

Boosting Brands with Augmented Reality: Why and When it Works

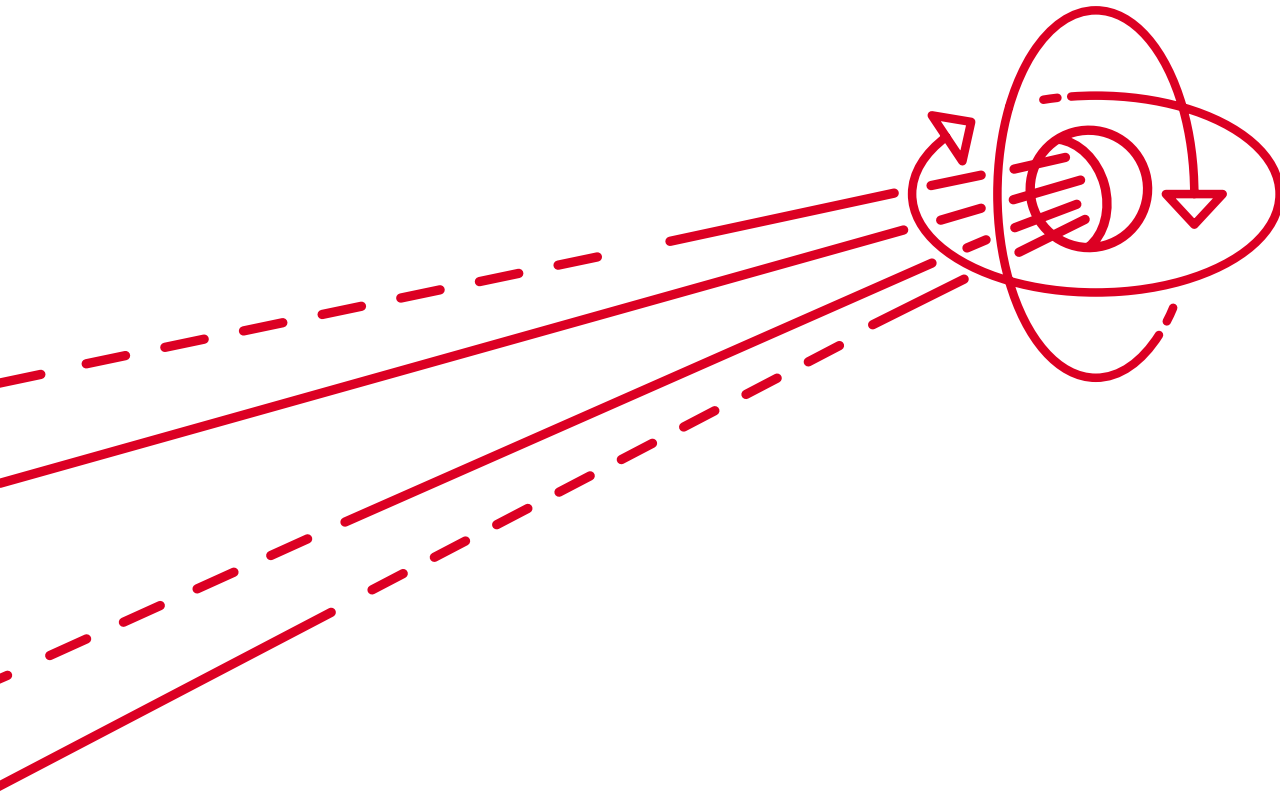
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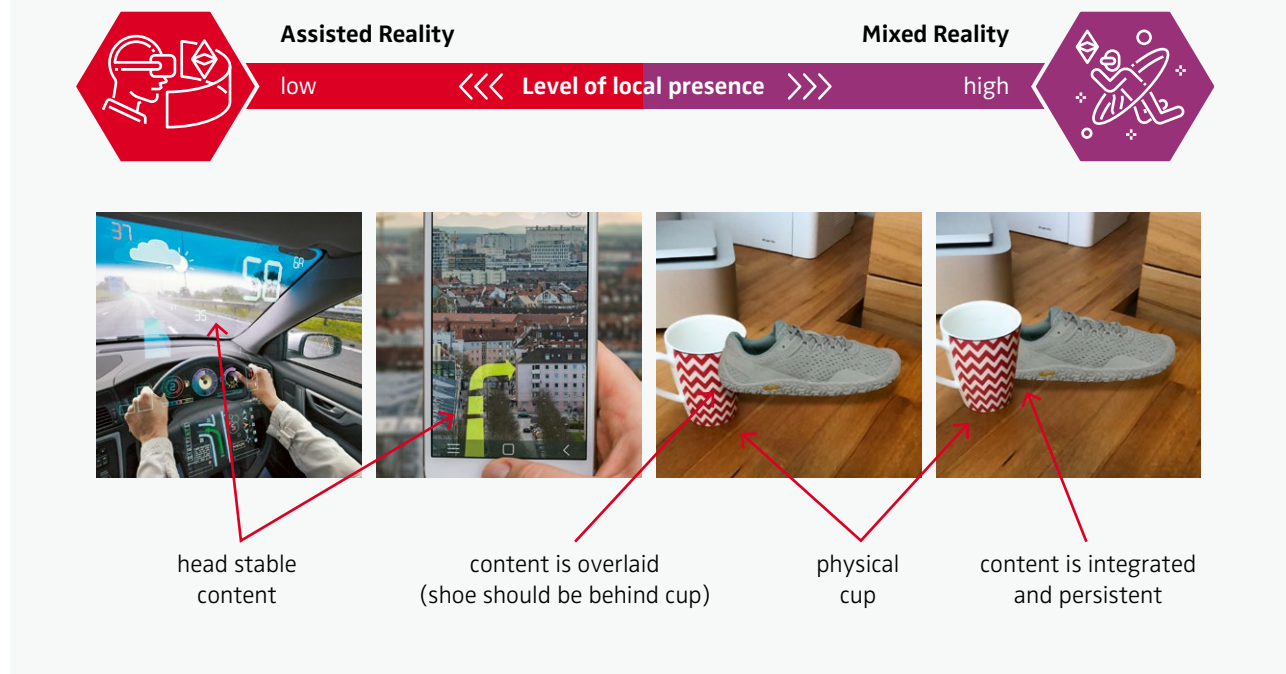
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The metaverse as a purely virtual world is still a vision, but brands can already benefit from AR applications today.
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Augmented Reality (AR) can add value to products and brands ✕

Over the last few years, executives have begun to realize the tremendous potential of augmented reality (AR) as part of their marketing strategies. Unlike virtual reality (VR), which immerses users in a virtual world through a headset, AR integrates virtual content into a consumer's physical environment. IKEA Place and Dulux Visualizer are prominent examples of AR applications that allow consumers to try out virtual pieces of furniture or paint colors in their homes. AR games such as Pokémon Go can generate new revenue streams as part of the product mix, and Lego's AR features for its toys show that AR can be a value-added feature for traditional physical products. Although AR is not new per se, it is currently experiencing a breakthrough. Almost all of today's smartphones have built-in AR capabilities. Cameras and LiDAR scanners can create stunning scans of a customer's environment, and algorithms can interpret objects in real time. New developer tools allow companies to create AR experiences much more efficiently than just a few years ago. In the near future, we can expect to see fashionable and ergonomic AR glasses that consumers can wear all day.

The different forms of AR ✕ AR differs in its level of "local presence," that is, the degree to which users perceive virtual content as actually present in their local, physical environment. Figure 1 shows potential AR applications with varying levels of local presence. In "assisted reality" situations, like the navigation systems shown on the left, the local presence

FIGURE 1 > The level of local presence in various types of AR



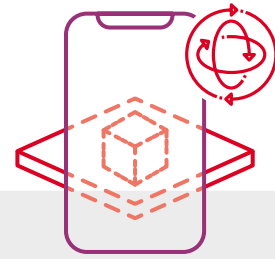
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of AR is low, and consumers can clearly distinguish virtual objects from real ones. Even such a low local presence can be very helpful. In some use cases, such as assembly instructions for a newly purchased product or a navigation system in a shopping mall, simplified AR features that are clearly identified as artificial and not actually "there" may even be preferred. However, advances in rendering, tracking and content quality allow developers to push local presence to higher and higher levels of "mixed reality," as in the two applications on the right side of Figure 1.

While much of the current enthusiasm for new reality formats relates to virtual reality and visions of a metaverse as a purely virtual world, more potential may actually lie in AR.

For example, an AR layer on top of the real world could be filled with virtual content by consumers and brands alike, enabling a new form of three-dimensional Internet that is well integrated into the physical world. While the development of such scenarios is a top priority for technology companies, they remain a futuristic vision. However, today's AR capabilities, if effectively implemented, can already create actual value in marketing. Recent academic studies and industry cases have shown effects such as increases in sales or a positive impact on brands.

How AR helps build brands ✕ Surveys of executives indicate that branding is the top priority for AR marketing,



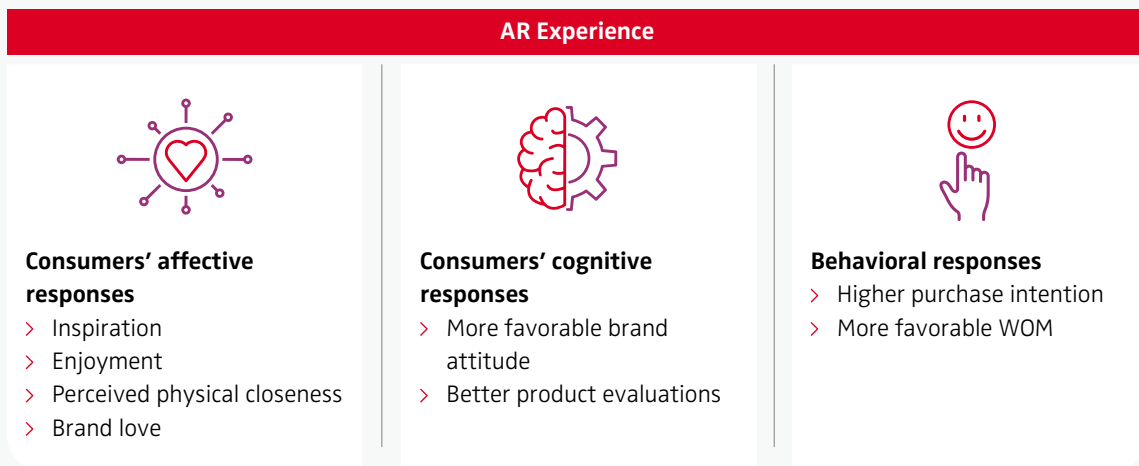
BOX 1

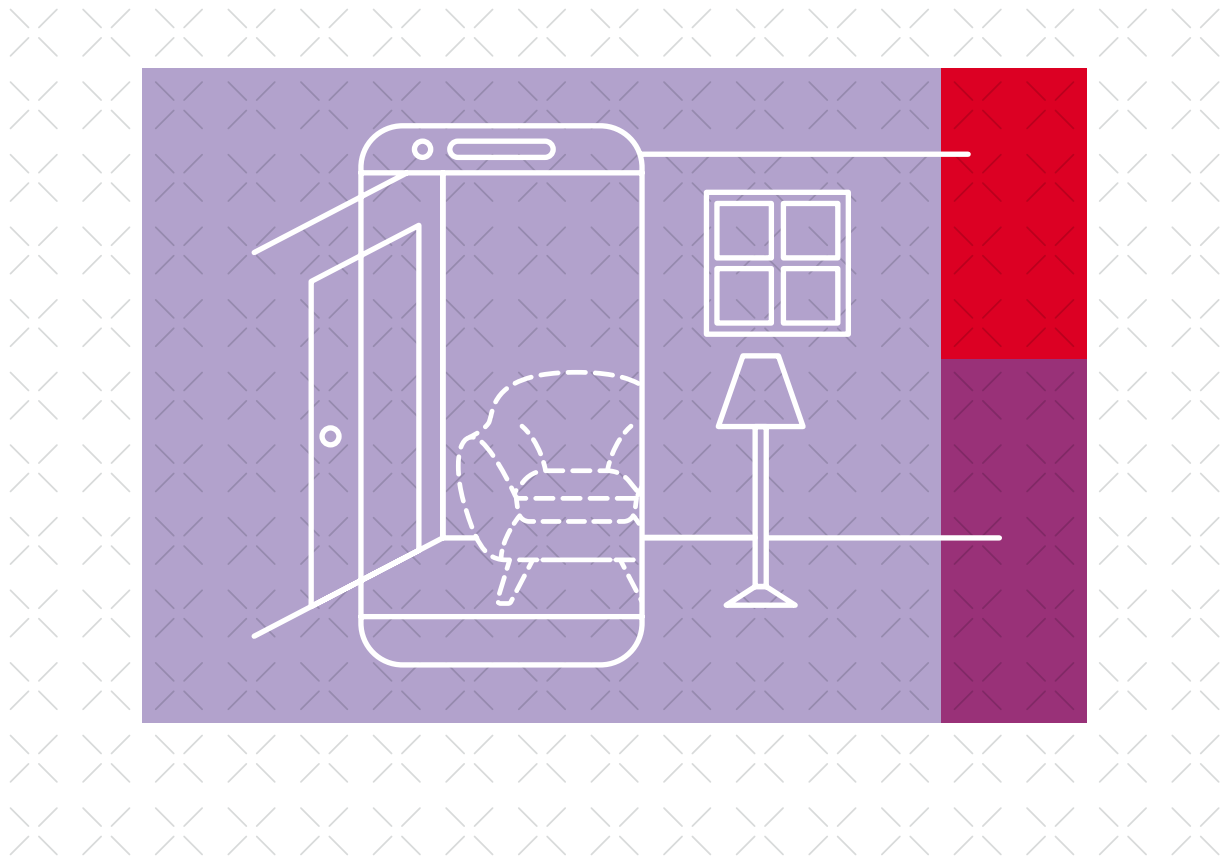
Research projects on consumer reactions to AR

In two research projects, we investigated whether consumers who feel inspired change their existing brand attitudes in positive ways. In each study, we surveyed more than 200 consumers and measured brand attitudes using established survey measures before and after using an AR app and assessed the changes. Specifically, consumers answered questions about how “good or bad” a particular brand was or how “favorably or unfavorably” they perceived it. Further, we asked consumers how inspired they felt when using an AR app, in addition to more generic questions, such as how much they liked an app or how useful they found it. The changes in brand attitude were about four times higher for the highly inspired consumers. Beyond brand attitude, we also found positive effects of inspiration on other relevant key performance indicators, including product evaluations, purchase intentions and word-of-mouth.

Additional research showed that AR also has the potential to increase brand love by fostering a perceived physical closeness between a consumer and a brand. In further studies, we asked consumers to experience AR content either in AR or non-AR using a tablet computer. The physical distance between a consumer and the branded content was the same in both groups – the distance from their eyes to the surface of the tablet. However, respondents in the AR condition were significantly more likely to report that they perceived the brand as physically close to them than those in the non-AR condition. This perceived physical closeness triggered brand love. In a replication study, we asked female consumers who had tried a commercial AR makeup app how much they felt the virtual makeup was actually on their skin (“local presence”), which somehow represents the “quality” of the AR experience. Note that we also measured brand love about a week before the main data collection and controlled for this; the effects remained. Figure 2 summarizes the effects.

FIGURE 2 > Simplified summary of consumer reactions to AR applications





while financial objectives are more likely to be considered as future goals. Although many brands are already using and likely benefiting from AR, managers also report an interest in understanding why and how AR works. We will focus on two important mechanisms that explain the effectiveness of AR in branding, namely inspiration and closeness. We will also discuss how they influence brand evaluations and emotional consumer-brand relationships, two critical key performance indicators in branding.

> **AR inspires consumers and makes them like brands**

✗ Liking a brand means having a positive attitude toward it. Such brand attitudes result from the associations consumers have with a brand. If these associations are mostly positive, like high quality, a fair price or a good design, brand attitudes are usually also positive and tend to remain relatively stable over time. Our daily work with AR has consistently shown that AR has a huge potential to inspire consumers by allowing them to playfully explore



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*AR can create actual value in marketing
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and manipulate their environment. To validate this observation empirically, we conducted several studies (see Box 1) which confirmed that AR-inspired consumers tend to have more favorable attitudes toward brands than less inspired or uninspired consumers. Inspiration seems to be a highly relevant metric that marketers should consider when evaluating AR apps. Our studies also showed that inspiration is particularly high when AR apps are designed to be fun and playful and when the content is realistically integrated into the consumer's physical environment. These effects were positive for most of the apps we tested, but boring and unprofessionally developed AR content might backfire on brands. We did not find such positive effects for more established measures, such as overall app ratings, that many marketers tend to focus on.

It's time to consider AR as a branding tool ✕ Managers often express doubts about whether AR is "ready" or if it's a good fit for their brand. Usually, this is because they don't know much about AR and haven't tried it out for themselves. While the "true" metaverse as the next Internet is still a vision, brands can already benefit from AR applications today. Playful, useful and well-developed applications can lead to measurable positive impacts on brands. Creating simple AR prototypes has become much easier and cheaper due to advancements in technology. We suggest that managers experiment with AR in a fun and playful way to gain hands-on experience. This will help them understand how AR can benefit their brand and keep up with competitors who are already using AR. The experience can also help them take further steps toward a future metaverse. ✕

- » **AR makes consumers even love a brand** ✕ Although loving and liking a brand are conceptually related, they are different. While liking is more of a pragmatic evaluation, brand love is a specific form of consumer-brand relationship. Brand love is a complex and multidimensional construct that ranges from very low to very high, although consumers may actually use the term "love" in everyday conversation only if they have very high levels of brand love. However, even small increases in brand love at lower levels – well below the threshold where consumers would actually use the term "love" – can lead to significant improvements in word-of-mouth and purchases. In fact, a recent meta-analysis showed that brand love is the most powerful type of consumer-brand relationship in shaping a company's profits. We found that AR had a positive effect on physical closeness and, subsequently, on brand love. However, the brand love effect was stronger for brands with higher levels of familiarity, suggesting that brands with stronger associations may benefit even more from AR in creating emotional bonds with consumers.



FURTHER READING

Rauschnabel, P. A., Babin, B. J., tom Dieck, M. C., Krey, N., & Jung, T. (2022). What is augmented reality marketing? Its definition, complexity, and future. *Journal of Business Research*, 142, 1140–1150.

Rauschnabel, P. A., Felix, R., & Hinsch, C. (2019). Augmented reality marketing: How mobile AR-apps can improve brands through inspiration. *Journal of Retailing and Consumer Services*, 49, 43–53.

Rauschnabel, P. A., Felix, R., Hinsch, C., Shahab, H., & Alt, F. (2022). What is XR? Towards a framework for augmented and virtual reality. *Computers in Human Behavior*, 133, 107289.

Zanger, V., Meißner, M., & Rauschnabel, P. A. (2022). Beyond the gimmick: How affective responses drive brand attitudes and intentions in augmented reality marketing. *Psychology & Marketing*, 39(7), 1285–1301.