

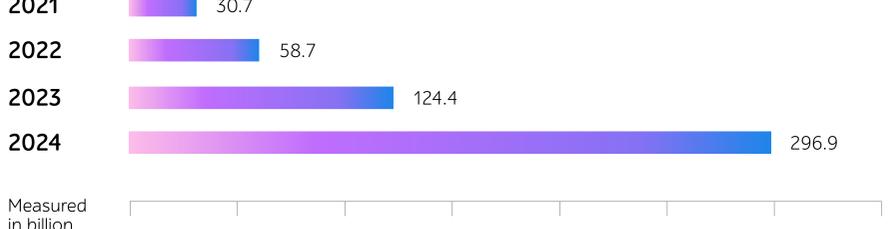
AR/VR reshaping retail world



34% of US consumers are interested in AR/VR while shopping in [2020](#)

By [2024](#), the global AR/VR market size is expected to grow **9^x**

Worldwide AR/VR market size from 2021 to 2024*



Measured in billion U.S. dollars

www.statista.com

4 new shopping experiences with AR/VR solutions

Smart dressing room and other AR-oriented features

Idea: "Try-before-buy" and "magic mirror" concepts are all about virtually fitting clothes and using makeup products just with a mobile phone. What's more, IKEA has already delivered the AR-based app that allows checking how furniture suits the interior.



59%

of customers have tried or would like to try this technology.*

Digital products' display with AR-based items' info

Idea: To help consumers make decisions faster, retailers introduce AR-driven solutions with the ability to detect goods via a phone-camera and show all the details about the selected item.



66%

of customers have tried or would like to try this technology.*

AR-based in-store navigation

Idea: With AR at the core, apps simplify the search of goods, optimize shopping routes, and suggest hidden discounts.



65%

of customers have tried or would like to try this technology.*

VR stores

Idea: VR glasses or headsets help consumers experience offline shopping while being at home. VR-driven solutions provide an exact copy of various kinds of stores customized to their preferences. For instance, Audi offers similar experience of virtual automotive showroom.



69%

of customers have tried or would like to try this technology.*

* "Meet the 2020 consumers driving change" research by IBM

52% of retailers are ill-prepared to introduce and maintain AR/VR technologies.* Why?

High expenses



Expensive bug fixing after going live



Running on specific pricey hardware

Badly-tuned QA processes



Lack of right-skilled specialists



Testing on late SDLC stages

* www.marketingdive.com

Different reality. The same attention to testing.

The more advanced technologies are becoming, the more challenging it is to ensure high software quality.

To be confident in releasing **top-notch AR/VR-based products**, progressive companies rely on timely software testing.

Shift-left testing

Reduced QA costs

It is much cheaper to detect discrepancies in requirements at early SDLC stages rather than redesigning 3D features and AI-driven elements in the production.



Hardware testing

Improved CX

As headsets, sensors, and other AR/VR wearables are an inevitable part of extended reality experience, verifying their smooth functioning provides user-friendly software for the customers.



Integration testing

Smooth interaction between systems, modules, etc.

While embedding AR/VR functionality into an app, it's vital to check that hardware and software interfaces interact properly.



Performance testing

Flawless immersive experience

AR/VR-based apps are resource-heavy and require high network speed, so checking their stability levels comes with more sophisticated QA approaches, tools, and skills.



Usability testing

High conversion rates

AR/VR shopping appeals to end users when they have apps that facilitate the purchase process and are created with intuitive interfaces.



Accessibility testing

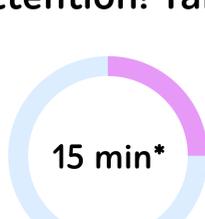
Non-health-threatening AR/VR-based products

Motion sickness is one of the biggest challenges amid companies introducing AR/VR innovation. Check that the extended reality moves in an appropriate way and doesn't bring discomfort to buyers.

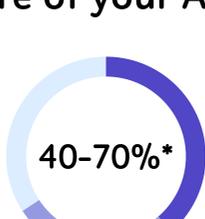


These are the mission-critical ones, and the list of testing types can be prolonged. It all about the project specifics and business needs.

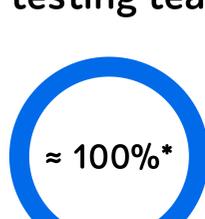
Attention! Take care of your AR/VR testing team.



is an approximate time of getting motion sickness



is the chance to get sick



of users experience nausea while using some VR apps

It's important to keep this in mind to ensure that QA engineers are safe and sound and don't experience any discomfort. Some steps to consider:



Define optimal time for staying in AR/VR for particular team members



Indicate specific time for breaks throughout working hours



Set up QA processes in a way to prevent long-lasting staying in AR/VR



Include various QA activities to make QA specialists take an AR/VR-free rest

* abcnews.go.com