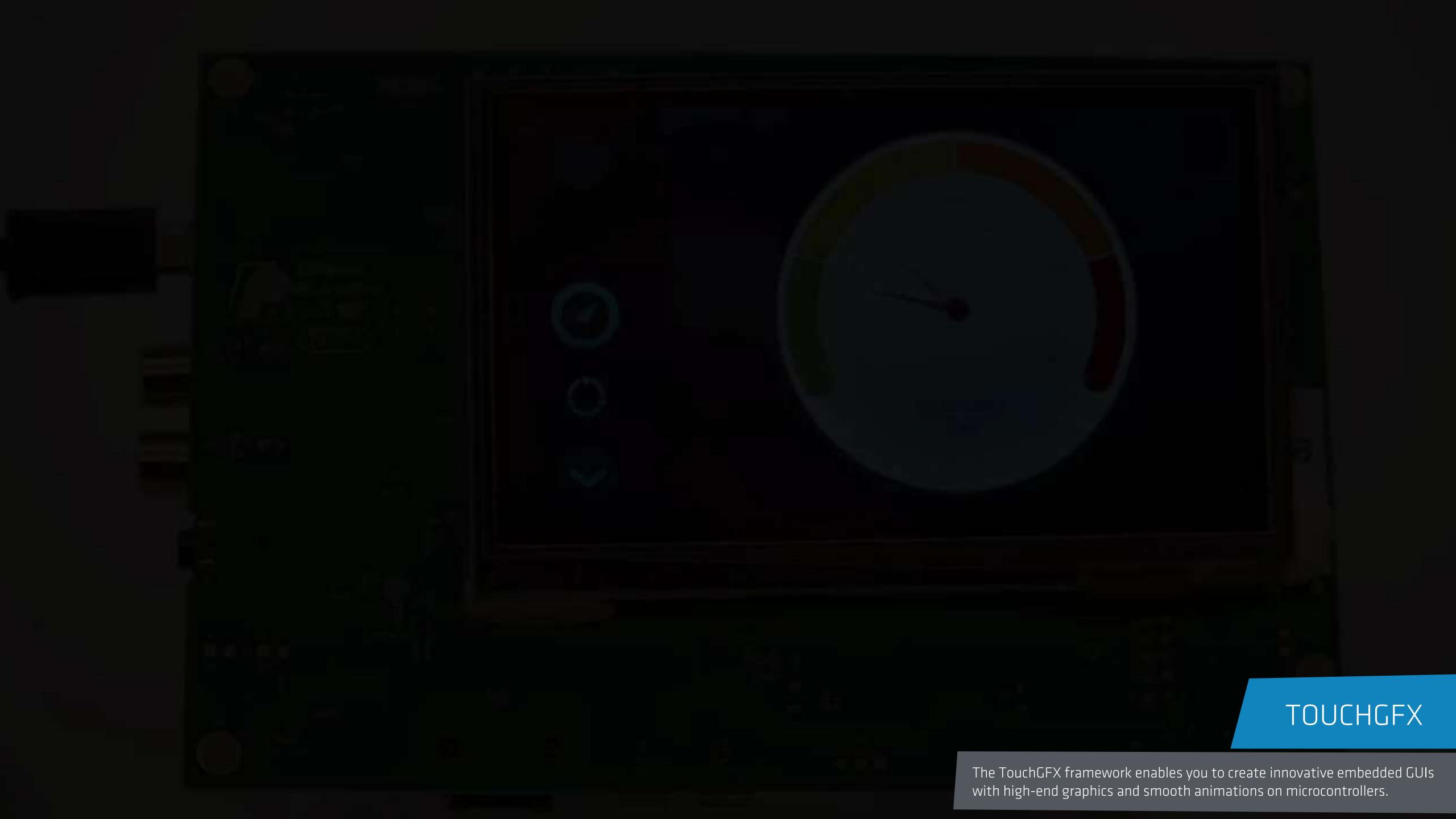# Mjolner
## INFORMATICS

The New Era of testing your User Experience in Virtual Reality

# SEIDR

## WHAT I WOULD LIKE TO SHOW TODAY

- WHY VIRTUAL REALITY PRODUCT VALIDATION AND WHAT IS SEIDR?

- DEMO: WHAT IS A SEIDR EXPERIENCE?

- THE PRODUCT VISION: HOW TO MAKE DIGITAL EXPERIENCES EASY TO WORK WITH

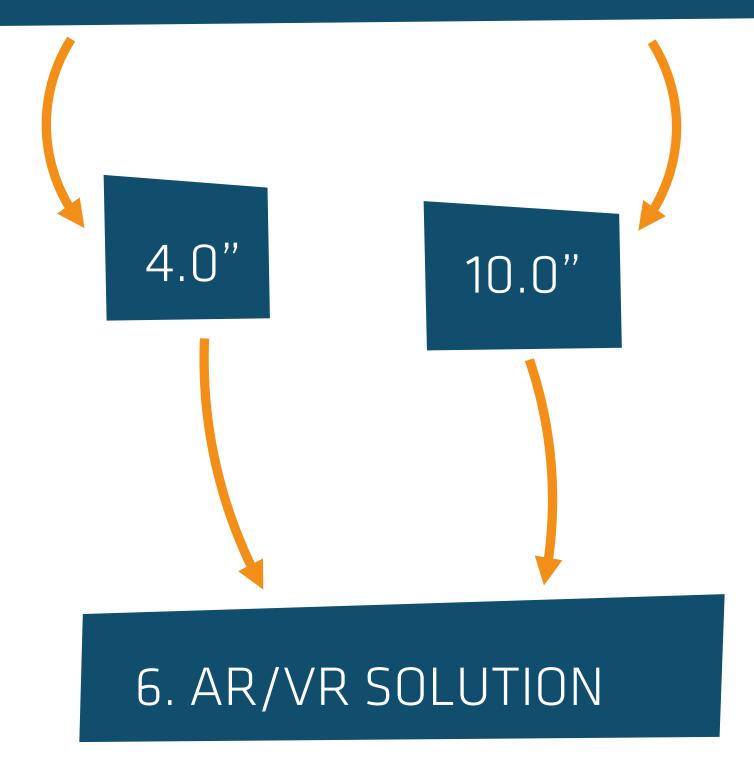CASE : VIRTUAL REALITY PRODUCT VALIDATION
A DIGITAL HANDS ON EXPERIENCE

TOUCHGFX

The TouchGFX framework enables you to create innovative embedded GUIs with high-end graphics and smooth animations on microcontrollers.

1. UI DESIGN CONCEPT

2. UI PROTOTYPE

3. TOUCHGFX PROTOTYPE

4. INTERNET OF THINGS & DATA SCIENCE WORKSHOP

# 5. UPDATE UI DESIGN CONCEPT

4.0"

10.0"

# 6. AR/VR SOLUTION

# THE PRODUCT DEVELOPMENT PROCESS TODAY

## WITHOUT VR

1. Select Harware Design (Headquarters in Europe)

2. Manufacture Harware Design (eg. Asia)

3. Develop Display Prototype (eg. South America)

4. Put it all together (Headquarters in Europe)

5. Ship it to testing destination for various tests (eg. a remote location)

6. Ship prototype back (to Headquarters in Europe)

7. Present prototype and await approval

Success or repeat step 1-7

# THE CHALLENGES

- Manufacturing hardware and display prototypes is time consuming

- Difficult to understand the physical design and user experience by reviewing 2D formats

- Multiple iterations on physical design is time consuming

- Difficult to evaluate multiple design iterations simultaneously

- Limited innovative output from R&D teams

- Sharing space and time requires significant effort

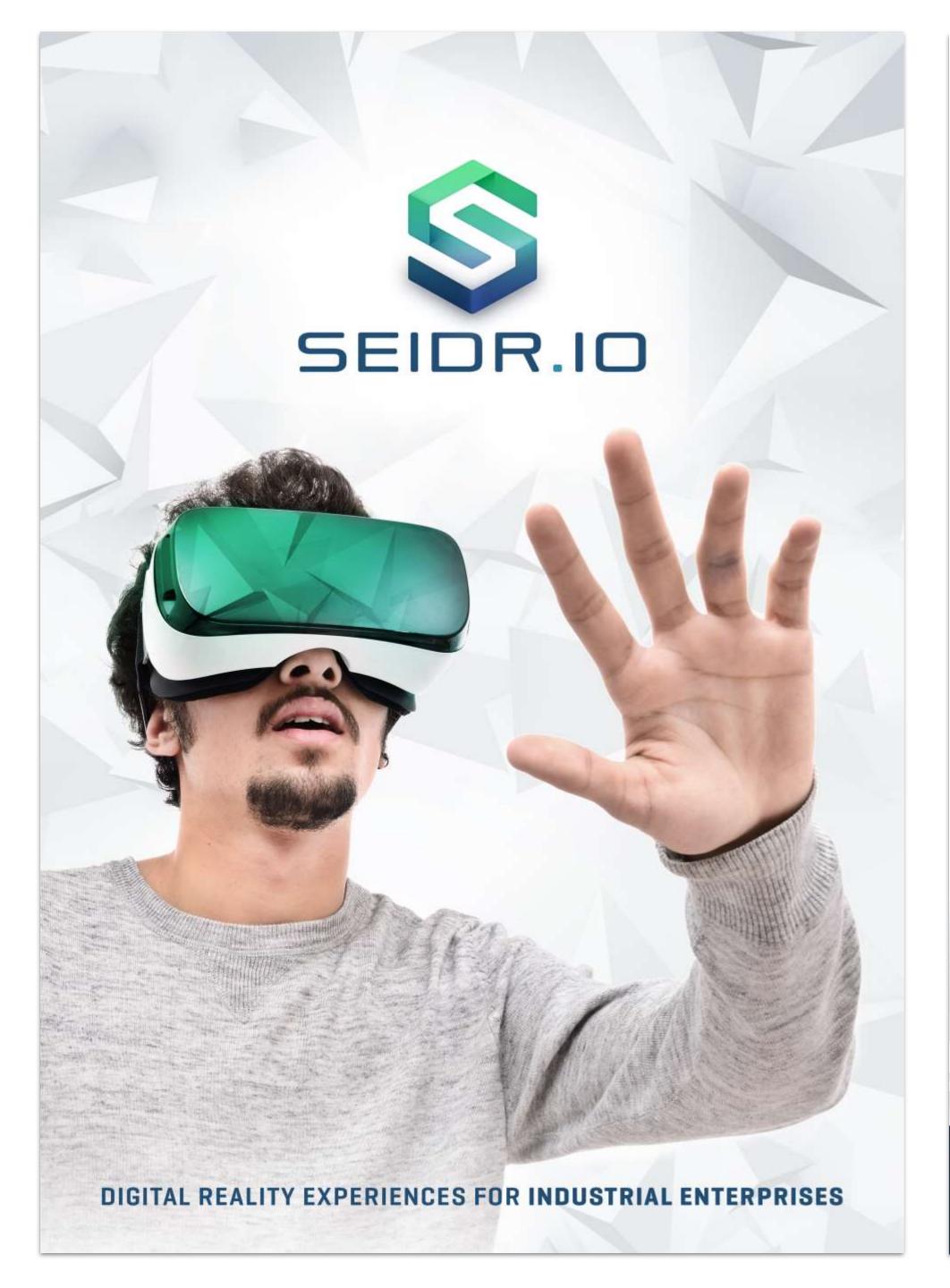...

# THE PRODUCT DEVELOPMENT PROCESS TOMORROW

## WITH VR

1. Add 3D model to digital space (digital)

2. Select environment (digital)

3. Configure animations and add sounds to 3D model (digital)

4. Add UI prototype (digital)

5. Share experience with stakeholders (digital)

6. Present and collaborate in digital experience on preferred platform (digital)

Success or repeat with new Seidr experience

# THE ADVANTAGES

- No need for hardware and display manufacturing until later

- Physical design and user experience is experience in a 3D environment

- Iterations on 3D models are fast, as it is purely digital

- Testing multiple design iterations simultaneously is easy and efficient

- Maximized output from R&D teams, as shipping and traveling is kept at a minimum

- Sharing space and time is no longer a requirement

...

# SEIDR.IO

**DIGITAL REALITY EXPERIENCES FOR INDUSTRIAL ENTERPRISES**

# ARE YOU PART OF A PRODUCT DEVELOPMENT TEAM?

## IF YES, LET US INTRODUCE YOU TO YOUR NEW BEST FRIEND, SEIDR.

Seidr is an easy-to-use digital space which lets you test and validate with end-users long before you produce anything physical. That means no material costs, no hardware development and no headaches before you have validated that you are building and developing the right product.

Seidr not only lets you test and validate the product experience with end-users much earlier – it eliminates the need for physical presence of users, which has a wide range of advantages for your R&D teams:

- Eliminating the need for physical presence drastically cuts down travel and shipping costs for people, hardware and physical prototypes.
- Cutting down travel and transport time enables your R&D teams to maximize the innovative output of their work.
- Give your R&D teams a digital space to share and test their work with each other and let multiple teams work towards a common solution, no matter their physical location in the world.

## THAT SOUNDS AWESOME! BUT HOW DOES IT WORK?

Here is how your Seidr process could look like:

1. The digital space of Seidr lets you import 3D models of your future product.
2. If you are looking to test the product in Virtual Reality, we also let you choose an environment that matches the end-context you imagine for your product.
3. To increase immersion for your users during the test, you can add animations sounds and interactive displays to your model.
4. Save your combined experience to the platform of your choice – either a smartphone for the Augmented Reality experience or a head mounted display (HMD) for the Virtual Reality experience.
5. Find the relevant people for your test - the physical location is no problem as Seidr is completely digital. When you have found the right people, just invite them into your Seidr space where you can share the experience of your product across the globe.
6. Start Seidr on your chosen platform and choose the experience from the list.
7. The virtual experience of the product brings you as close to the physical product experience as possible when you interact with the model, the environment around you and the interactive display.
8. Collect feedback from the test and start improving the product for your next iteration.
9. Repeat as needed until you have found the product iteration worth producing a physical prototype for.

## SEIDR.IO

**R&D SHOULDN'T BE IN THE CLOUD**

We know that sharing your cutting edge prototypes and latest innovation through a third party cloud application poses security and confidentiality issues. This is why we let you create, host and run your digital Seidr space locally, giving you full control over when and where your valuable company property is shared.

# SEIDR.IO

**DIGITAL REALITY EXPERIENCES FOR INDUSTRIAL ENTERPRISES**

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DIGITAL COLLABORATIVE WORKSPACE FOR PRESENTING PRODUCTS IN ALL STAGES

EASILY CREATE DIGITAL VR/AR/MR EXPERIENCES FOR

KEEP IT LOCAL AND SECURE!

SEIDR CORE APPLICATIONS

Apple
ARKit

Microsoft
Hololens

Facebook
Oculus Rift

Google
Daydream

UNITY SEIDR FRAMEWORK

SEIDR EXPERINCE

I'm an
asset

MODEL

I'm a
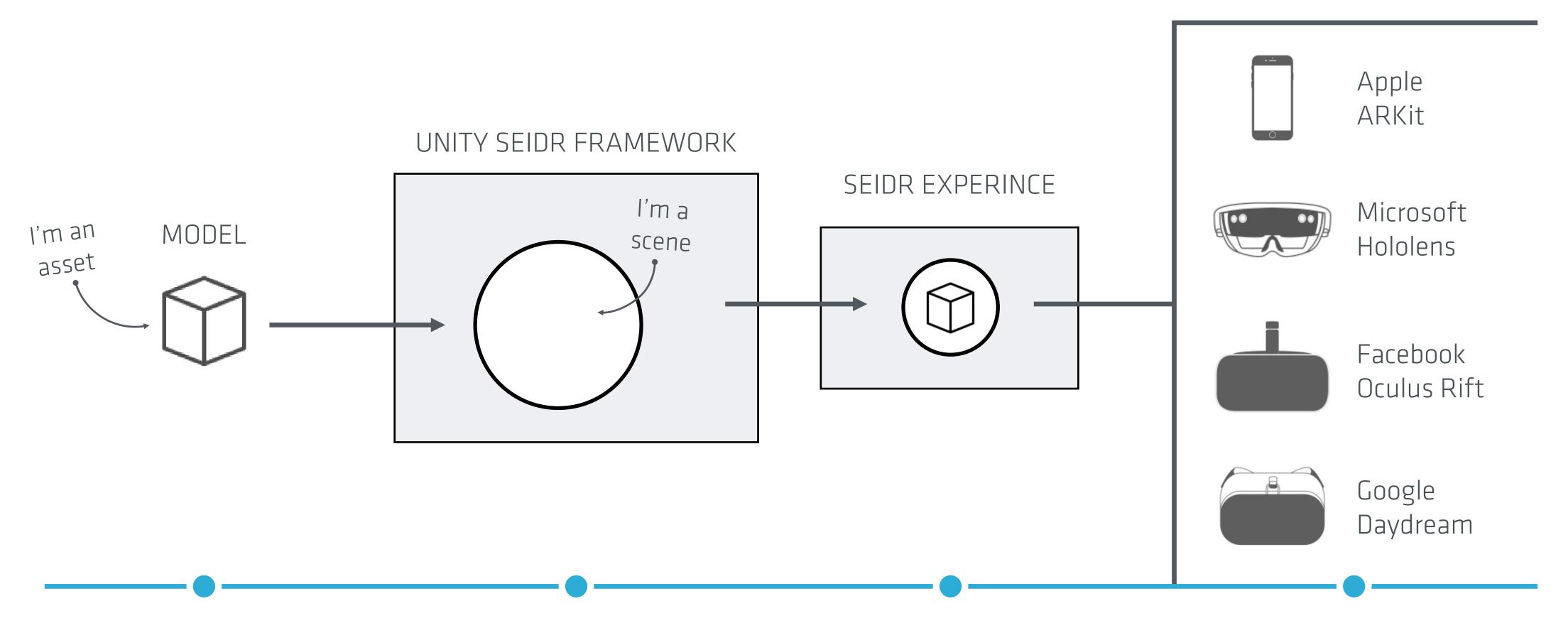scene

Model of a
new product

Choose a context
Magic model animations
Ambient and interaction sounds
Interaction guide
Interactive web based prototypes
*Interactive TouchGFX display

Collaborative experience

Choose experience platform

# DEMO

## S SEIDR.IO

○ —— ○ —— ○
Select model     Select platform     Run experience

### YOUR MODELS

What files are supported?

| NAME | DATE ⌄ | | |
|------|--------|---|---|
| ☐ Microwave-Mx1.fbx | 08/11/2017 | 🗑 | 👁 |
| ☑ Kitchen-MixMaster-final.fbx | 06/10/2017 | 🗑 | 👁 |
| ☐ Pump-Switch.UK.it1.fbx | 18/08/2017 | 🗑 | 👁 |

🔗 SELECT FILE    Or drag & drop a file into the list

### MODEL PREVIEW

My model is not looking right?

SELECT PLATFORM

# SEIDR.IO

Select model —————— Select platform —————— Run experience

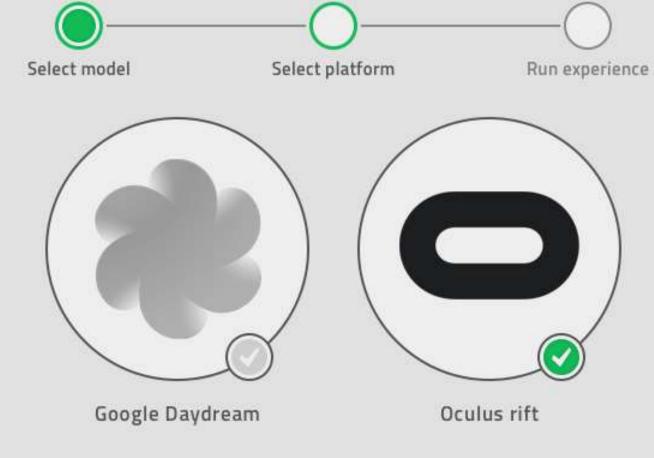Google ARCore    Apple ARKit    Google Daydream    Oculus rift    Microsoft Hololens
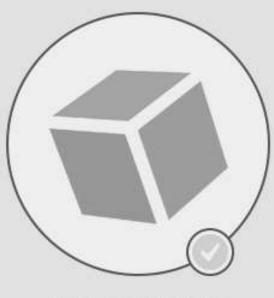
## Augmented reality

Augmented reality experiences let you place your model in your physical environment and expect it as if it was a physical object

## Virtuel Reality

Virtual reality experiences let you place your model in a digital environment.

● If you select this option, you have to choose an environment, from a variety of options, your model will be placed in

● Virtual reality experiences support multiplayer

## Mixed Reality

Mixed reality experiences let you place your model in your physical environment and expect it as if it was a physical object

### EXPERIENCE NAME

Kitchen-MixMaster-final    .sdr-ak

GO BACK

GENERATE EXPERIENCE

# SEIDR.IO
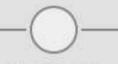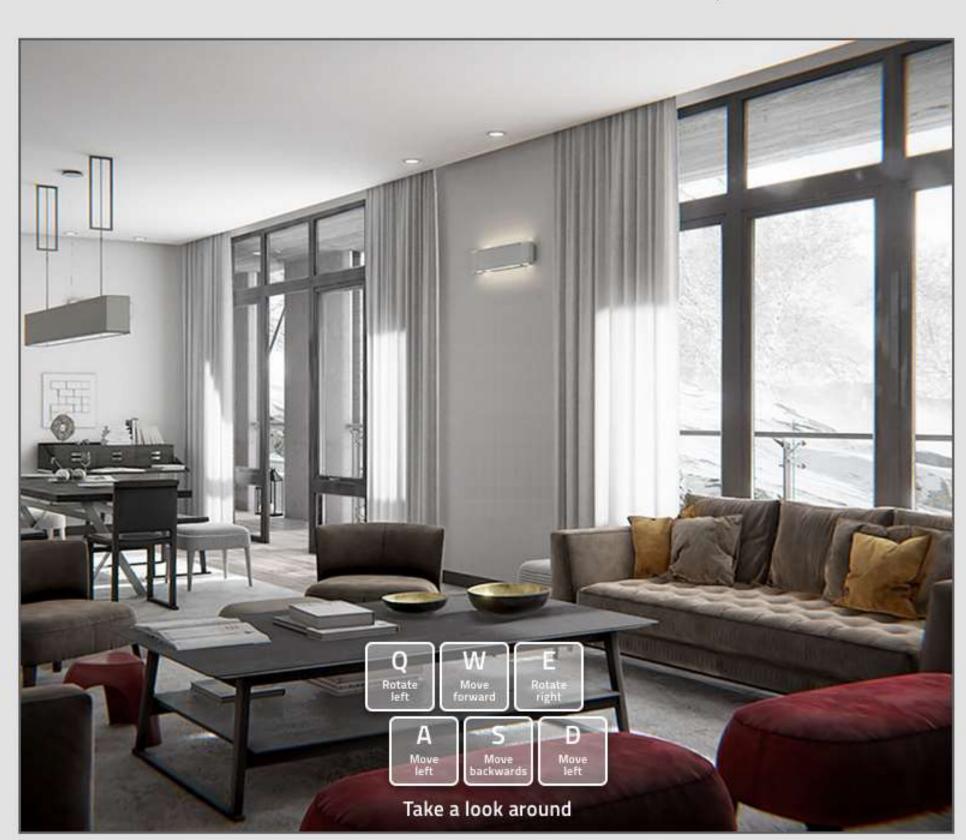
○ Select model —— ● Select platform —— ○ Select environment —— ○ Place model —— ○ Run experience

Select the right environment for *KitchenMaster* experience

Winter vacation home ⌄    ✓

Do you want to add your own environment? Read more here!

## Sound settings

✓ Ambient sound

○ Background music

Do you want to add your own background music? Read more here!

| Q Rotate left | W Move forward | E Rotate right |
| A Move left | S Move backwards | D Move left |

**Take a look around**

GO BACK    **PLACE MODEL**

# SEIDR.IO

Select model  —  Select platform  —  Select environment  —  Place model  —  Run experience

## Place the model for the *KitchenMaster* experience
Use the keyboard to find the right location for your model.

### Add interactive display to Kitchen-MixMaster.final

✓ Enable interactive display solution

| Q Rotate left | W Move forward | E Rotate right |
| A Move left | S Move backwards | D Move left |
| Z Move down | X Move up | |

MOVE HOTSPOT

RESET POSITION

| Y Rotate left | U Move forward | I Rotate right |
| H Move left | J Move backwards | K Move left |
| N Move down | M Move up | |

Move camera

Move your model

GO BACK

SETUP DISPLAY

**S SEIDR.IO**
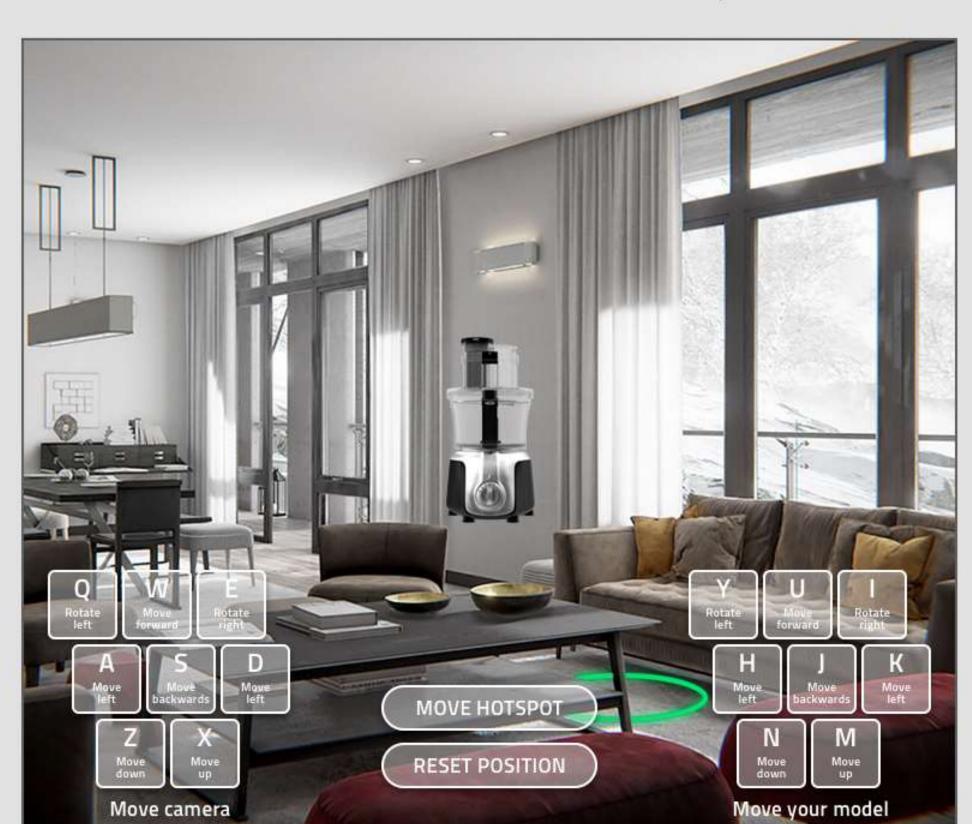
Select model — Select platform — Select environment — Place model — Run experience

## Place the model for the *KitchenMaster* experience

Choose a display from the list

What files are supported?

| NAME | SIZE ⌄ |
|------|--------|
| ☐ Microwave-Mx1.fbx | 800*480 px |
| ☑ Kitchen-MixMaster-final.fbx | 800*480 px |
| ☐ Pump-Switch.UK.it1.fbx | 800*480 px |

**Use the keyboard to find the right location for your display.**

Did you know, you can specify a placeholder for displays in your model. Read more here!

Move camera

| Q Rotate left | W Move forward | E Rotate right |
| A Move left | S Move backwards | D Move left |
| Z Move down | X Move up | |

RESET POSITION

Move your model

| T Rotate down | Y Rotate left | U Move forward | I Rotate right | O Rotate up |
| H Move left | J Move backwards | K Move left | | |
| N Move down | M Move up | | | |

GO BACK

SETUP DISPLAY

# S SEIDR.IO

● Select model ─── ● Select platform ─── ● Select environment ─── ● Place model ─── ● Run experience

## 1. Open or share your experience

### Your experience file is ready to be played by whomever you share it with

[ SHOW FILE IN EXPLORER ]

c:/Users/Max/Documents/SEIDR/Experiences/OCR/KitchenMaster.sdr-or

**OR**

[ OPEN IN SEIDR* ]

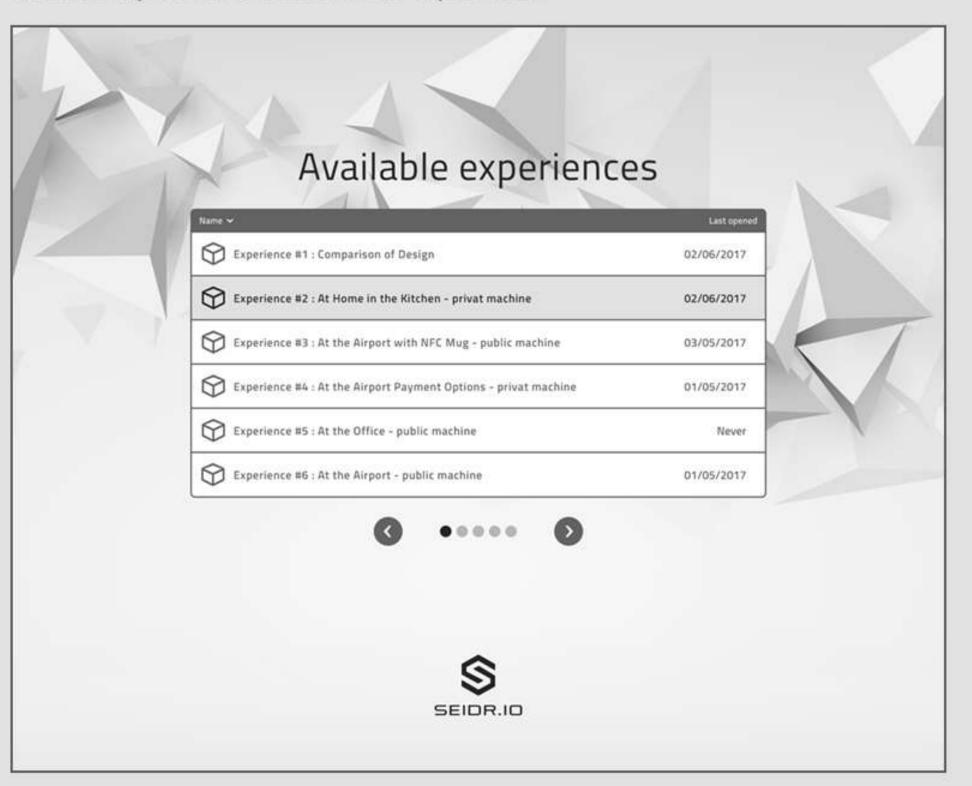Automatically copy the experience file to the correct location on your computer and start SEIDR.

*Requires the SEIDR application is installed on this computer

### Upgrade to SEIDR PRO and use our experience sharing service

Upload your experience to our cloud service and get an instant link to be used in the seidr application for instant download of your new experience

[ GENERATE SHARE LINK ]

## 2. Select experience from the list of experiences

### Available experiences

| Name ⌄ | Last opened |
|---|---|
| Experience #1 : Comparison of Design | 02/06/2017 |
| Experience #2 : At Home in the Kitchen - privat machine | 02/06/2017 |
| Experience #3 : At the Airport with NFC Mug - public machine | 03/05/2017 |
| Experience #4 : At the Airport Payment Options - privat machine | 01/05/2017 |
| Experience #5 : At the Office - public machine | Never |
| Experience #6 : At the Airport - public machine | 01/05/2017 |

‹   ● ○ ○ ○ ○   ›

S SEIDR.IO

GO BACK

DONE