



MEET THE NEXT GAME CHANGER

Virtual reality (VR), augmented reality (AR) and mixed reality (MR) are on a similar path. No longer just for gamers or theme parks, these emerging technologies are redefining how everyday companies market, sell and support customers. Their potential to solve real-world business problems is exciting and usage is predicted to skyrocket in the next few years.

Technology like smartphones and social media changed how billions of people work, communicate and socialize. Yet, when they first emerged, many questioned their relevance for business and marketing. Until other companies – including their competitors – tested, learned and profited from being first in the space.

HOW CAN VR, AR & MR HELP ME?

Immersive reality converts whatever you're marketing on a flat page or screen into something customers can personally experience and try. That increases buying confidence, sales and post-sale satisfaction.

IMMERSIVE REALITIES	ADVANTAGES	CHALLENGES	IDEAL FOR
<p>VR</p> <p>Transports you to a different world.</p> 	<p>Customers can experience your destination first hand, vs just seeing or hearing it.</p> <p>Eases scary/stressful situations. (A clinic or hospital patient can "escape" to a happier, soothing place.)</p> <p>360° (a limited type of VR) is the most accessible & affordable right now. It can add big impact to your social & mobile marketing.</p>	<p>To achieve full immersion, wearables are needed.</p> <p>Many cardboard options exist, but quality hardware is still costly. However, big price drops are predicted in next few years.</p>	<p>Travel & Tourism</p> <p>Real Estate/Interior Design</p> <p>Hospitality</p> <p>Healthcare & Medical Training</p> <p>Education</p>
<p>AR</p> <p>Brings anything into your real world but is unable to interact with it.</p> 	<p>Will it match my decor? Fit my space? Work in our office?"</p> <p>AR removes all doubt & guesswork. Since AR can be accessed from mobile devices, testing is affordable.</p>	<p>Support varies, based upon newness of device.</p>	<p>Product/Packaging Mfrs.</p> <p>Retail and eCommerce</p> <p>B2B sales (show booths, , product demos, plant tours)</p> <p>Education</p>
<p>MR</p> <p>Brings objects & people (as avatars) into your real world that can interact with you and the environment.</p> 	<p>Bring dry or complex topics to life by gamifying them</p> <p>Eliminate training barriers: dangerous chemicals, extreme temperatures, inaccessible locations, costly travel</p> <p>Ensure privacy when working with sensitive content or situations</p> <p>Sit down next to people in one room who are all thousands of miles away.</p>	<p>Newest technology - still in its infancy.</p> <p>Wearables are needed for full effect/ immersion.</p> <p>Low adoption & high entry cost now. That will change.</p>	<p>Education</p> <p>Medical/technical training</p> <p>Construction</p> <p>Interior design</p> <p>Complex B2B demos</p> <p>On the job assistants</p>

98.8% CAGR GROWTH (2017-2021)


Industry analyst, International Data Corporation, forecasts global AR & VR spending will reach \$17.8 billion in 2018: that's a nearly 95% increase over last year. They predict similar growth through remainder of their 2021 forecast period: a five-year compound annual growth rate (CAGR) of 98.8%.*


*Source: IDC.com "Worldwide Spending on Augmented and Virtual Reality Forecast to Reach \$17.8 Billion in 2018, According to IDC", November 29, 2017. <https://www.idc.com/getdoc.jsp?containerId=prUS43248817>


WHAT'S YOUR ROLE?


Think about the business problems you face today that impact your bottom line. What's costing you sales or customer attrition? What are your internal training challenges? These emerging technologies may solve those problems. But now's the time to explore and learn. Consider starting smaller: perhaps with an AR test. Then apply what you learn to full MR when the time is right. Getting a headstart now gives you a big advantage over your competitors.


OUR SHARED VOCABULARY


 **360°** Photos or video capturing real-world content viewable with handhelds, HMDs and supported by some social platforms. We can see all angles, just like we can look around in real life. But we can't shape the experience or interact with it.


 **Augmented Reality (AR)** An overlay of computer-generated images on the user's reality. The image can't interact with users: it's merely pasted on top superficially. (Newer AR can recognize flat 2D surfaces like walls & floors, but still lacks full MR capabilities.) *Example: a customer "places" a digital image of a chair in their living room. The chair will be exactly where the user puts it. But it can't recognize or interact with anything in that room.*

 **Cardboard** Refers to any low-cost, entry-level mobile VR headset made of cardboard. It allows cell & tablet users to access immersive VR. The name is a shortened version of Google Cardboard which the company debuted in 2014.

 **Handheld** Mobile devices like a cell phone or tablet used to access AR. You run an app and point camera at something. Then see that "something" (an ad, item, package, person's face,) come to life. *Example: Snapchat lenses, Pokémon Go and Google Translate are AR experiences accessed via handhelds.*

 **Head-mounted display (HMD)** A wearable device to access virtual reality systems, like a helmet, glasses or a pair of goggles. The user stays fairly stationary, at most moving around a single room. Also called "VR Headset".

 **Immersive Reality (IR)** Initially used to describe VR. Some now use the term as a broad category descriptor for VR, AR & MR. Another term sometimes used is "alternate reality".

 **Mixed Reality (MR)** An overlay of digital content that can anchor to and interact with the real world. *Example: using the chair from AR definition: in MR, the chair would recognize and interact with your environment. It would know not to sit behind curtains, atop a lamp or block the doorway.*



Presence A way to describe how convincing and immersive an experience is. "Creating presence" means reality was suspended and the users felt like what they saw and heard actually happened.



Reality The world or the state of things as they actually exist.



Virtual Reality (VR) An immersive experience created entirely from computer-generated content for training or fun. Allows users to interact with environments that may be remote, inaccessible, hazardous or imaginary. They can fly, ride, dive, etc. *Example: you wear a set of goggles and are transported to the bottom of the ocean or a planet in space.*



Wearable Physical accessories for IR like goggles or headsets that allow you to move freely and see your real environment at all times. As wearables get smaller, lighter and more affordable, some predict they'll replace smartphones and TVs.

INTERESTED IN CONTINUING THE CONVERSATION?

- Get a hands-on demo in our Innovation Lab
- Book a brainstorming session: let's partner together to solve your biggest business problem.