



ENHANCING CUSTOMER EXPERIENCES THROUGH 3D

HOW 3D IMAGERY & AR CAN DRIVE SHOPPING CONVERSIONS ONLINE



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THE NEW SHOPPING EXPERIENCE IS 3D

Today, online shopping is a routine task for everybody. It is just part of your everyday life. That is why, over time, certain collective expectations developed when it comes to online shopping experiences. Especially the final product page is — with individual variations — standardized across the board: product and brand name, category, product description, specifications, customer reviews, and so on.

This whitepaper deals with one of the key success factors of any online shop: product imagery. Over the years, there has been a lot of development in this area. Many beneficial, innovative features like 360° views, image sharing, or image customization were widely implemented. Nonetheless, true immersion and engagement with the product is still rare. 3D and Augmented Reality (AR) can change that. They offer a new chance to drive sales and strengthen brand loyalty, but most shop providers still have reservations towards these technologies. You too?

Don't worry, utilizing these technologies is easier than ever before thanks to sophisticated new 3D and AR platforms. With our whitepaper we demonstrate how you can use 3D and AR technology to bind customers and increase conversions in your store. And shop integration? As easy as embedding a video in your store.

Enjoy reading.

Hans Elstner, CEO room AG

WHO SHOULD READ THIS WHITEPAPER?

The whitepaper is especially aimed at online store owners and shop providers looking to increase conversion and customer loyalty through better 3D customer experiences.



KEY LEARNINGS

- How and why 3D and AR features can increase conversions
- Tips for implementing 3D & AR in your online shop
- How 3D and AR can work in concert to increase customer engagement





1. WHY 3D PRODUCT MODELS ENHANCE SHOPPING EXPERIENCES

We do not have to argue about the fact that product images are crucial for every web shop. It has been proven by countless empirical studies and best practice use cases all over the world. Visual content just grasps the customer's attention more than just plain text or tables with specs. Decisions are being made more quickly when images are involved.

The question is "How can online shops improve imagery even further?". In the last decade, we saw improvements like 360°-degree views, video integration, image customization options for users (e.g., changing the color of clothing) or the option for customers to upload pictures of themselves to get a better impression of how a piece of clothing or accessory might fit. These features aim to recreate the physical brick-and-mortar store experience online — for example, looking at a product from all angles to get a better and more detailed impression.

However, there is one chance to increase immersion most web shops are still missing out on: realistic, interactive 3D product models. There are several studies outlining the positive effect of 3D for virtual shopping experiences^[1] but hardly any online shop is implementing it. Why? It might have to do with technical aspects. 3D images were once technically demanding features requiring lots of server space and dedicated software to run. User experiences would have been negatively impacted by long loading times or incompatibility of hard and software.

But 3D platforms have evolved. Today, web-based, high-speed 3D with fast loading times is not an utopia anymore. Modern 3D platforms like room work with small data packages. Delivery is ultrafast, and every desktop, notebook, smartphone, or tablet can handle them — without the need of downloading a special, dedicated software. The new 3D platforms utilize web-standards that run on any device. Simultaneously, they provide 3D model quality that surpasses anything that came before — realistic, true to scale, high-quality 3D models. And the best: integration into your online shop is super easy.

2. THE POWER OF 3D IN YOUR WEB SHOP



2.1 MINIMAL LOADING TIMES

Fast loading times of your store page are a key factor for user satisfaction and search engine optimization (SEO). If a page is loading too slow, the user becomes impatient and might bounce. This can also negatively impact search rankings. Loading times were one of the key issues for not integrating 3D product images in the past. That should be a thing of the past. Internet speeds are constantly increasing, and web-based 3D technology made huge leaps in compression. A regular 3D model created with the room productCloud, for example, is just the size of a regular smartphone photo. This is a significant improvement over the hundreds or more megabytes a low-quality 3D image had just a while ago. Loading times stay fast and users get the additional benefit of immersive, explorable 3D models of their desired products. In turn, this accelerates the purchasing decision and benefits the shop providers.

2.2 USABILITY FOR WEB SHOP MANAGERS & CUSTOMERS

Usability is not just about customer experiences, it is also concerning shop managers. They must be able to add, switch, adjust, or edit 3D product files easily. The 3D platform of choice should therefore not be a hassle to operate and offer a fluid workflow. It should follow the same modern UI/UX rules as store frontends. After all, workflow efficiency is important. Platforms like the room productCloud allow you and your shop managers to easily edit 3D models and create multiple 3D variants of a product — no special programming knowledge or apps required.

At the same time, these configurators can be provided as engagement tools on the store frontend to customers. Changing colors, textures or material composition of the 3D model allows users to really explore all aspects of a product. This can be a crucial differentiator and success factor for your store. In terms of customer usability it is important that customers are able to use the 3D product models naturally. The models have to fit the interface as well as the look and feel of your online shop. The configuration options or editor tools should follow a clear design that do not irritate customers.



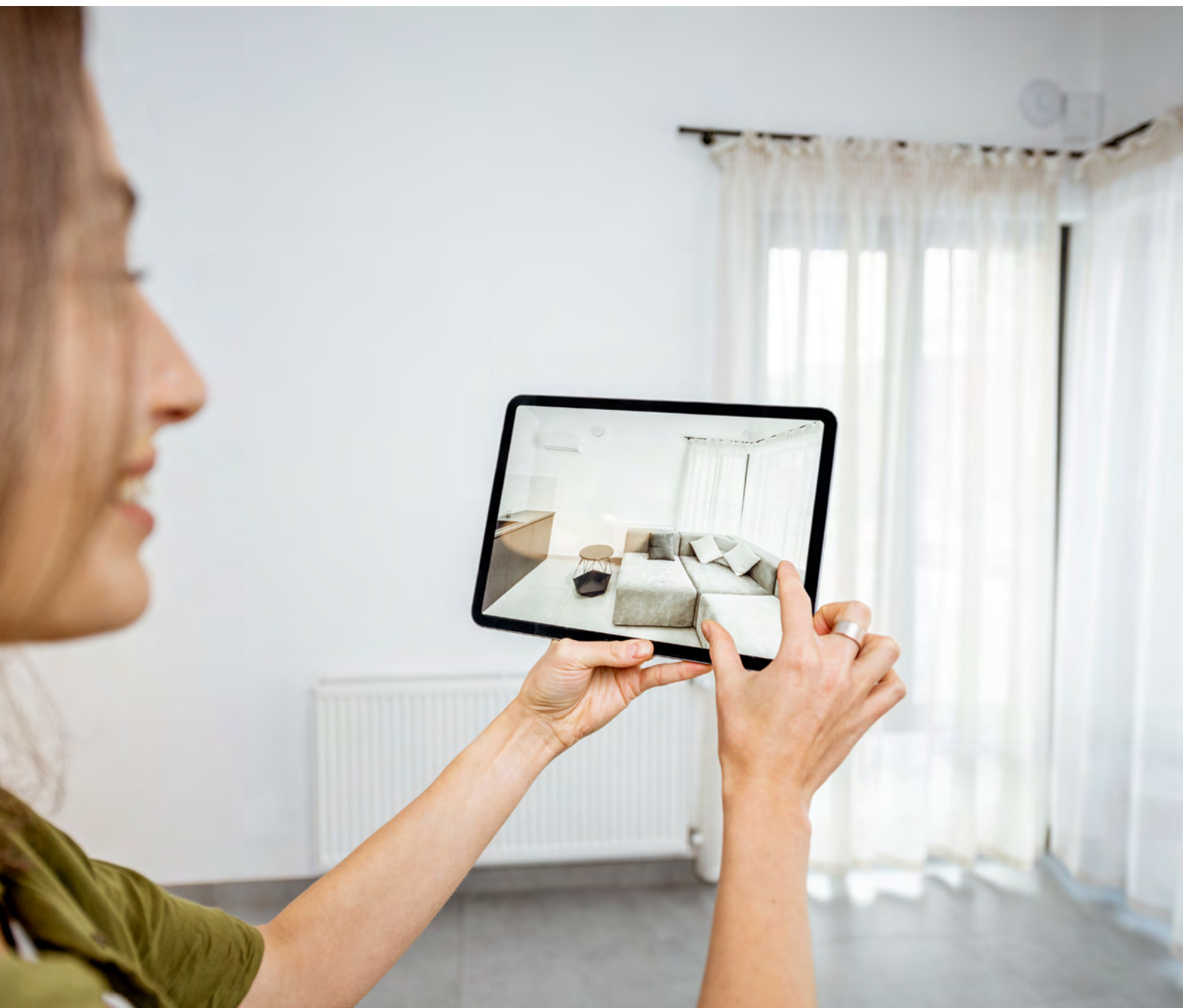
2.3 EASY ONLINE SHOP INTEGRATION

Today, flexible APIs enable you to integrate 3D content easily into your web shop without programming effort. Embed 3D models of your products as easy as YouTube videos. Let customers share your 3D content with others via social media, email or messenger. Let them even configure the 3D products to their liking with powerful, user-friendly editors. You are also able to create virtual showrooms to display your 3D products as a natural extension of your 2D shop interface. Server loads and loading times are kept at a minimum thanks to sophisticated compression algorithms and systems architecture.

Where do the 3D product models come from? You can either use a database with pre-built models or create the 3D models yourself. This is usually quite easy since the 3D platforms provide you with multiple tools to do so. The room productCloud enables you to simply scan the product via an app or generates 3D models out of the pool of product images you already have.

Platforms like the room productCloud are already available via simple plugin for many major shop systems like Shopware, WooCommerce, shopify, SAP hybris or Magento. Thanks to a sophisticated API customized integrations can be easily realized as well.

3. AUGMENT YOUR ONLINE SHOPPING EXPERIENCE



3.1 THE MISSING A(R)SPECT OF SHOPPING

3D and AR are natural partners and work brilliantly in concert with each other. Allow users to experience 3D models in your store and enable them to take them (virtually) home via AR.

AR, also known as Mixed Reality, is a powerful, yet under-utilized tool for driving sales. AR projects a virtual image into the physical world, usually with mobile devices like smartphones or tablets, or special AR headsets. Digital and physical world merge to create an immersive experience for the user. Providing AR models of the products in your online shop can have a major impact on your sales. According to major shop software providers and industry experts, implementing AR features to an online store can increase conversions 25% [2] and more [3]. But why are shop owners so reluctant to implement AR? The reasons might be long site loading times, expensive implementations, large file sizes as well as hardware and software incompatibilities on the user side.

Fortunately, these are no longer issues. Powerful new 3D platforms like the room productCloud make integration cost-efficient and easy. They deliver immersive 3D and AR experiences in small data packages to every user — regardless of the device they are using. Now is a great time for you to jump on the bandwagon to differentiate from the competition. It was never easier to implement AR.

3.2 BENEFITS OF AR FOR ONLINE SHOPPERS

AR offers a variety of benefits to your customers that a simple product page with 2D images cannot. Thanks to AR your customers are able to literally take the product home. This can either be done with special AR glasses or - more user-friendly, like with the room productCloud - just by using any mobile device. The 3D model of the product is projected into the physical world to create a so-called Mixed Reality (MR) experience.

Platforms like the room productCloud are web-based and do not require special hardware or apps. Your customers can simply scan a QR code on their desktop and the product is on their phone. If they are already accessing the shop on their mobile devices they can use the AR models immediately. This is especially helpful for selling things like furniture, decorative accessories, electronic devices, or kitchen utensils. Shopper can place the product in their home environment and see how they might look like. The 3D AR models are also true-to-scale and empower your customers to actively plan with them in their home.

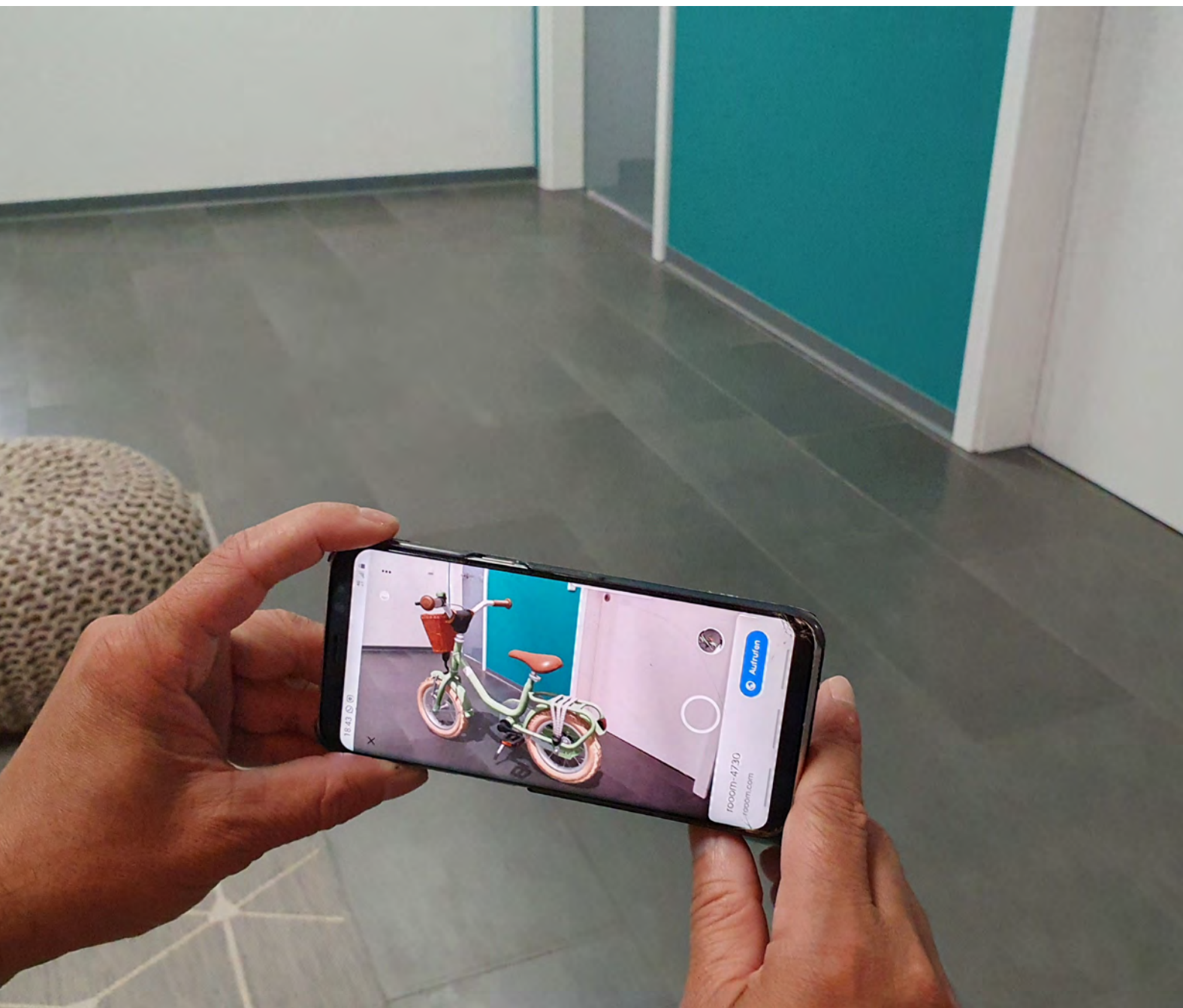


3.3 AR IN YOUR ONLINE STORE

Like 3D, AR is easy to integrate in any shop. Flexible APIs connect AR platform to shop system. Since AR usually requires 3D models it should be part of the 3D platform you are using. The room productCloud offers 3D models that can be viewed in AR as an option. The feature is, for example, already a part of the 3D product viewer.

If you choose to implement AR in your store, make sure it is as easy to access. Choose a platform that works on every device and is not restricted by special hardware or software requirements.

4. ONLINE SHOPPING AS A MIXED REALITY EXPERIENCE



There are certain customer experience standards most web shops adhere to. Look and feel may differ, even additional content offerings, but some basic principles are present everywhere. Customers come to expect things like fast visual navigation, product categories, search bars and well-structured product pages with images, product descriptions, customer reviews, and so on. Considering the customer-centric orientation of most online shops, it is just a question of time before 3D and AR become a standard as well. With easy to access and implement 3D and AR technologies like the room productCloud online shop owners can build truly engaging Mixed Reality product worlds for their customers.

The customer will become an active part of the experience thanks to these technologies, which is a revolutionary change. It will increase conversions significantly and achieve ROIs most online shops can only dream of today. Companies that already use AR and 3D models in their shops are benefiting immensely. They see stronger customer loyalty, higher conversion rates, and ultimately, higher sales. Now is the time for all online shop managers to implement 3D and AR product visualizations. In the near future, every customer will just expect it.

[1] For example: <https://journals.sagepub.com/doi/abs/10.2501/IJMR-2016-027>

[2] <https://www.shopify.com/partners/blog/shopify-3d>

[3] <https://www.retailcustomerexperience.com/blogs/how-3d-technologies-are-changing-the-online-shopping-experience/>



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