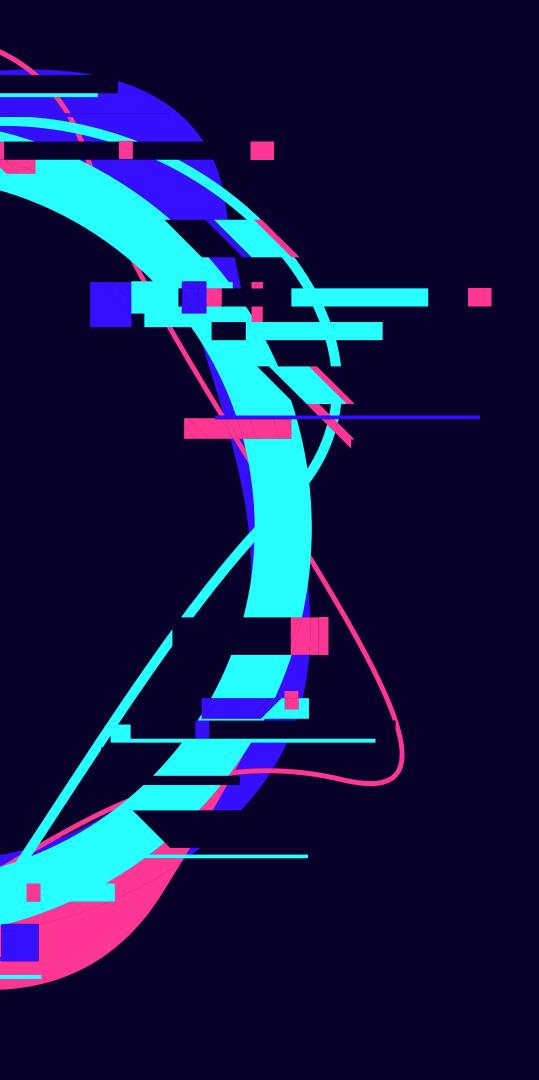
# AUGMENTED REALITY IN EDUCATION





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#### **AUGMENTED REALITY**

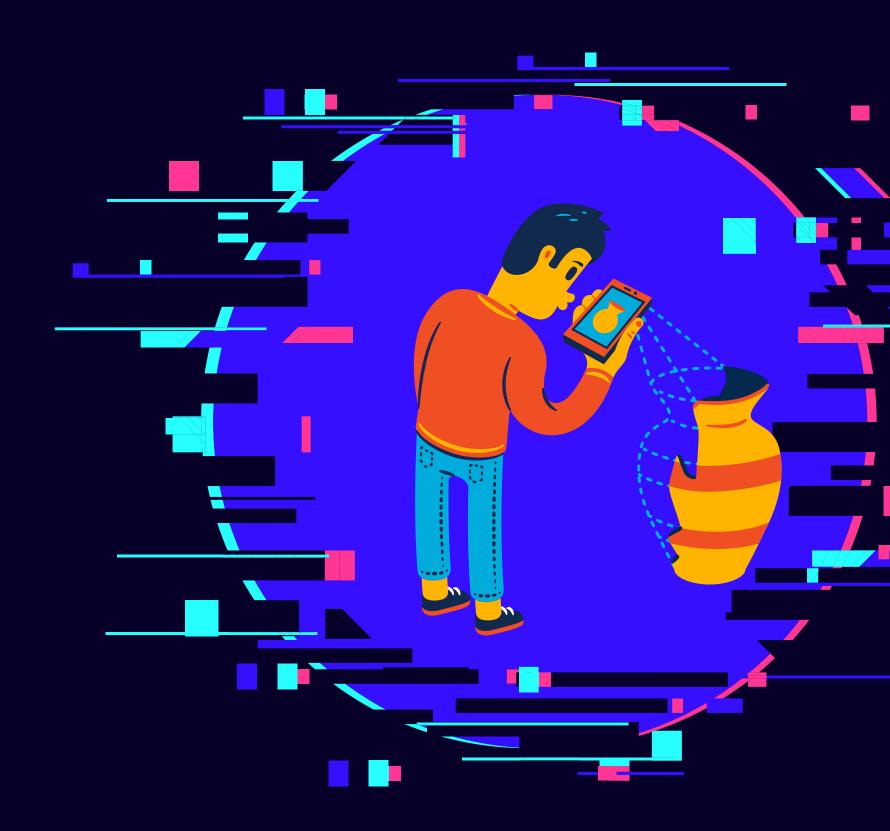
#### "AR"

Augmented reality (AR) is the integration of digital information with the user's environment in real time.

AR users experience a real-world environment with generated perceptual information overlaid on top of it.

#### "AR vs VR"

Virtual Reality creates a new, simulated environment that presents the given topic in an engaging, interactive and experiential manner.



By means of AR, we can visually change natural environments in some way or provide additional information to users.

AR embellishes the existing reality with the elements of imagery, sound effects, or text.





#### There are two broad classes of AR apps:

Marker-based apps Location-based apps.

Marker-based apps use predefined markers to trigger the display of AR overlays on top of the image.

Location-based apps use GPS, accelerometer, or compass information to display AR objects on top of physical ones.



#### Use of AR&VR in Education

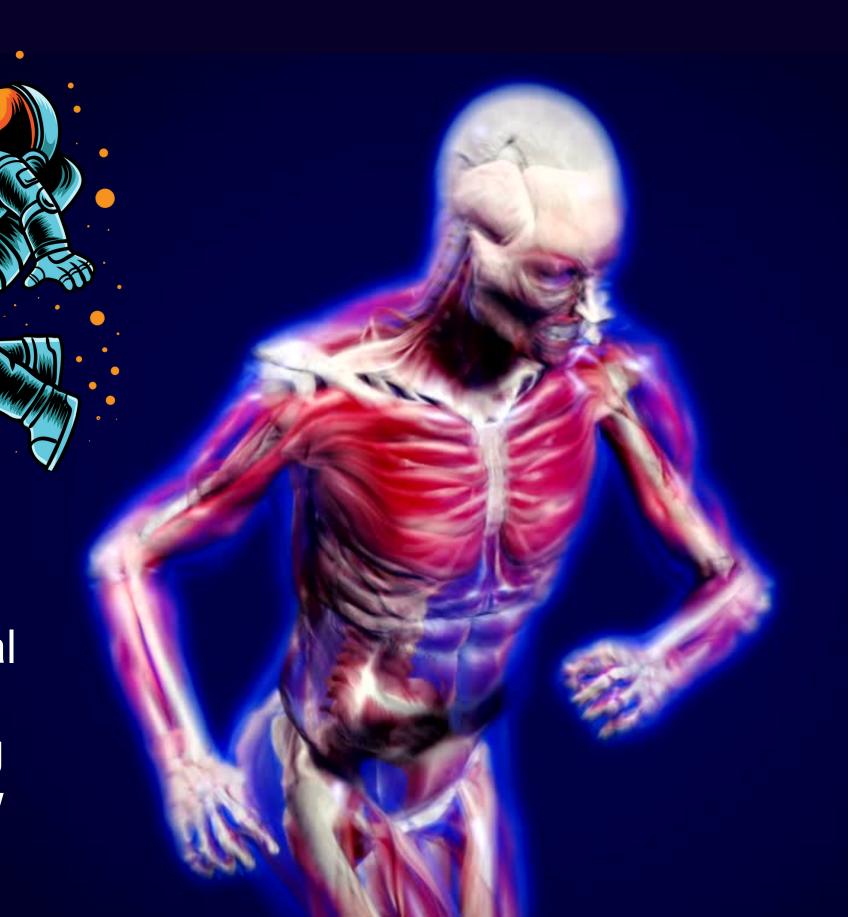
The real purpose of AR/VR in education is to promote student engagement and nurture better understanding. By making learning immersive and experiential through AR, teachers can explain complex concepts to students in a controlled environment. It is used in differen training areas.

Sciences
Humanities
Business Studies
Architecture & Engineering
Communication Skills
Foreign Languages



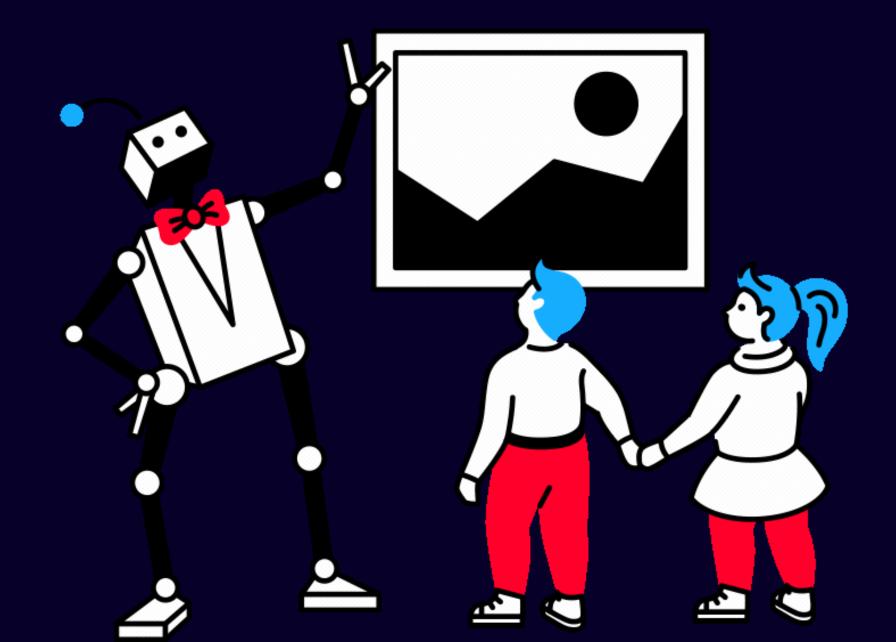
#### Sciences

Educational institutions are harnessing the visual and sensory power of VR to teach students subjects such as human and animal anatomy, molecular biology, chemistry and atomic physics. Astronaut and pilot training makes extensive use of the extended reality technology.



#### Humanities

Virtual tours to historical monuments and archaeological sites in far off places are enriching the learning experience of history, archaeology and political science students. Furthermore, students of arts get first-hand experiences of the world's top museums and the artworks housed therein through VR.



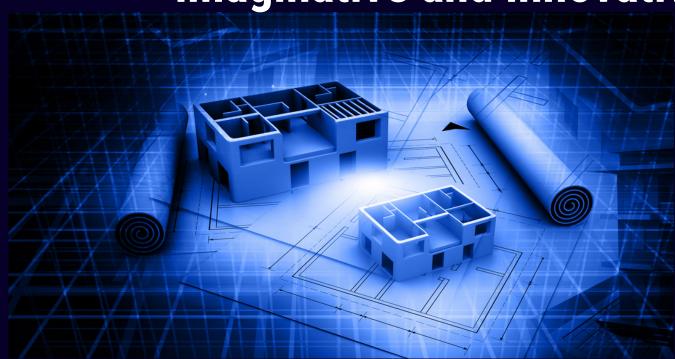
#### **Business Studies**

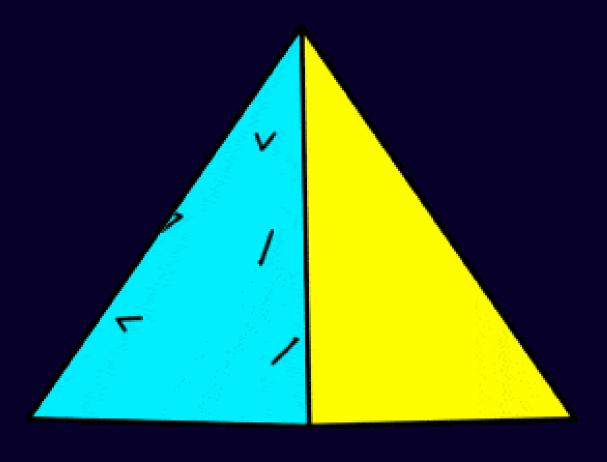
Different business and economic models can be better explained to students through the use of AR/VR. In business education, the real buying-selling, the in-store experiences, production line, supply chain etc. could be made visibly understandable and experiential with the use of AR/VR. The technology comes in very handy in making students corporateready.

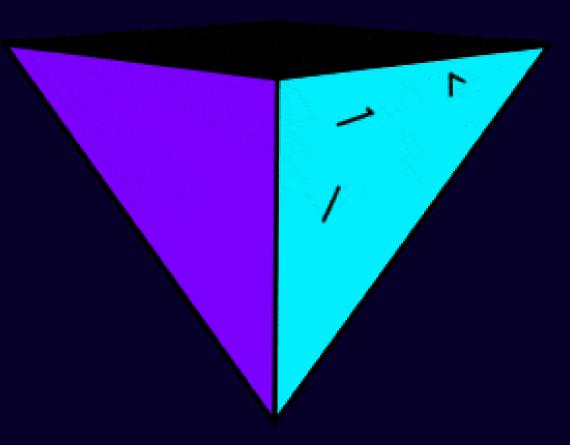


## Architecture & Engineering

The most widespread use of AR/VR is witnessed in the fields of architecture and engineering. Using VR technology, the designers are able to not just better implement their vision by creating to-scale 3-D models, they are pushing the boundaries of physics and mechanics by creating the most imaginative and innovative designs.







#### Communication Skills

Across the disciplines, VR tech is being used by students to enhance their communication skills, particularly public speaking abilities. There are VR e-learning virtual speech courses that allow students to choose the size of the crowd being addressed and then practise public speaking and presentation skills.



## AR and VR helps in education

- AR/VR makes learning immersive and experiential
- It leads to enhanced memory retention among students
- It is particularly of great aid to students with learning difficular
- It dissects and simplifies complex topics and concepts for better understanding
- It promotes self-learning and self-sufficiency among students
- It is a great training tool and instils confidence in learners
- It makes remote learning engaging and interesting





Animal 4d+

Space 4d+

Humanoid 4d+

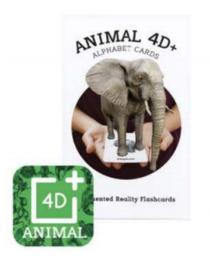
Dinosaur 4d+

Octagon Studio

Quiver

AR Bilim
Kartları (AR
Science Cards)











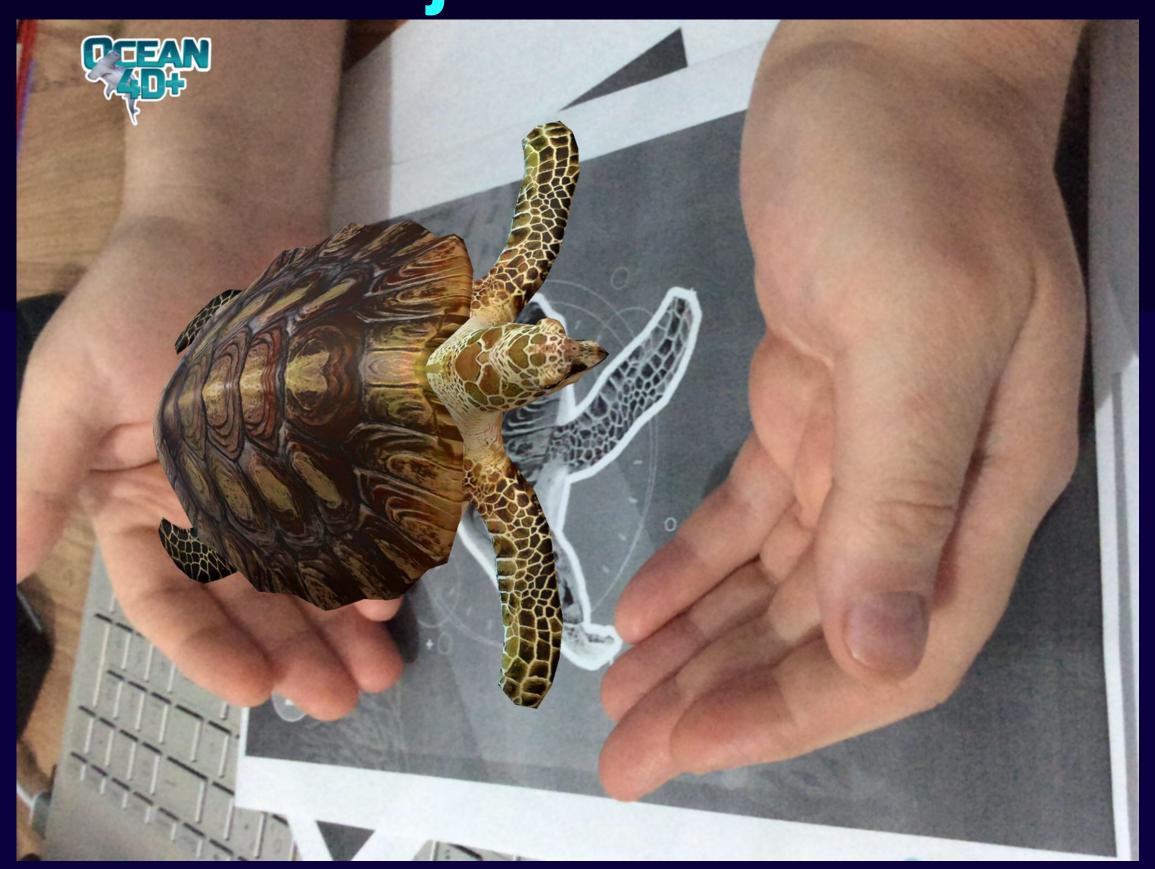


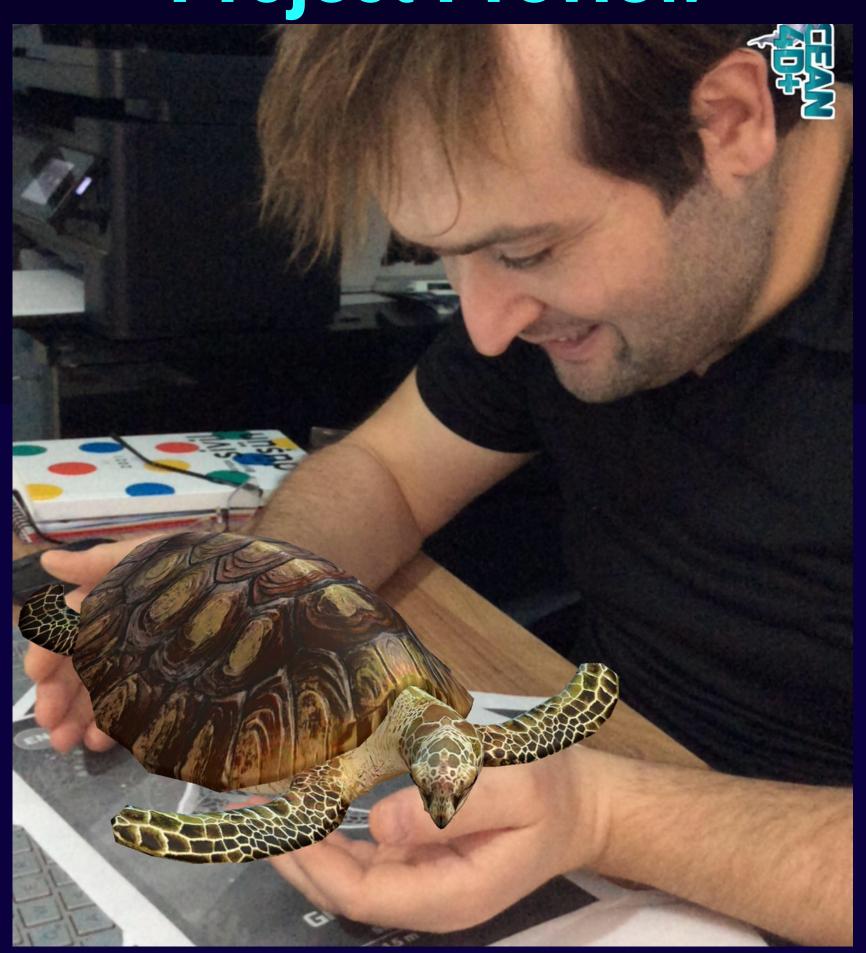


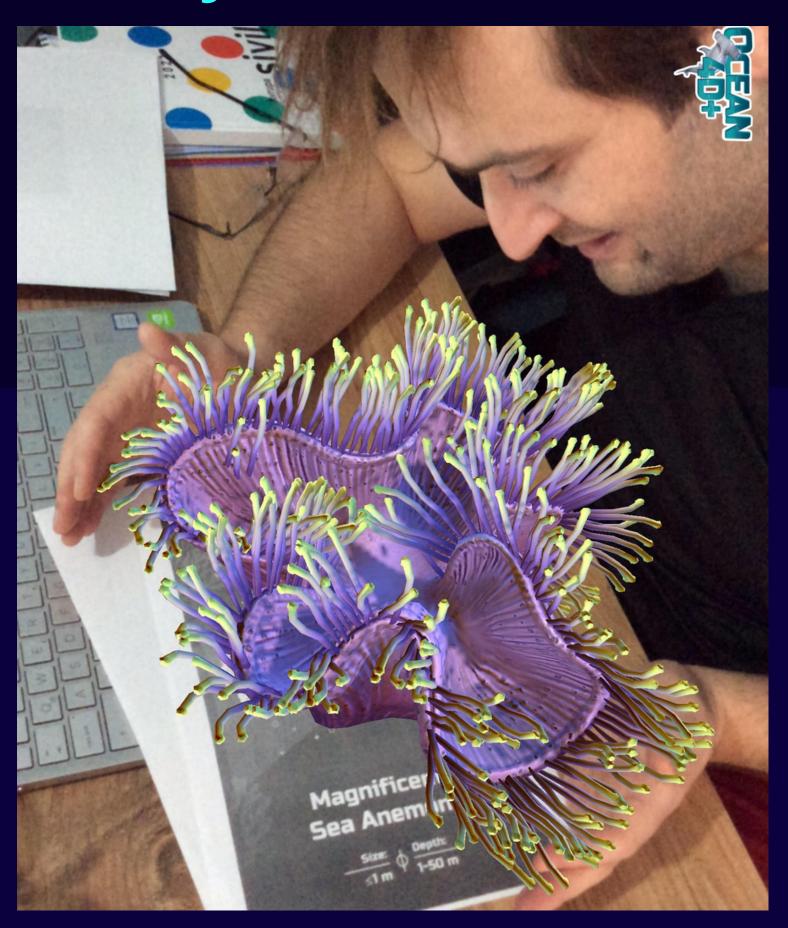


#### TO CREATE AR CONTENT



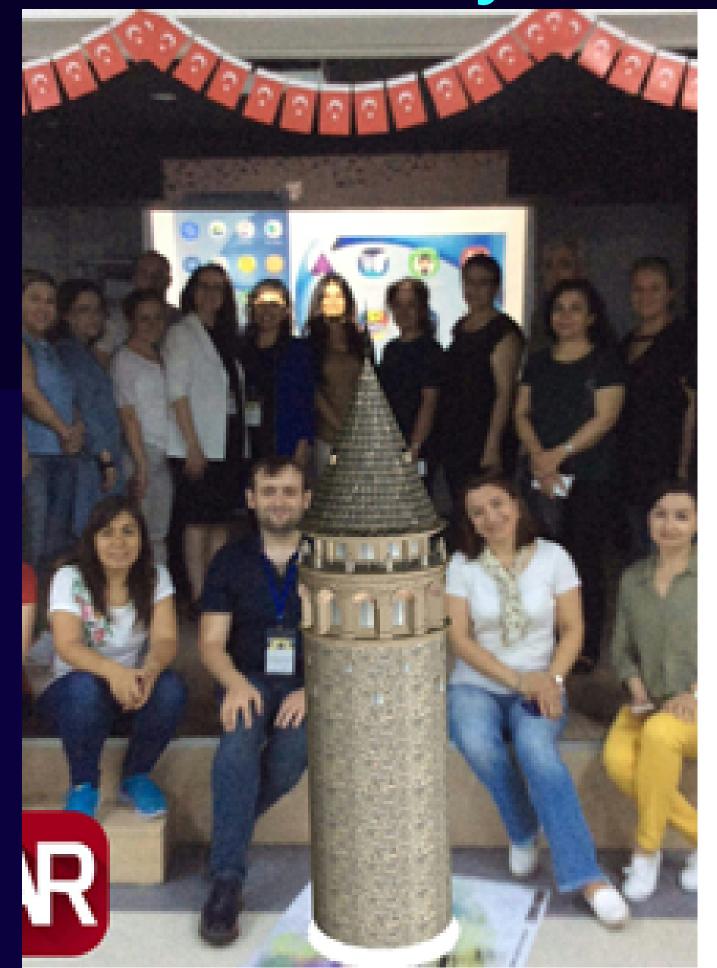
















#### Other Use Areas of AR

The potential of AR is seamless and brands are already utilizing this technology in their business to provide a brand new user experience.

Companies implement AR to create product demos, interactive advertising and provide real-time information to customers.

It was proved that when people touch or interact with a product, they are more likely to buy it due to the emotional bond established.

#### Other Use Areas of AR



Being a rapidly growing market with huge potential, AR attracts both huge corporations like Google, Apple, Facebook, etc., as well as smaller businesses..



#### GOOGLE ARTS AND CULTURE

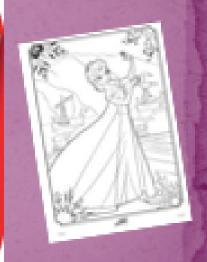
Google Arts & Culture







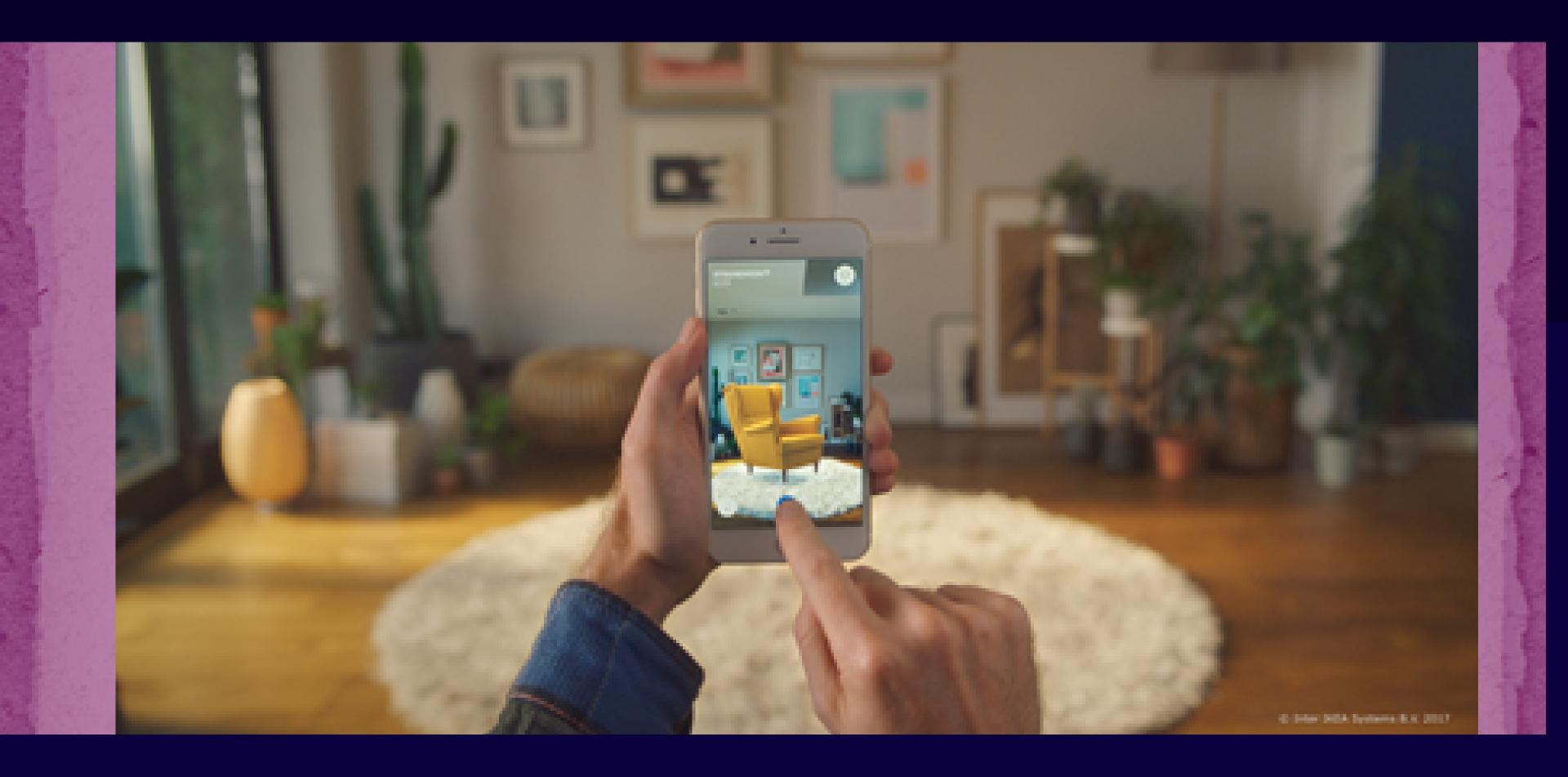














# WORKSHOP TIME



# QUIZ TIME

KAHOOT

