EON Merged XR User Guide

EON-XR *v9.4* | March 2022

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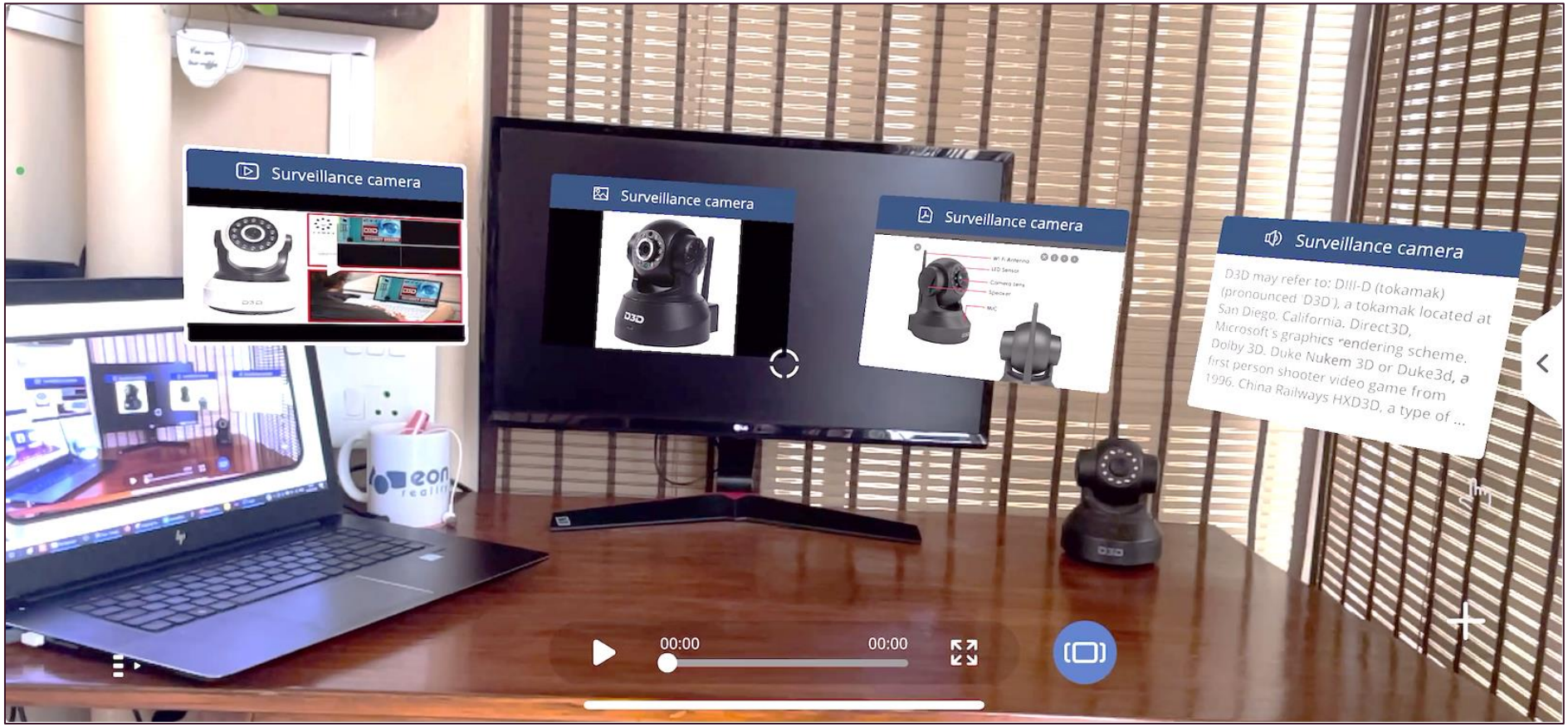
I. EON MERGED XR

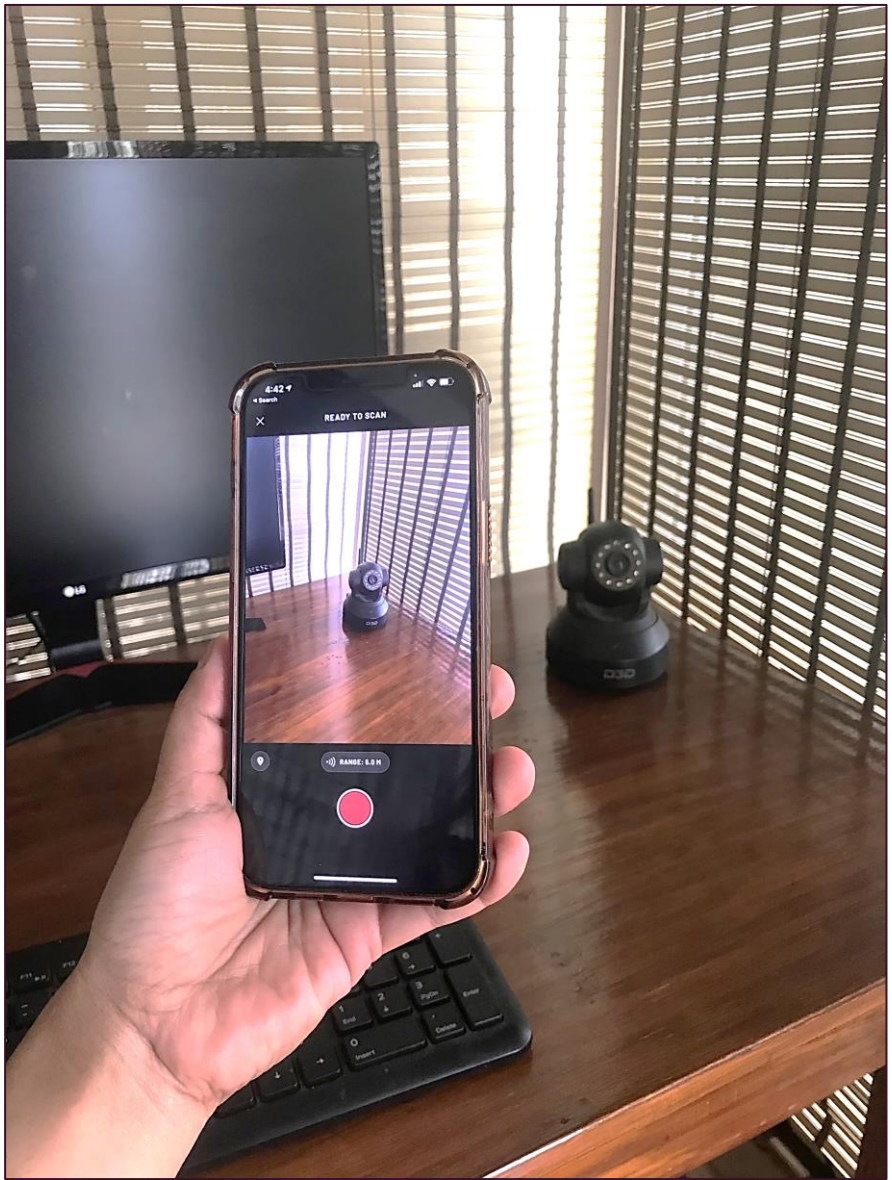


EON Merged XR is a flagship product of EON Reality where you can **MERGE** a digital object into your physical world using **any device** (smartphones & tablets) and **ENRICH** it with **AI**-generated knowledge portals.

In this user guide, we'll explore EON **Merged XR** of a **Home surveillance CCTV Camera**

****Your institute users will be able to perform Merged XR only with the **EON Merged XR Licenses.***
To check your licenses, Go to Admin > Reports > Product license information

II. DIGITIZE ANY PHYSICAL OBJECT



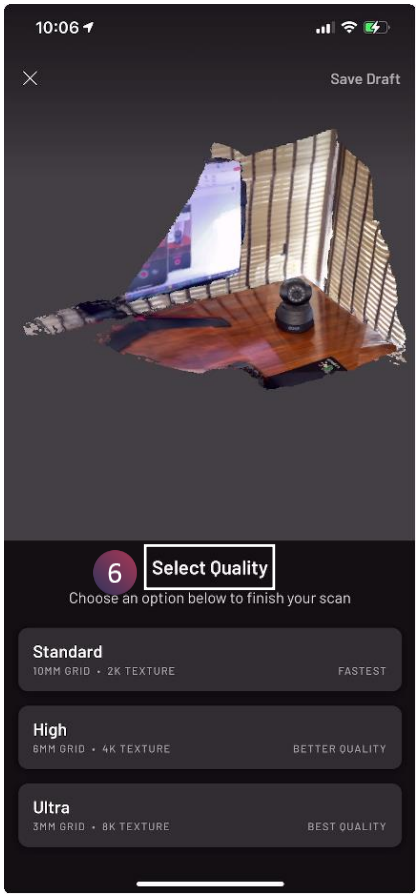
From the comfort of your smartphone or tablet, bring any object or setting around you into the digital world with EON Merged XR. Simply scan and upload directly into the program (EON-XR), and then use the new Digital Twin to open knowledge portals, add activities and inject limitless amounts of information straight into your surroundings.

We have used **iPhone 12Pro Max** ,equipped with LIDAR scanners which gives optimal scanning outputs.

Alternately you can use other scanning devices as well for scan and upload to EON-XR

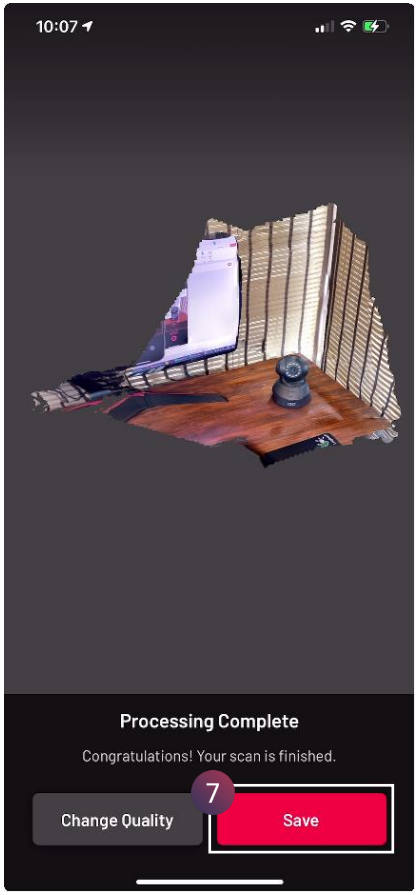
In this User Guide, scanning is done using **Scaniverse** app which is available in app store and is free for iOS users.

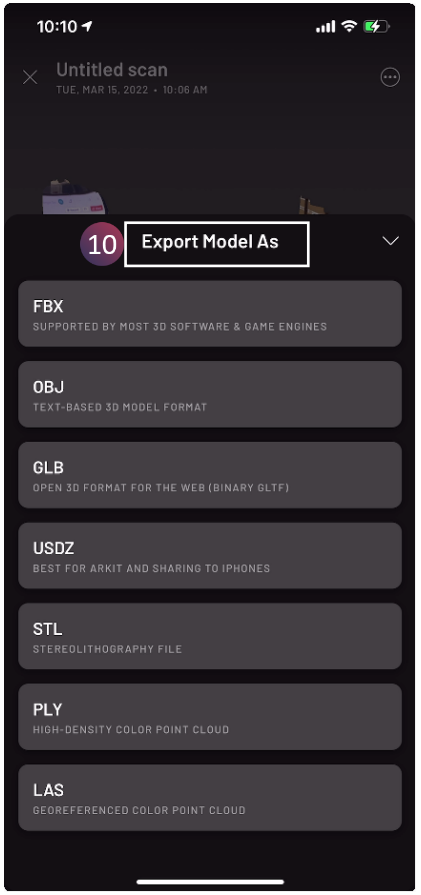
A. Scan a 3D Object & Export to EON-XR 1 2

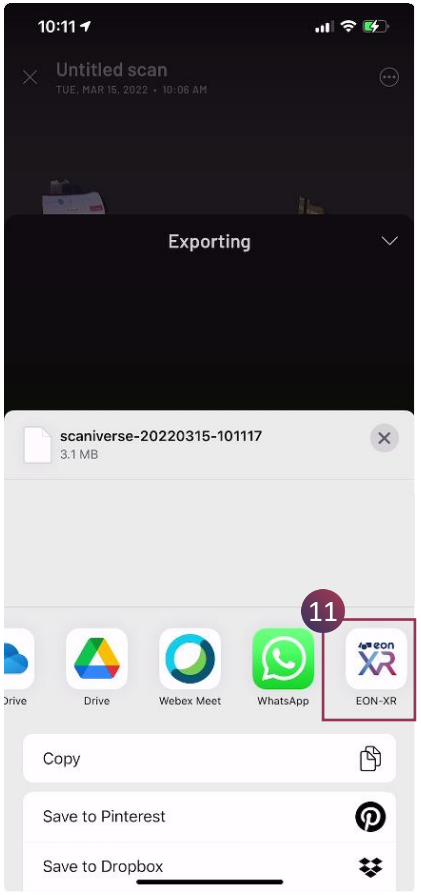


1. Open Scaniverse
2. Create Scan
3. Set a range
4. Start scanning
5. Stop when the red lines disappear from your object
6. Select quality

A. Scan a 3D Object & Export to EON-XR

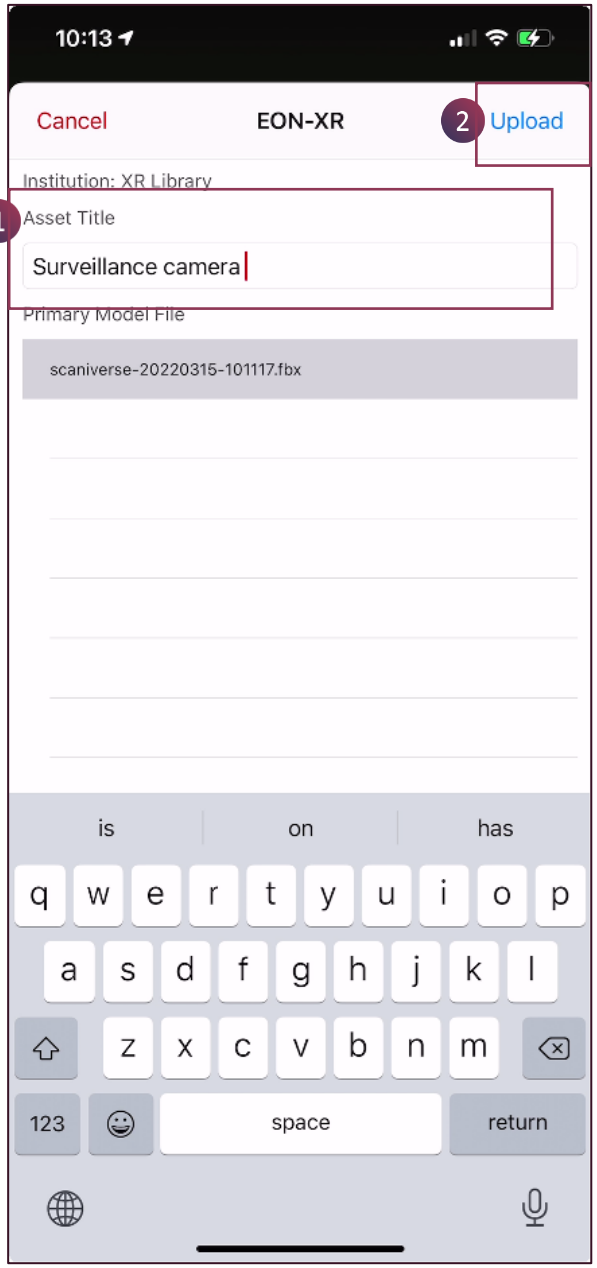






7. Save
8. Edit as necessary
9. Share
10. Export Model As > Select Model export format (FBX/OBJ/GLB etc.)
11. Export to EON-XR

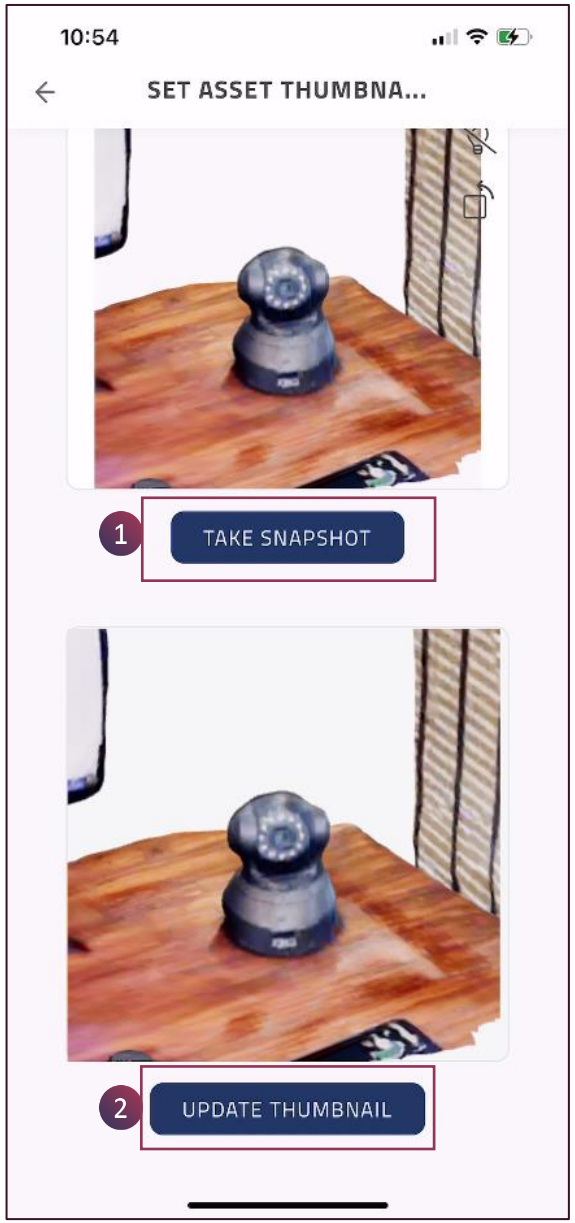
B. Set Asset Title (in EON-XR)



Within EON-XR app, define an

1. Asset Title and
2. **Upload** asset

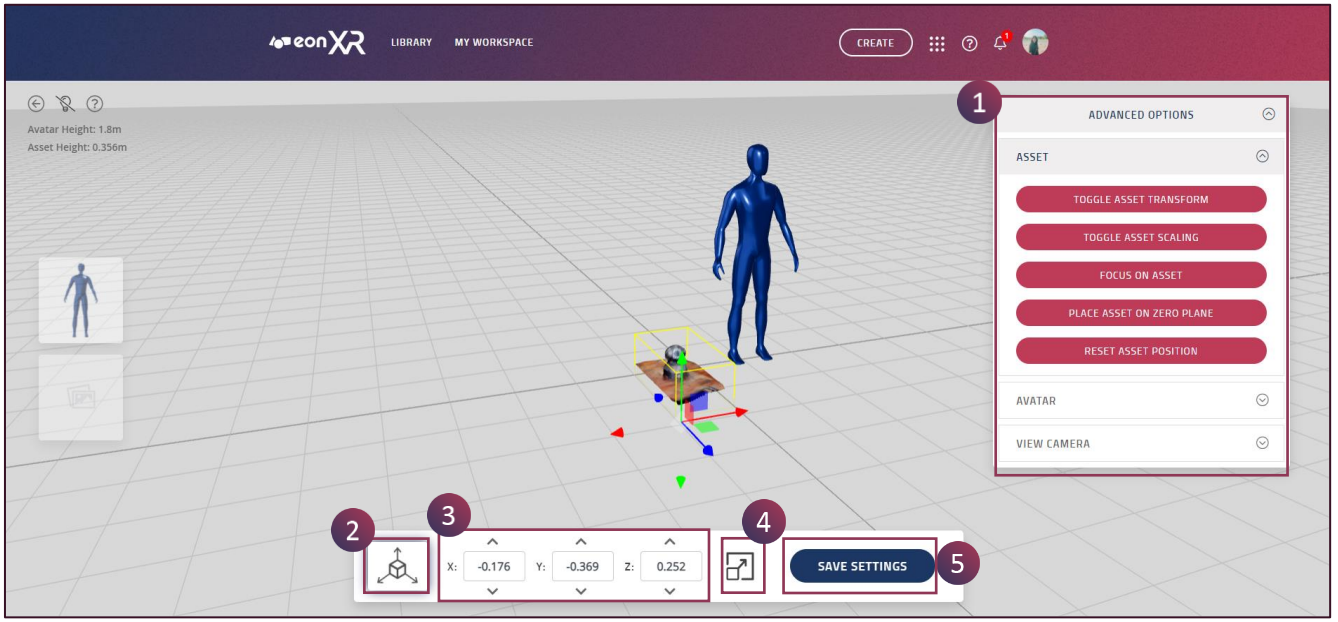
C. Set Asset Thumbnail

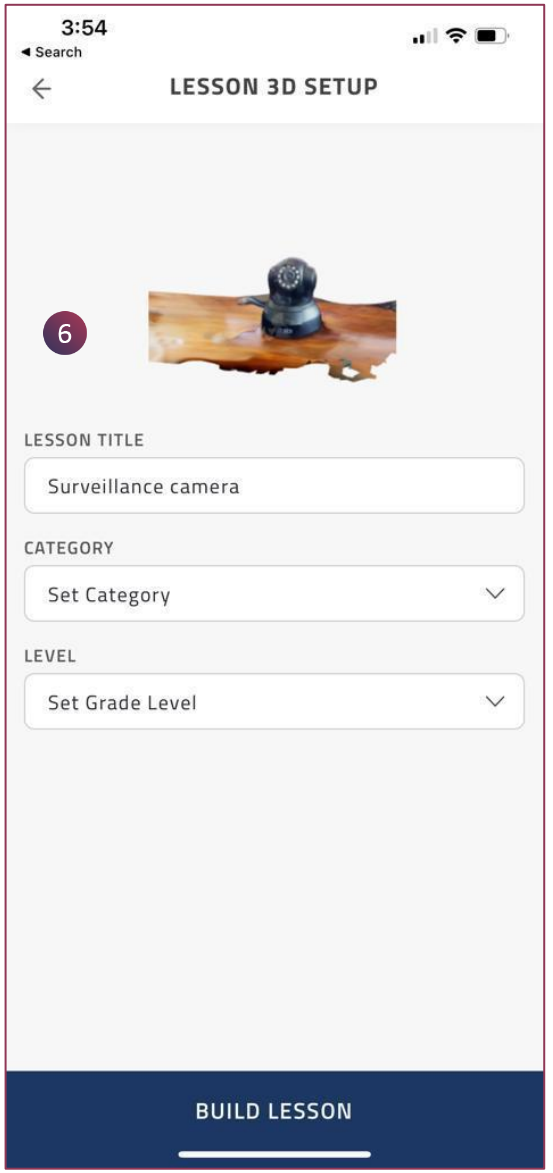


Set a desired orientation of your 3D asset

1. Take snapshot
2. **Update** thumbnail

D. Set 1:1 scale & Build Lesson



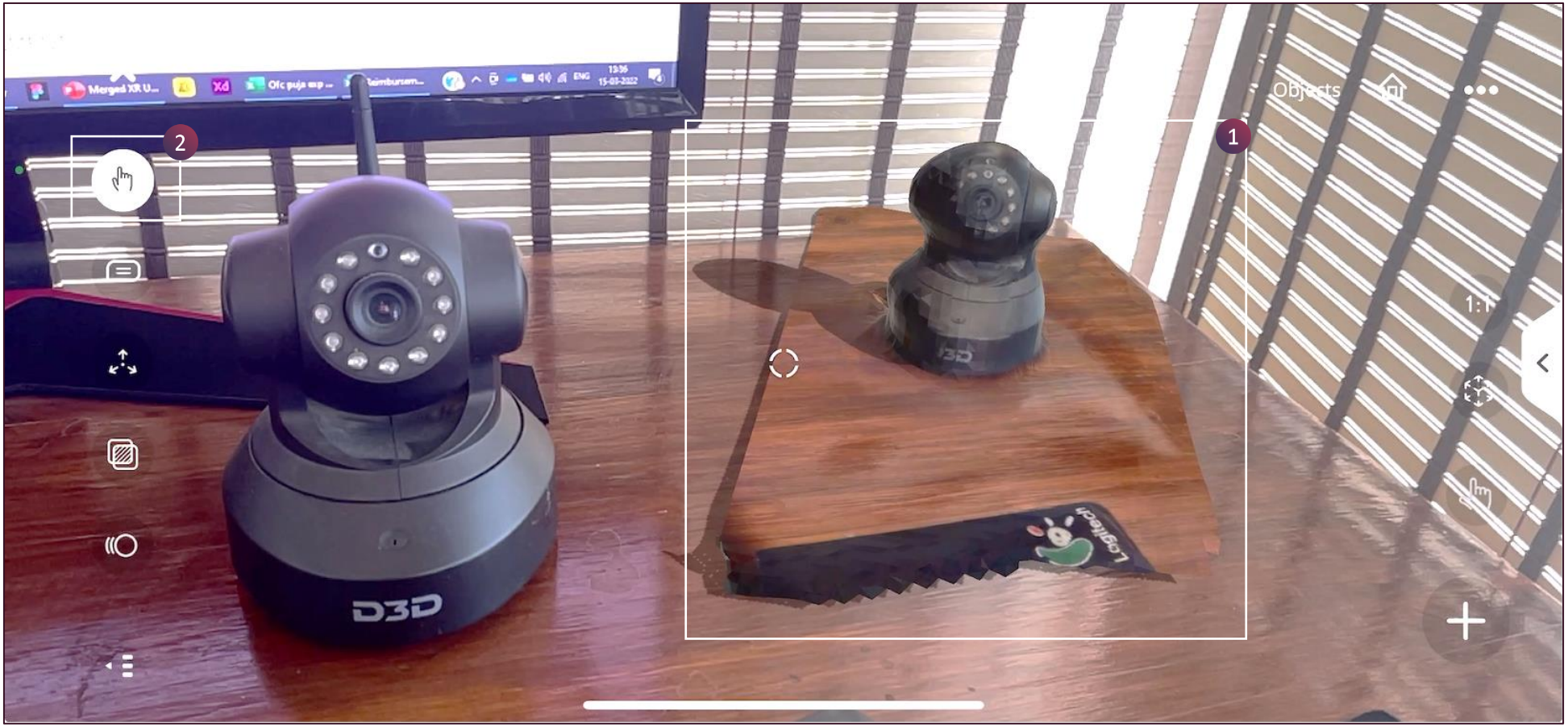


Set 1:1 scale. This will support an optimal AR viewing during EON Merged XR and help in EON Spatial Meetings.

1. Go to **Advanced options** to manage the asset / avatar size / aspect ratio.
2. **Toggle Asset Transform** : Use this to change asset placement.
3. Manage XYZ values
4. **Toggle Asset Scaling:** Use this to simply increase / decrease size of your 3D asset
5. Save settings
6. Setup the lesson Page and Build Lesson

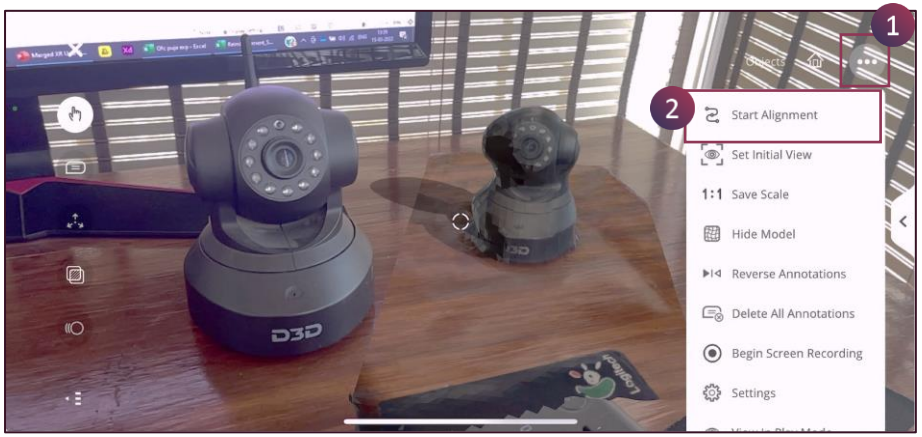
**** Currently this feature is available in EON-XR desktop app only.*

E. Open Lesson in EDIT Mode

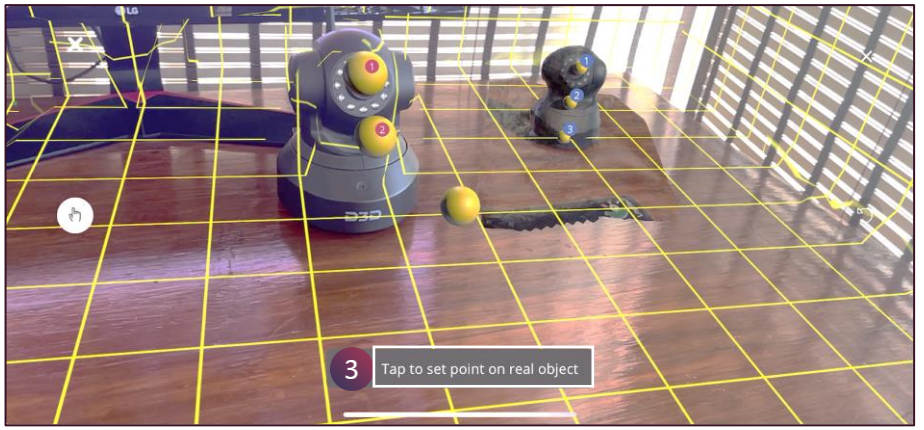


1. Open lesson in **EDIT** mode. It will launch default in **AR mode.** Here you can see the physical object and its digital twin side by side.
2. You can always switch to the **Touch** mode

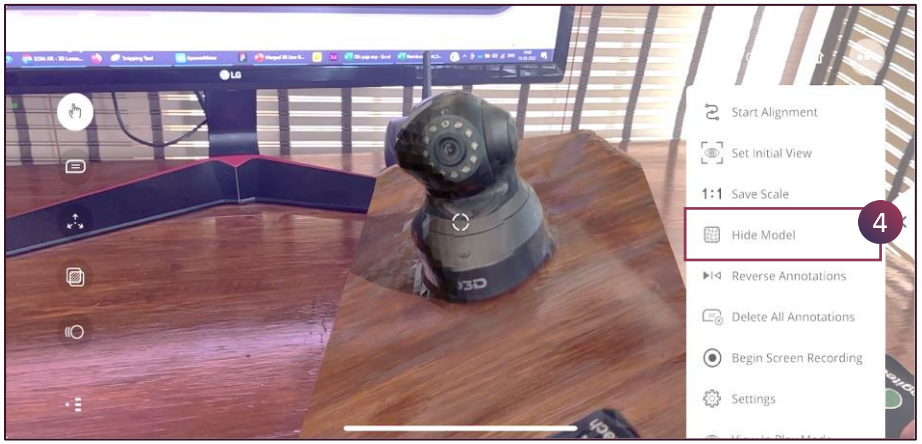
F. MERGE the Digital & Physical Twins



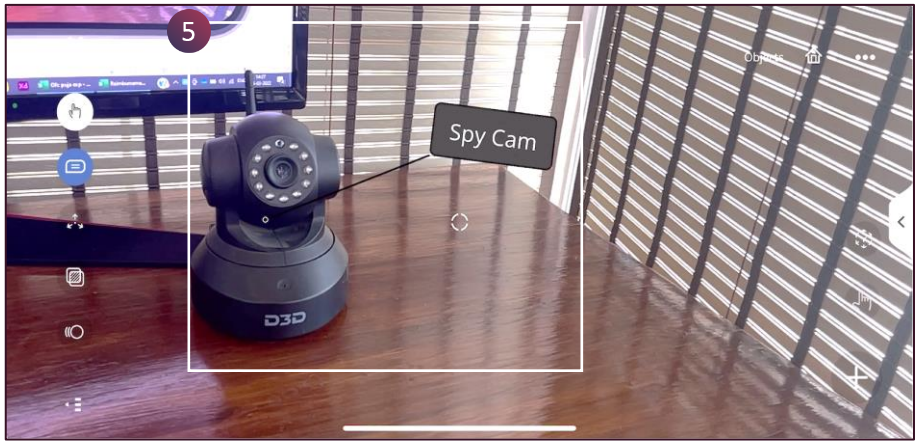
1. Open the three-dot menu &
2. Start Alignment



3. Tap to set the three pairs of tactical points between the object & its digital twin

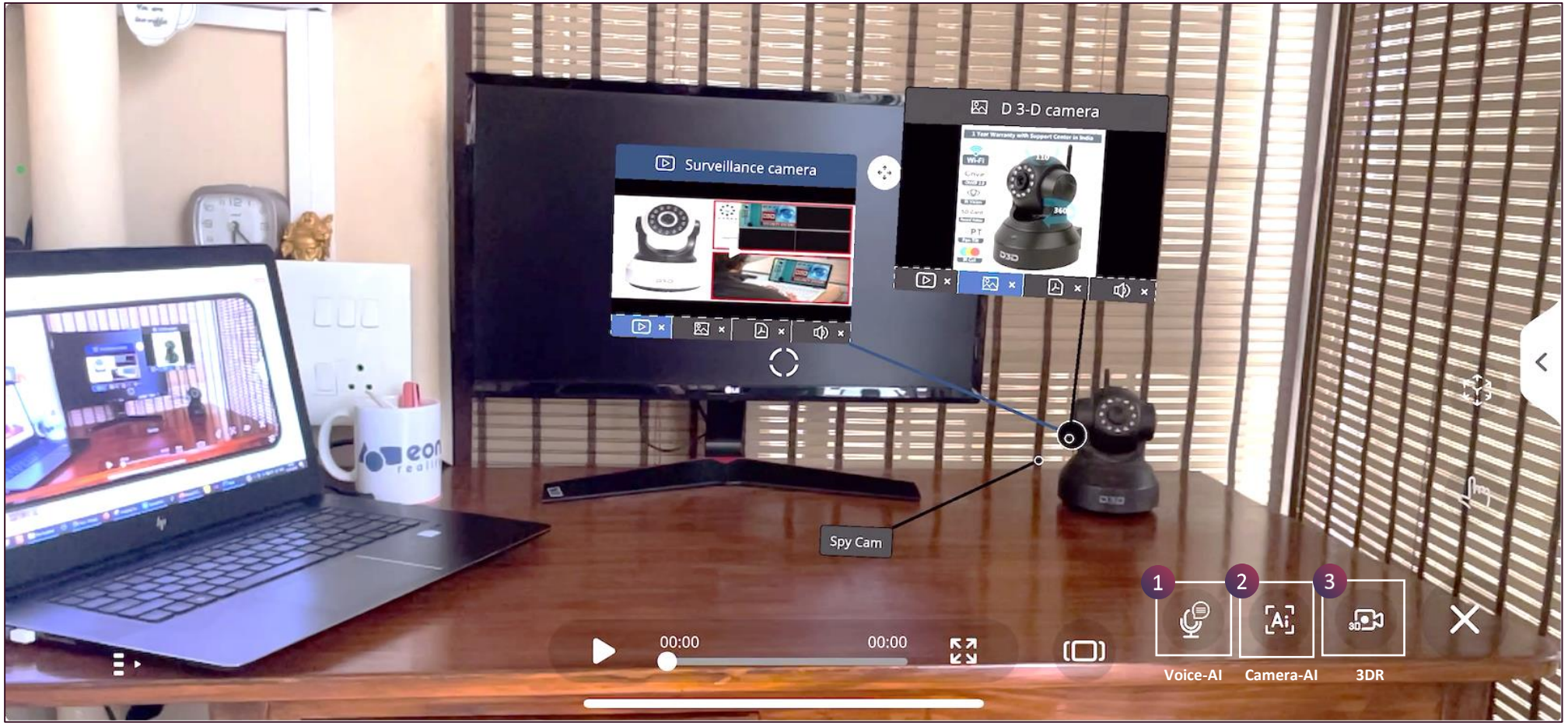


4. Overlap and Hide Model



5. Now the physical object is merged with and contains the knowledge points of its digital twin

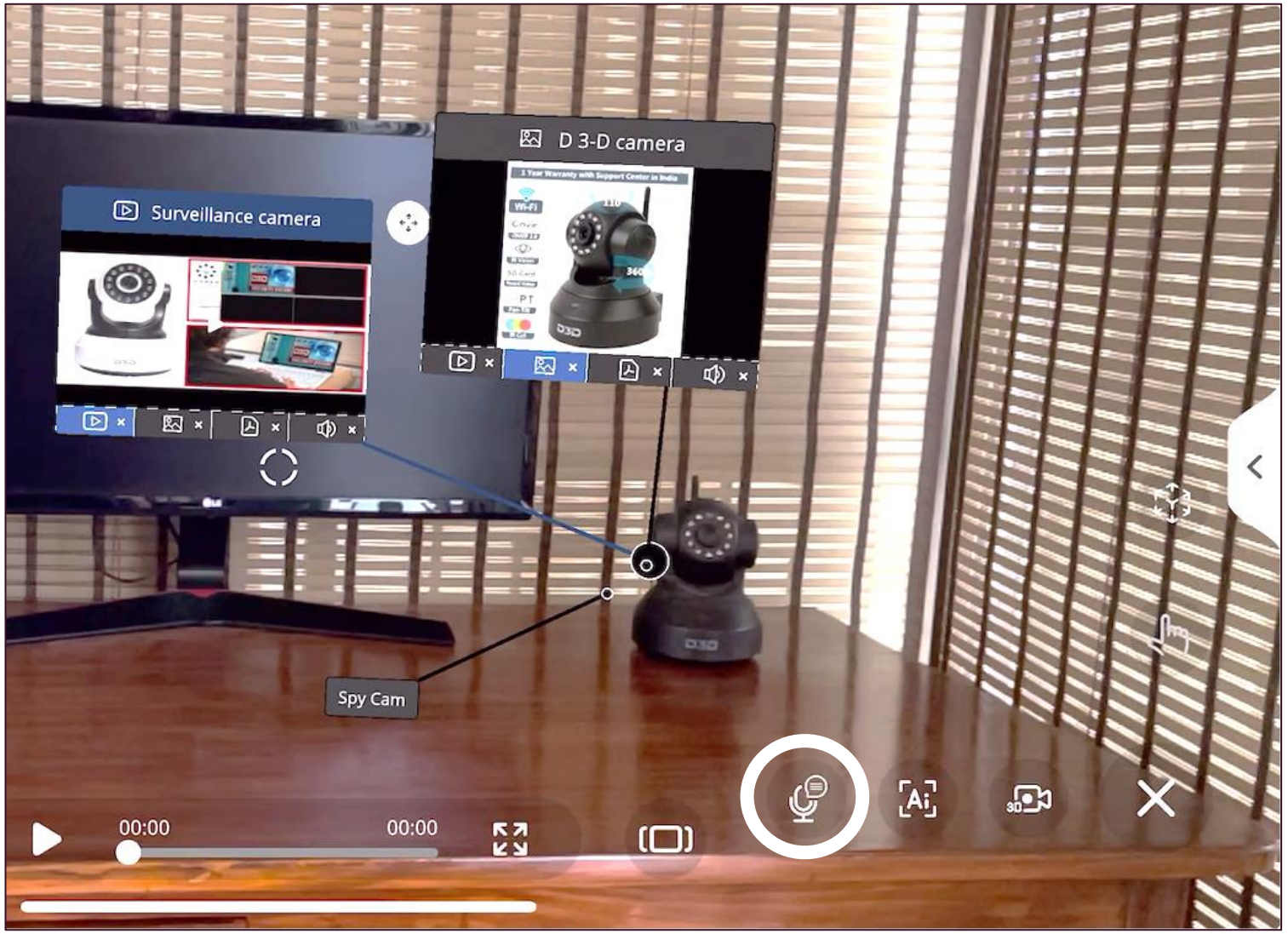
III. ADD KNOWLEDGE PORTALS TO YOUR OBJECT / 3D MODEL



You can **enrich** your **Merged XR** with Knowledge Portals created through,

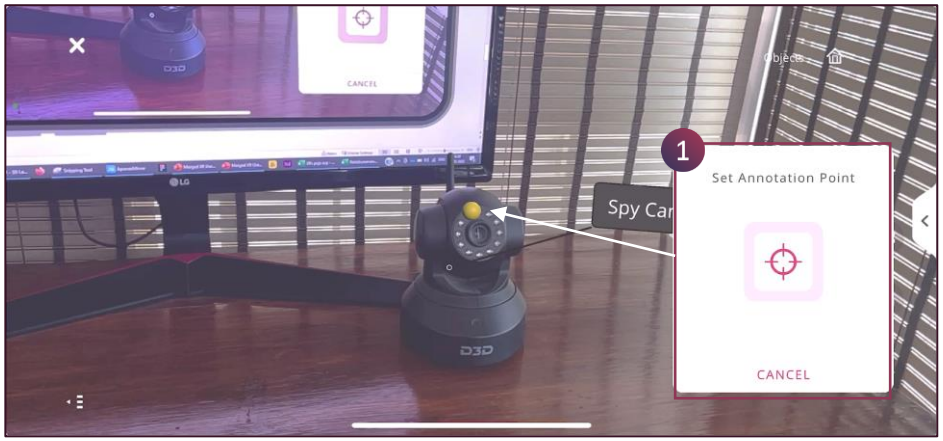
1. **Voice - AI**
2. **Camera - AI**
3. **3D Recording**

A. Add content with voice - AI

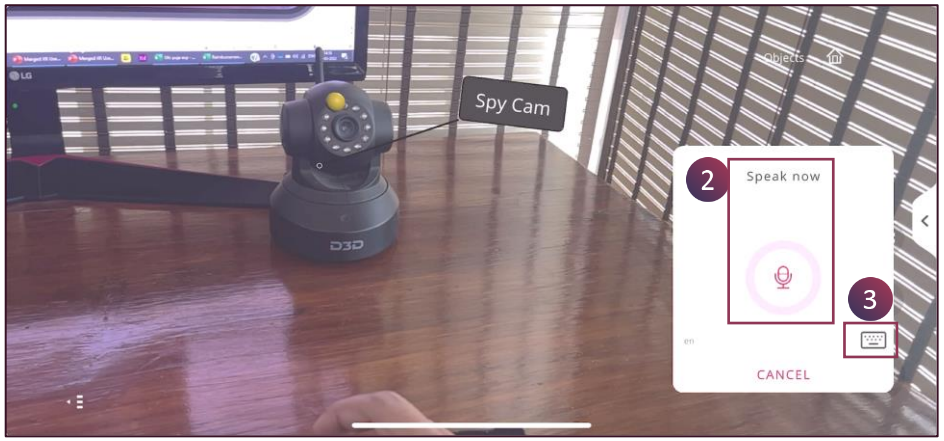


The EON-XR platform allows you to record a **voice-clip** and fetch content / information as videos, images, pdf and text/audio files using **voice-recognition-artificial intelligence.**

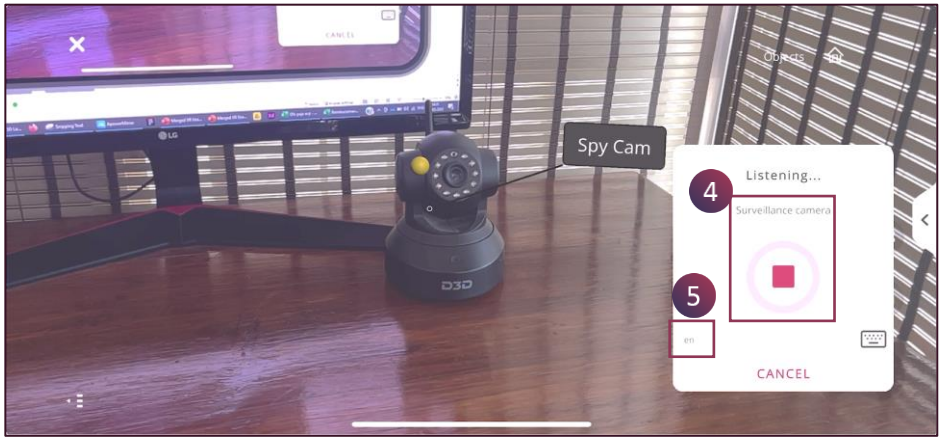
a. Add Annotation



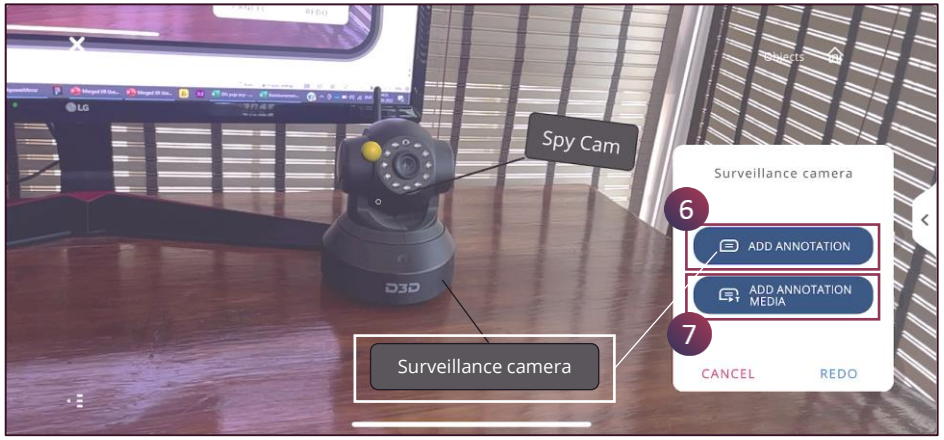
1. Set Annotation Point by placing the yellow ball at correct part using the target marker



2. Speak to generate a Voice-based annotation
3. Alternately use the keyboard to type your annotation

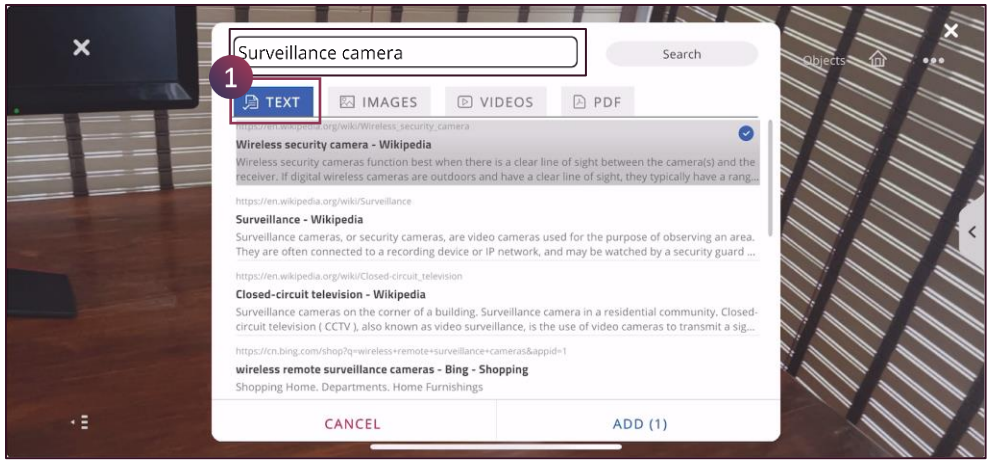


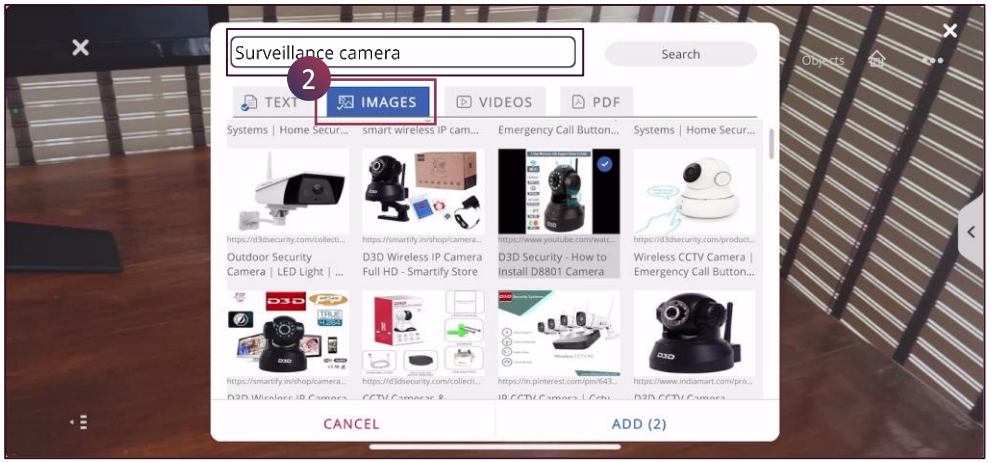
4. Stop once the correct annotation is voiced out and appears on screen
5. The selected audio language is shown here

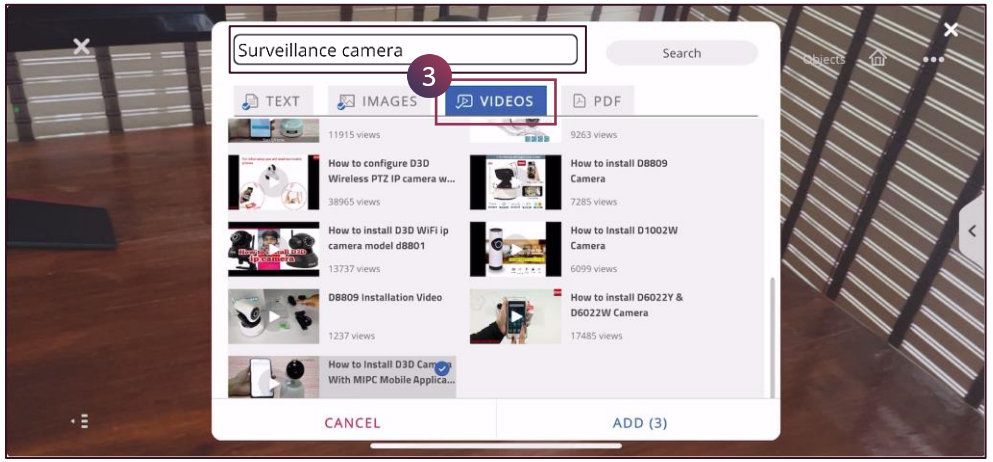


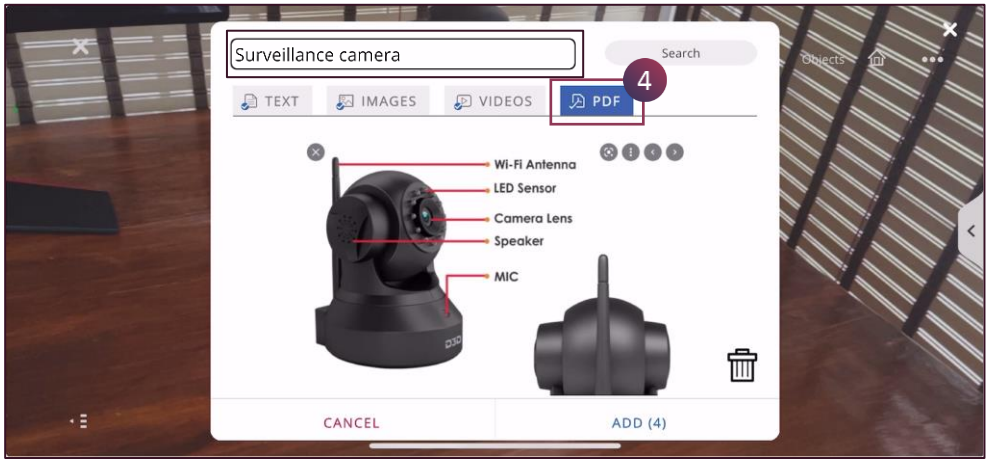
6. **Add annotation** – Just the label or
7. **Add annotation media** (next page)

b. Add Annotations Media: Text / Images / Videos / PDF









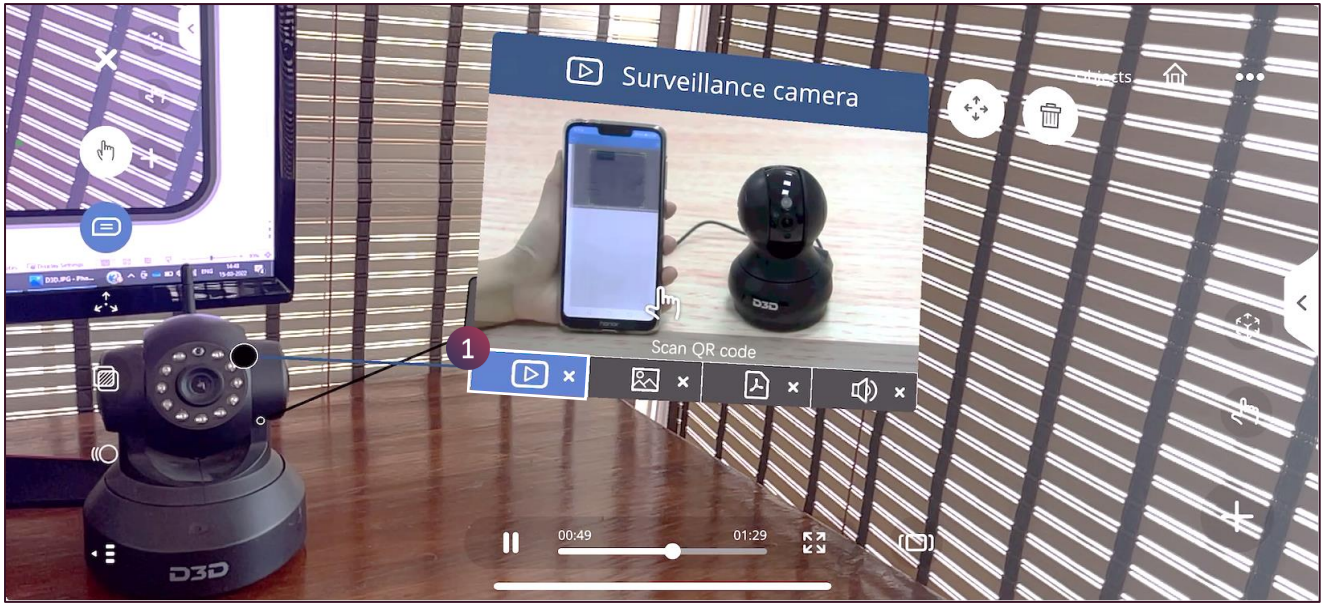
Scroll & select your desired media.

1. **Text** | **2. Images** | **3. Videos** | **4. PDF**

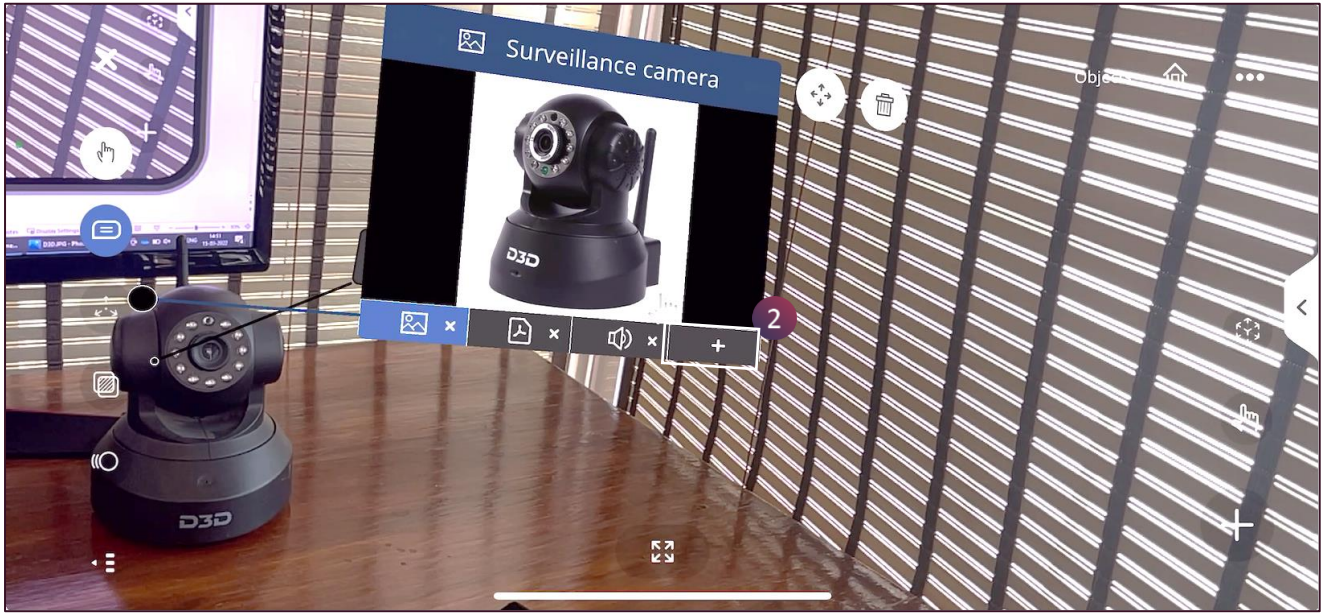
c. Edit Annotations Media Search

Edit the Description / keywords for a better search.
Touch the dialogue box to open the mobile keypad.

d. Delete Annotation Media

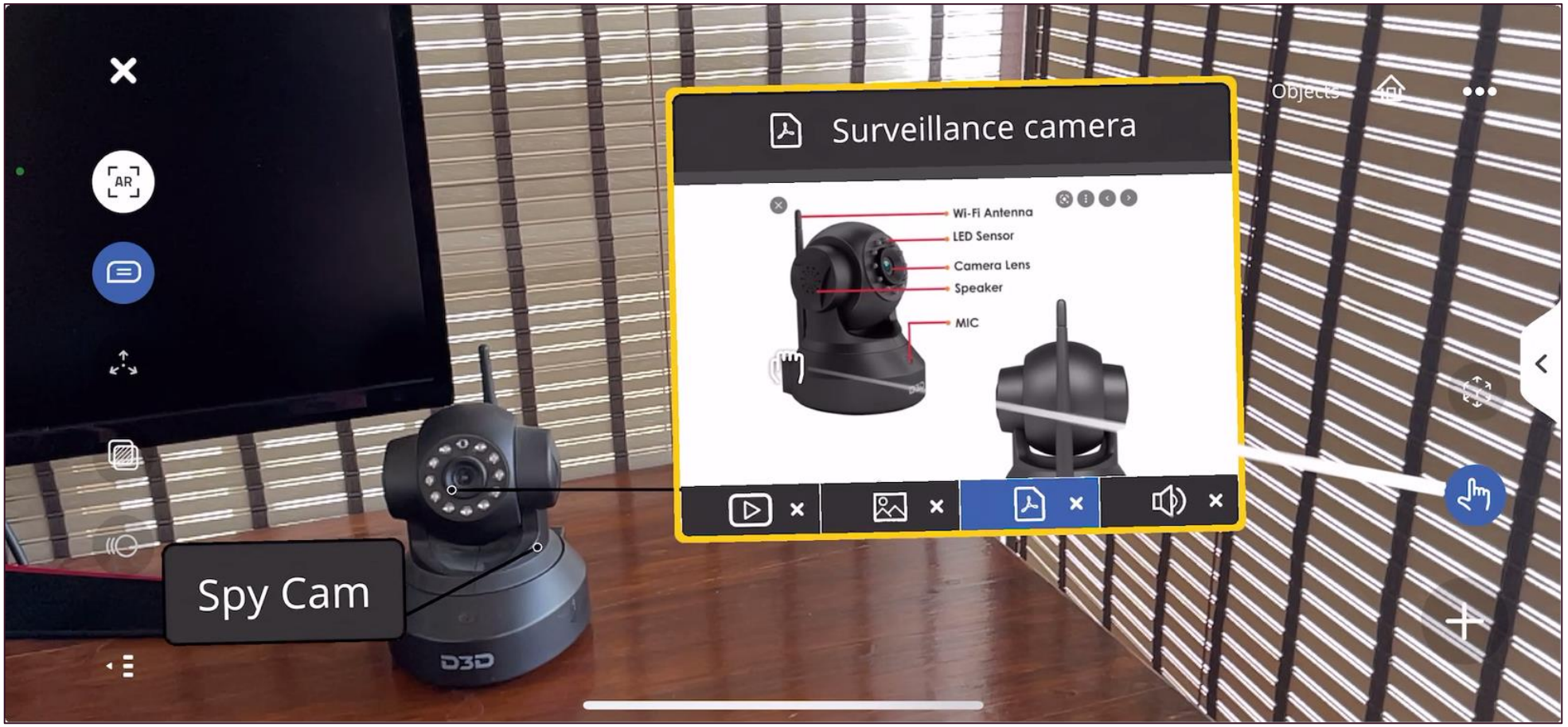


1. **Delete** annotation media from the floating knowledge portal by using the cross (**x**) icon.



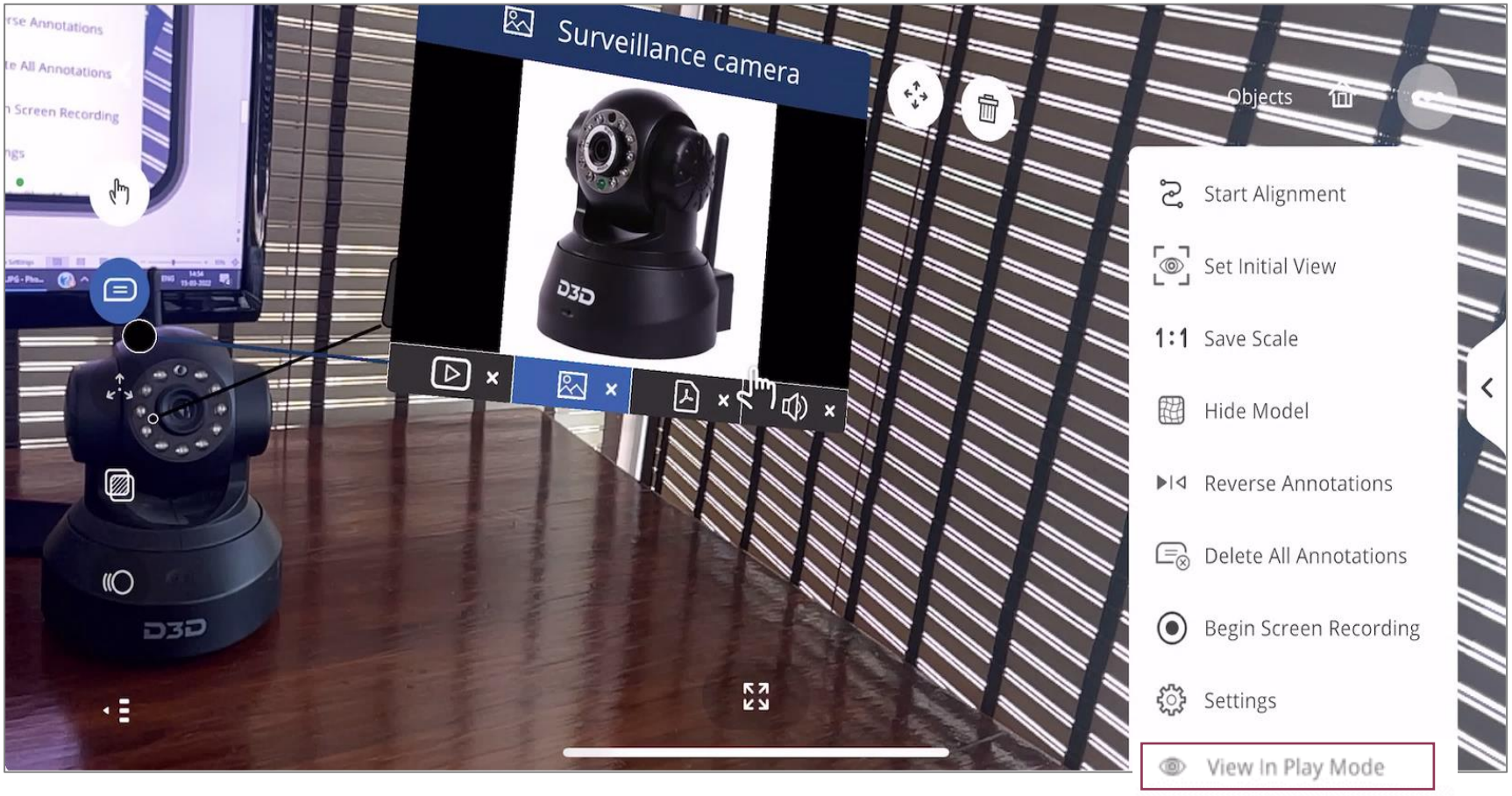
2. **Add** a new media using the plus (**+**) icon.

e. Move Annotation / Annotation Media



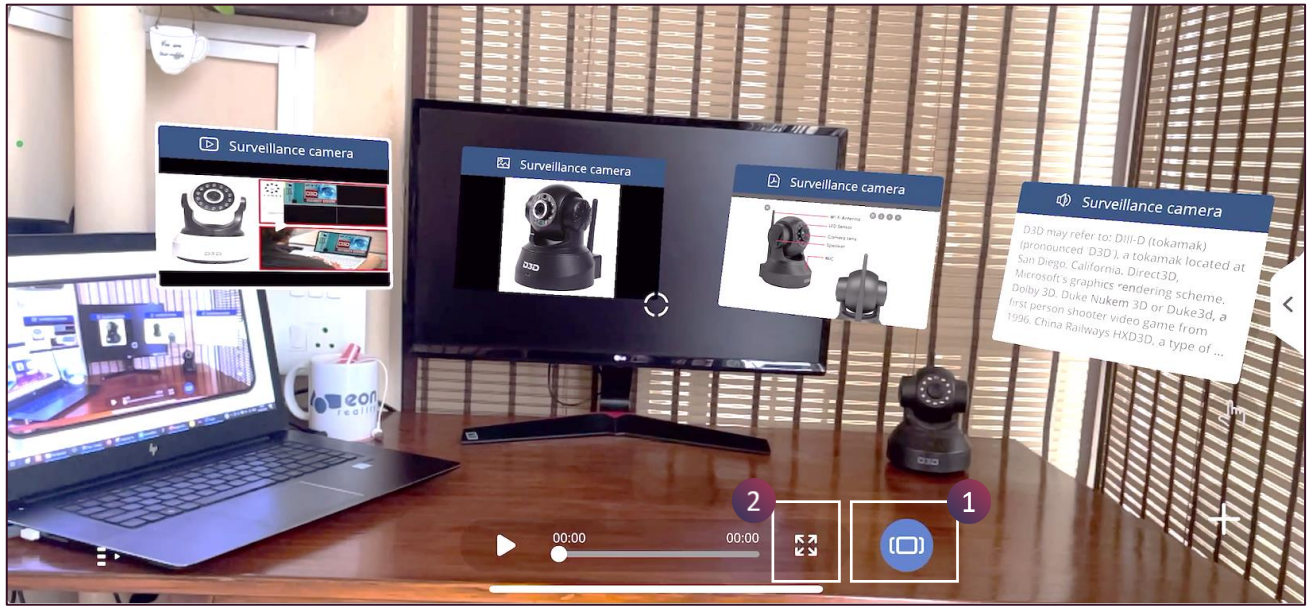
Use the **finger** tool to **move** the floating annotation / annotation media to a different location.

f. Play Annotation Media



Switch to **View in play mode** from Edit mode, to review how it appears for the end-users (your learners)

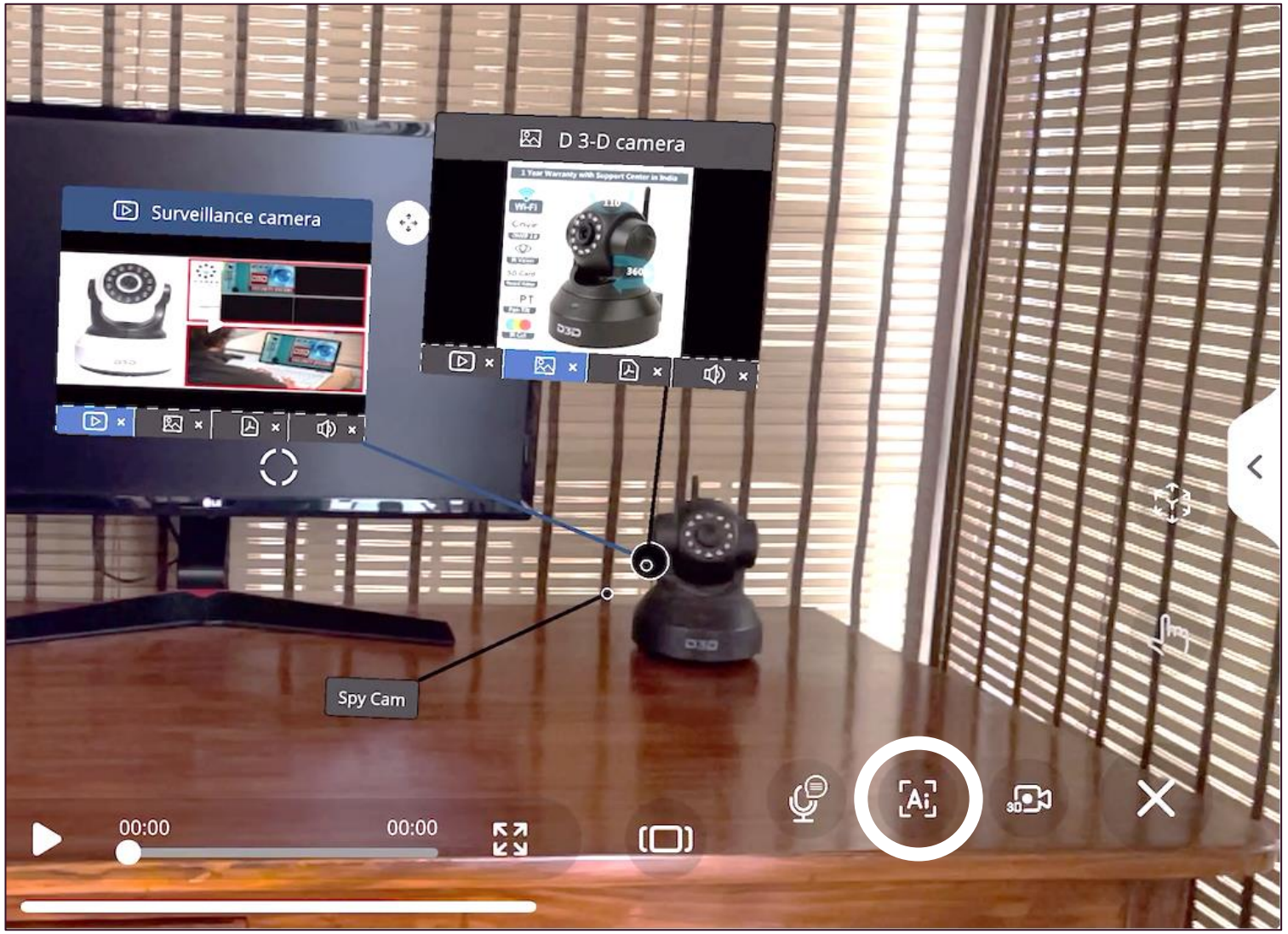
g. Expand Annotation Media



1. Use the **Carousal** menu to see the annotation media as separated floating knowledge portals

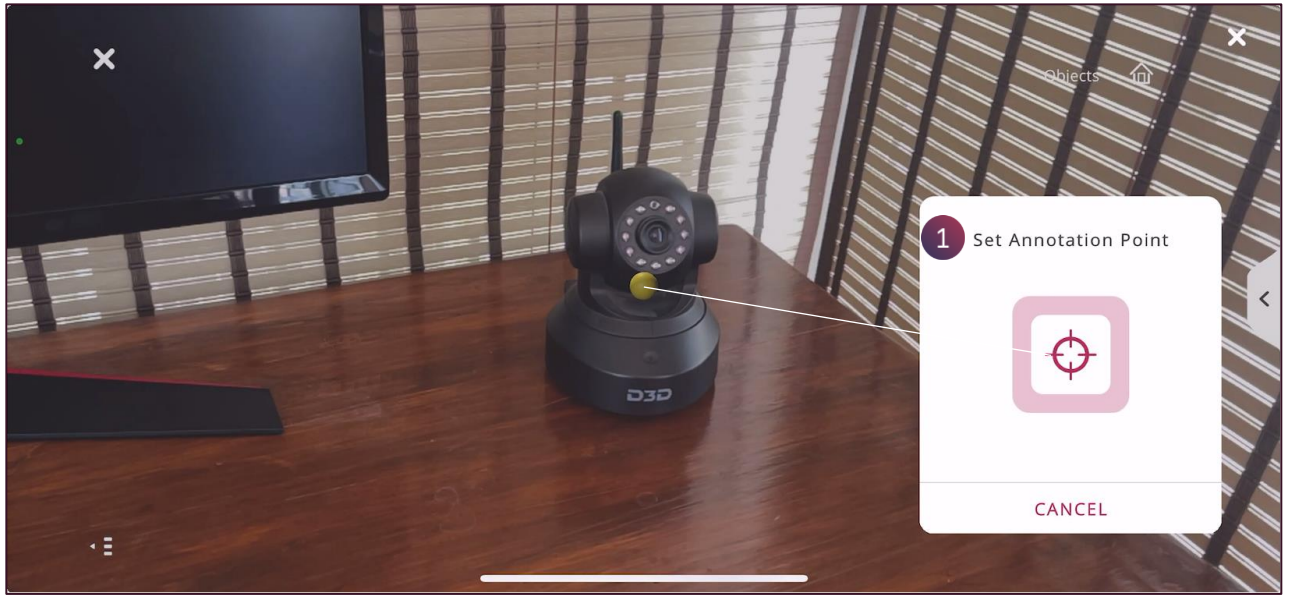
2. Use the **Expand** function to see a media full screen

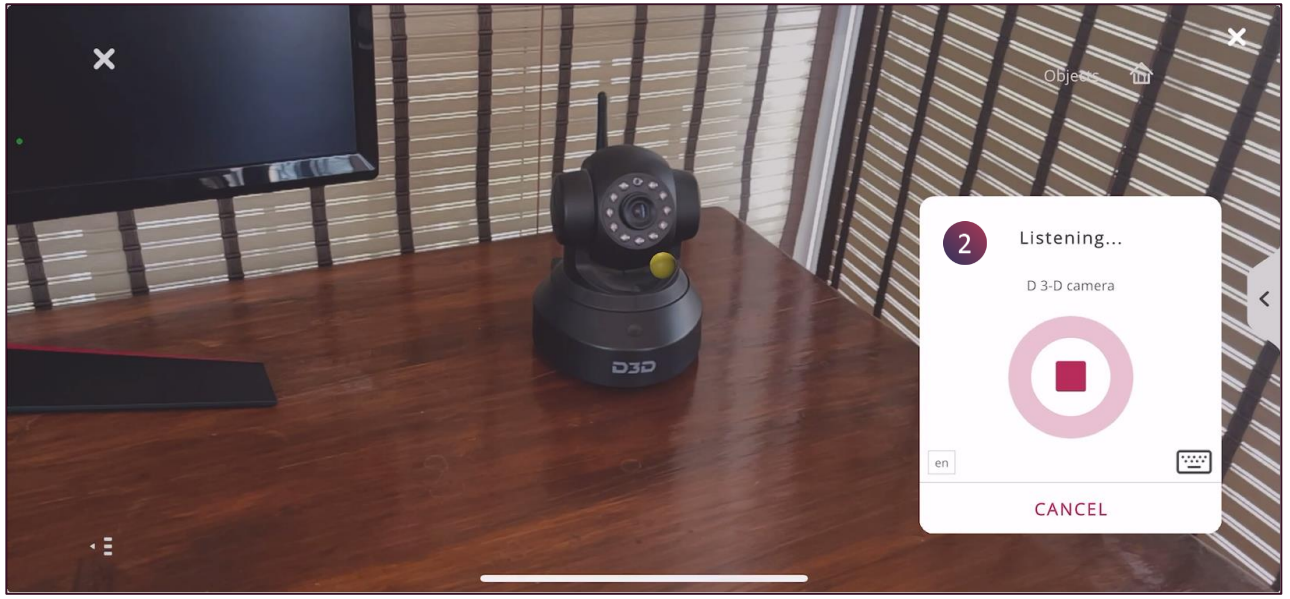
B. Add content with Camera - AI



The EON-XR platform allows you to click a picture of your Merged XR object and fetch content / information as videos, images, pdf and text/audio files using **image-recognition-artificial intelligence**.

a. Use AI Cam To Identify Object 1 2 3



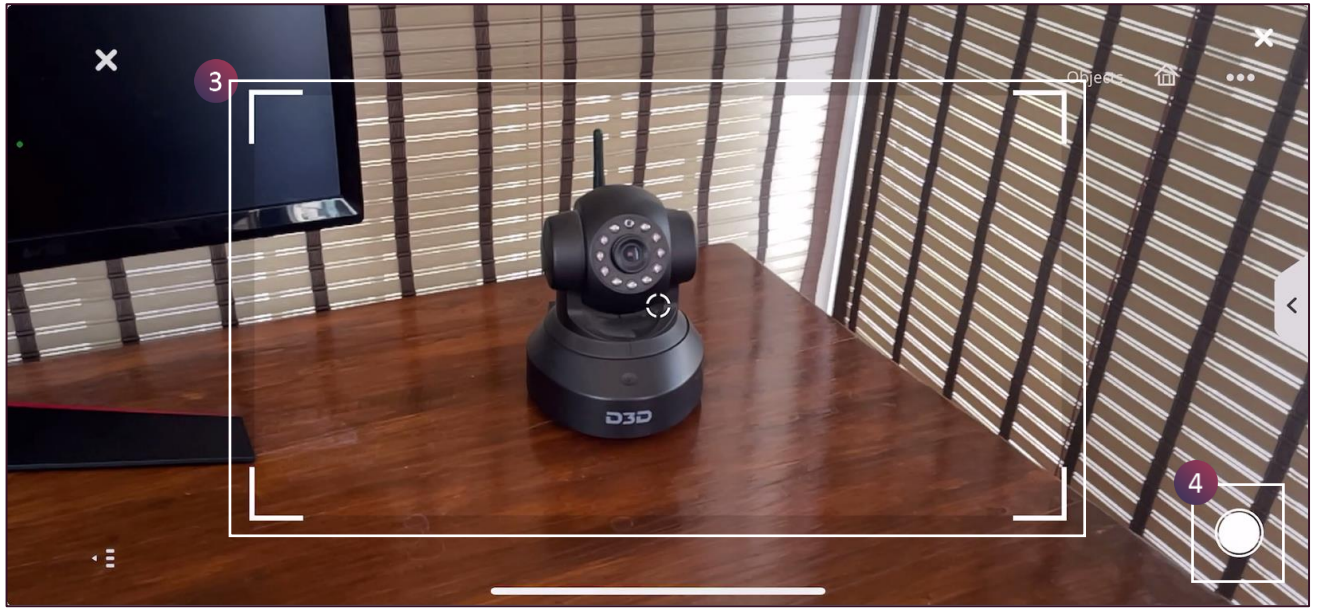


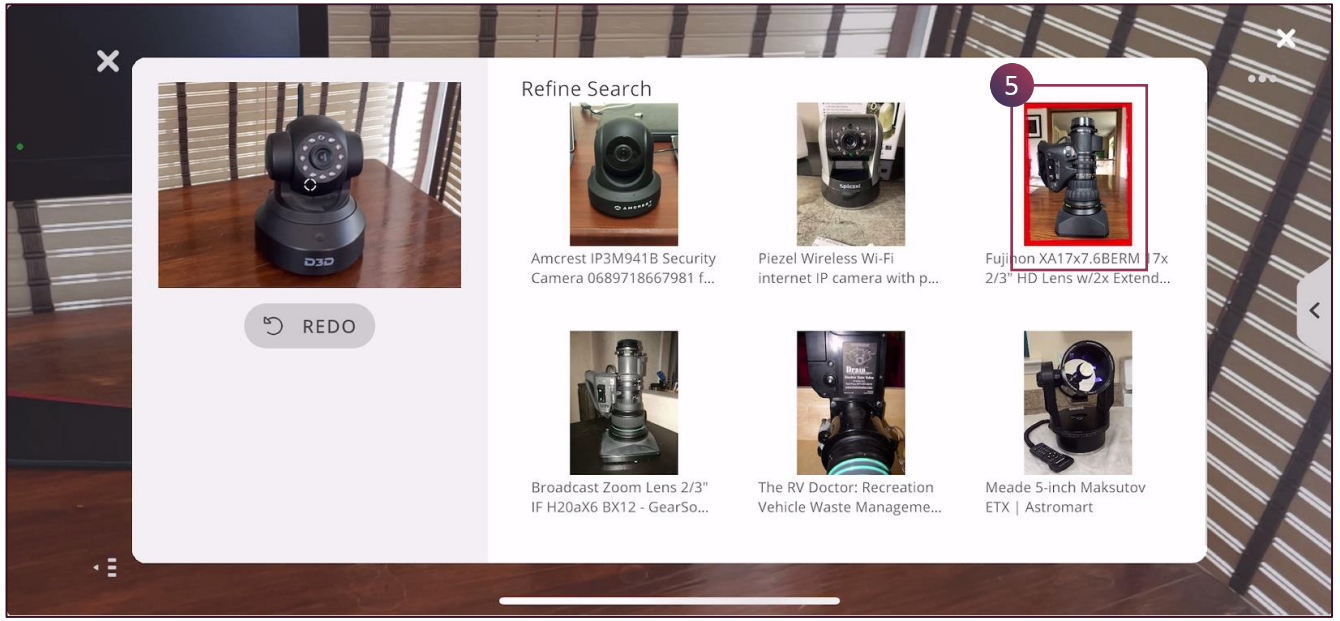
Set Annotation Point

1. **Set annotation point** by pointing the yellow ball on a specific part of your object

2. Speak out the name

a. Use AI Cam To Identify Object 1 2 3





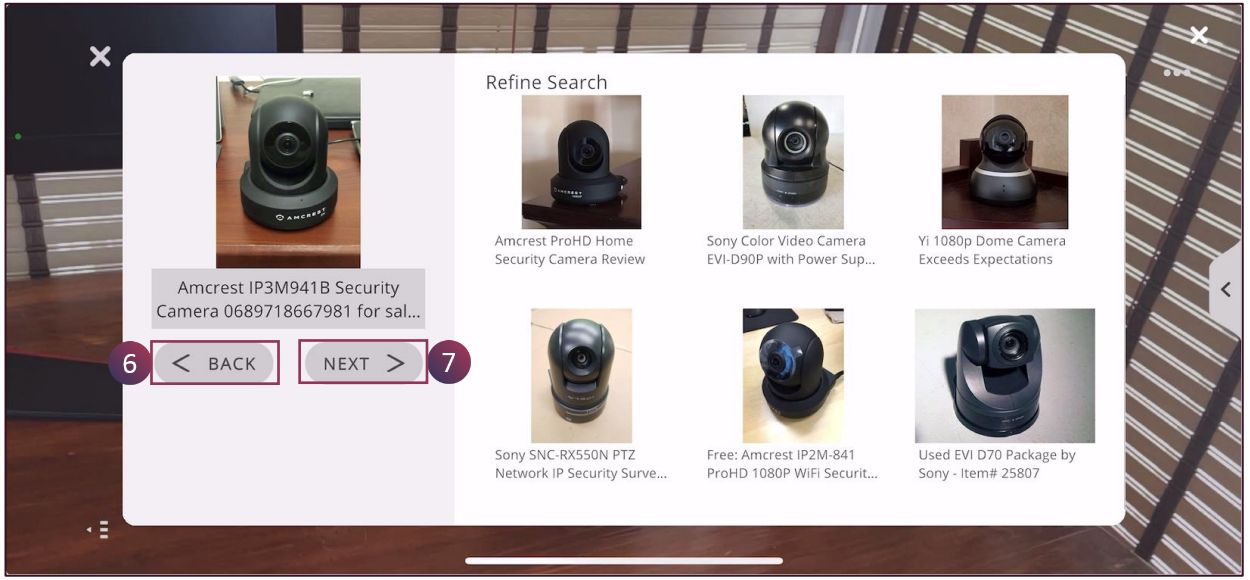
Take Picture & Refine Search

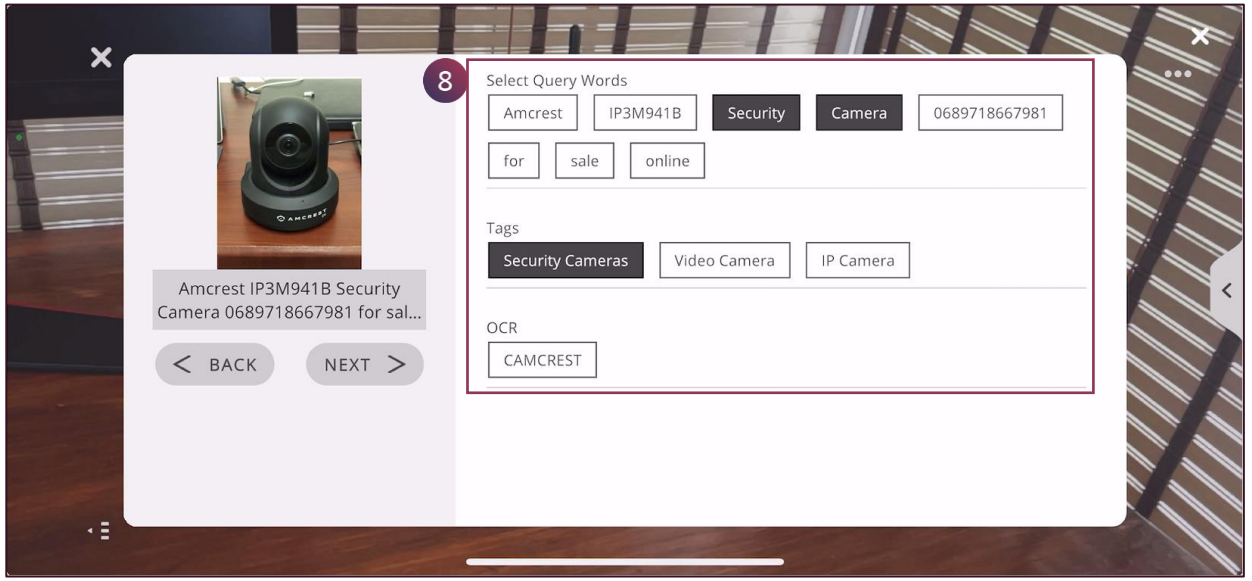
3. The camera frame will appear around your object.

4. Tap the **white assistive touch** to click a picture.

5. **Refine search**. Choose a relevant image reference to further modify your content search.

a. Use AI Cam To Identify Object 1 2 3





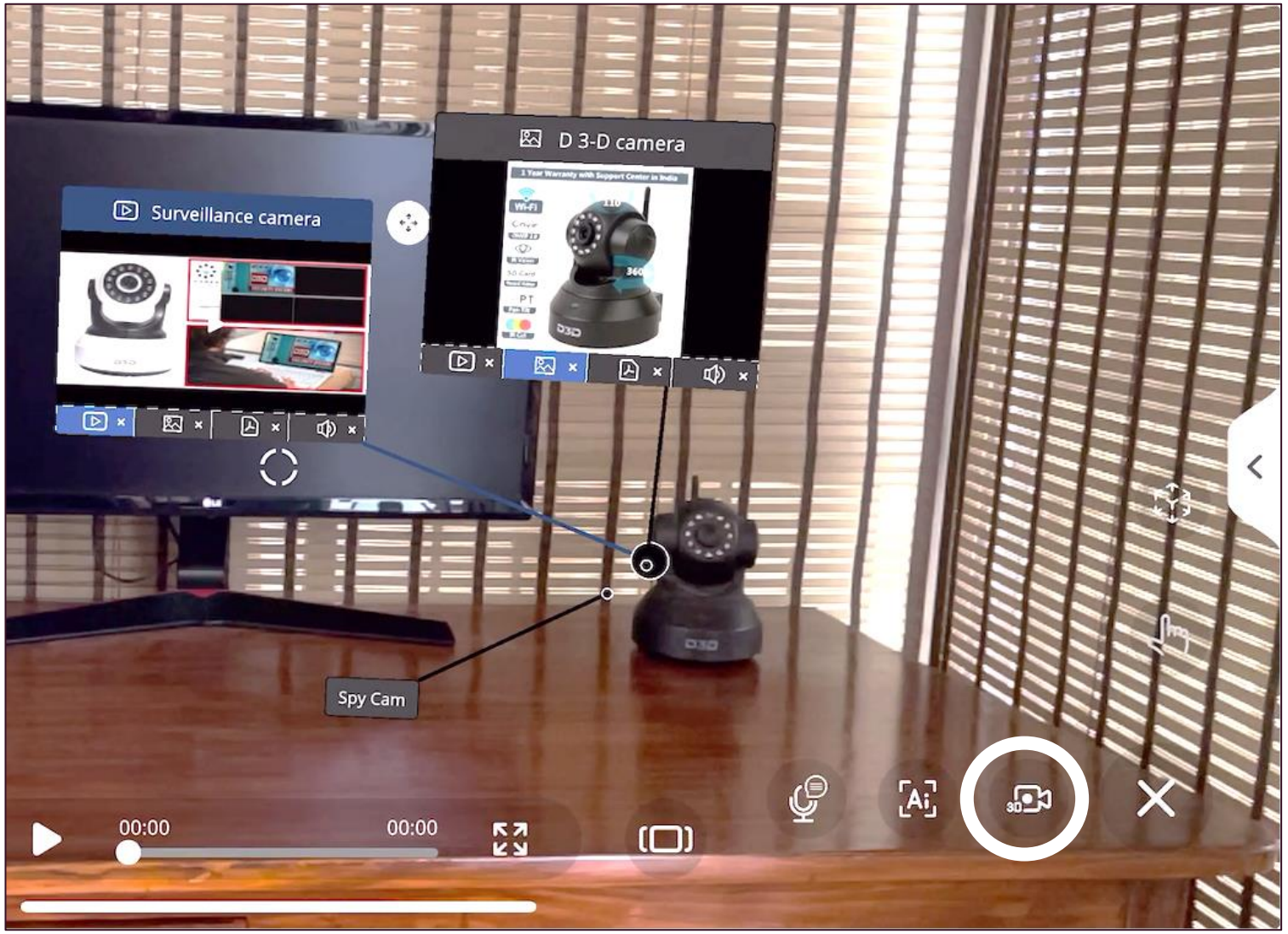
Add metadata

6. Tap on **BACK** to go back to your own object

7. Tap on **NEXT** to move forward

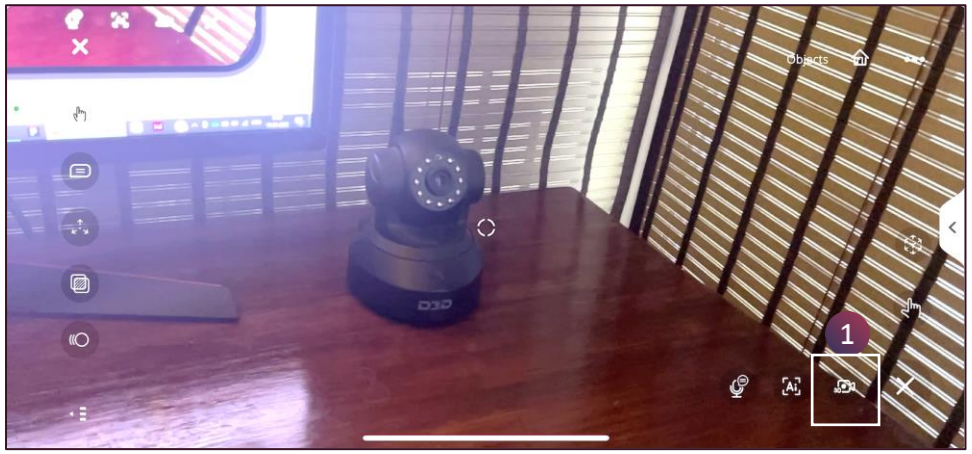
8. **Select Query Words, Tags** and **OCR** to further refine your content search

C. Add Content with 3D Recording

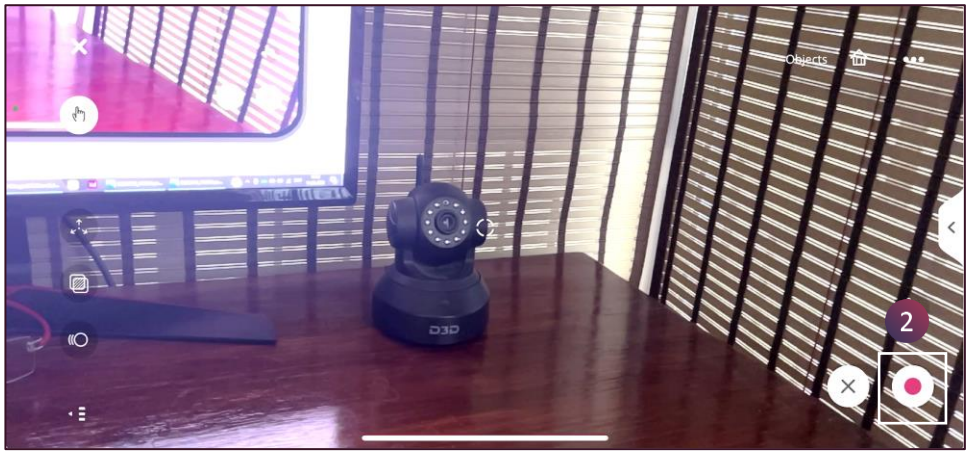


The **3D Recording** feature allows you to record your screen manipulations along with your own audio while you interact with **the Merged XR** in **Augmented Reality**.

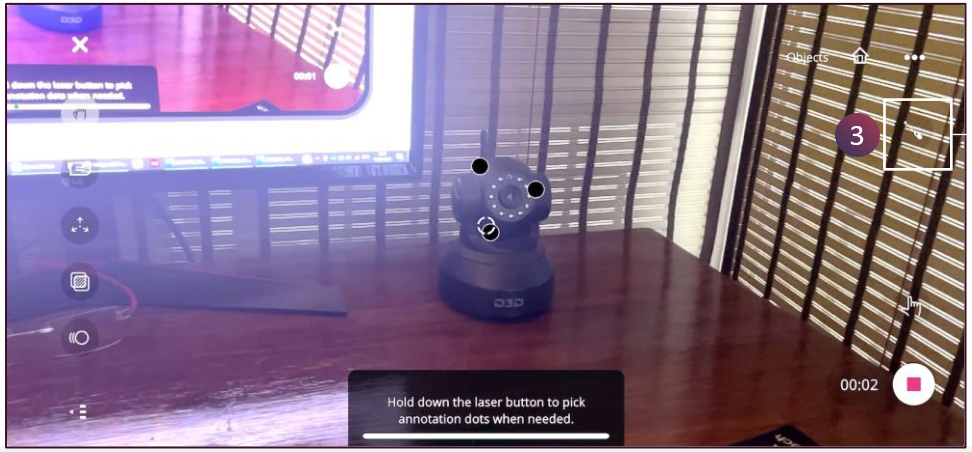
a. 3D Recording – Edit Mode



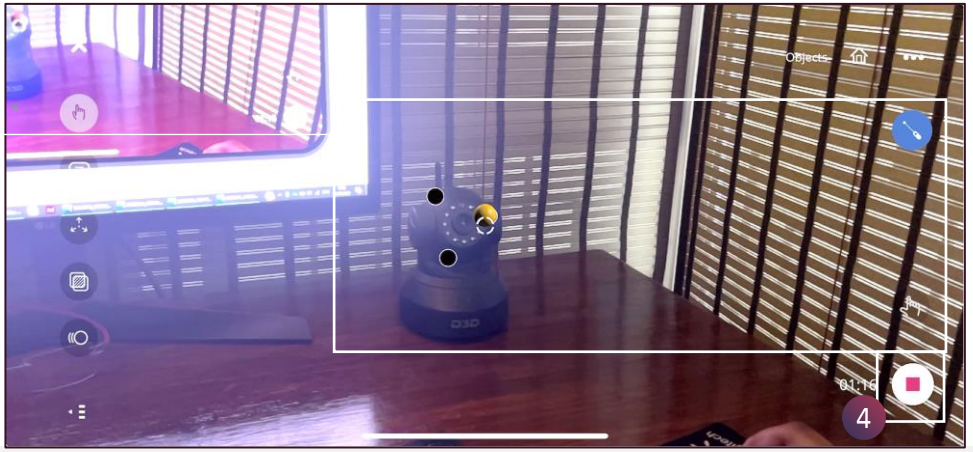
1. Tap on the 3D recording



2. Tap on the “Start Recording” red dot and talk about your model

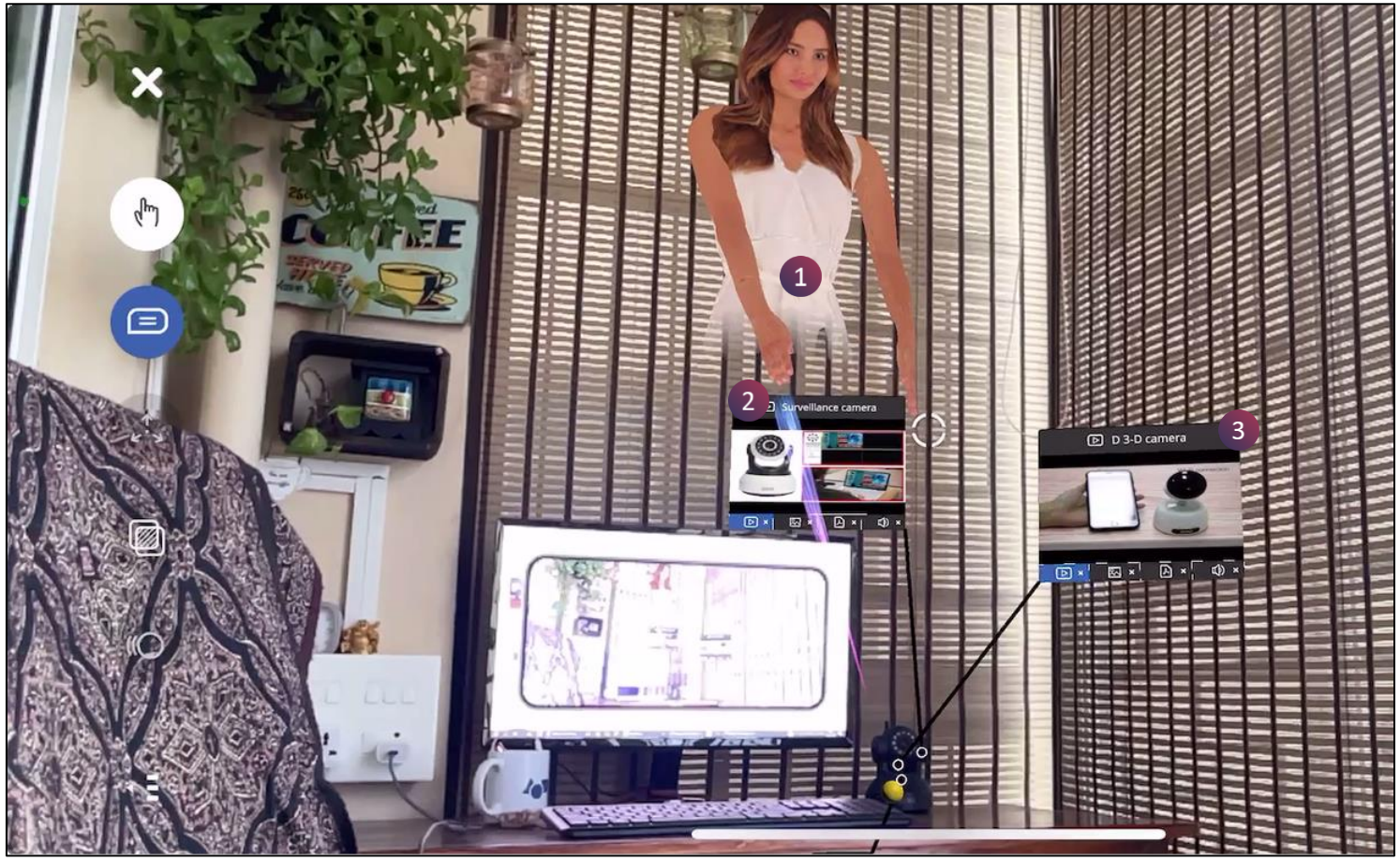


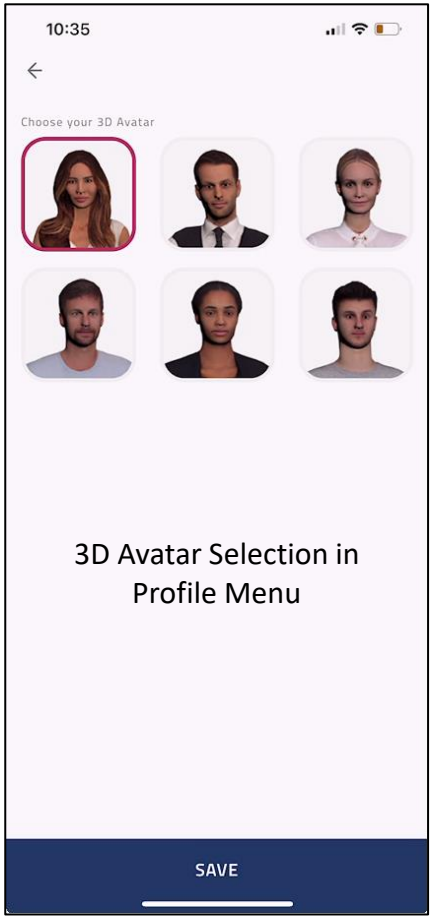
3. Hold down the lesser button to pick annotation dots when needed.



4. Continue recording and tap on stop when done.

b. 3D Recording – Play Mode





3D Avatar Selection in Profile Menu

1. In **Play** mode, your screen recording will be presented through your pre-selected **3D Avatar (animated)**
2. The **lesser movements** during edit mode will be represented as this **light beam** pointing at certain annotations
3. Simultaneously you can also open the **pre-created media** and use them in your 3D recording