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Auto Casualty

What You Need to Know About Extended Reality

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The concept of Extended Reality (XR) conjures up images of virtual computer worlds built as an escape from everything around us. Considering what 2020 has been like so far, that might seem pretty attractive, but extended reality provides us so much more than just an escape. It can be a teacher, tour guide, trainer or an assistant. XR is an umbrella term that encompasses both augmented and virtual reality. It's rapidly moving out of the hands of gamers and into the world at large. Analysts predict that more than 35% of all businesses will adopt and use some kind of XR technology by the year 2024. This year in particular, as we've had to adopt new technologies to help manage the impact of COVID-19, XR has become increasingly attractive as a way to do more while still maintaining social distancing.

Virtual Reality Puts You There

Virtual reality (VR) technology places you inside a virtual environment, where you can interact with digital objects projected around you in three dimensions. To get an idea of how VR could work in the insurance industry, it's worth taking a look at the impact it is already having on the world in general. During 2020, hundreds of popular tourist attractions tapped into virtual reality to give people quarantining at home a chance to visit the Blue House in Hong Kong, the Temple of Zeus in Sicily, or even the Grand Canyon in Arizona. The VR experience does more than just bring you to these places. Your virtual tour might include narration from a guide or park ranger, visual highlighting of not-to-be-missed features or even a chance to travel back in time. In the workplace, one of the most prevalent uses of VR has been for training. Walmart purchased 17,000 VR headsets to train more than 1 million employees last year. This year, they've introduced VR training for situations ranging from managing opioid overdoses to recognizing COVID-19-related shifts in product demand at the store level. One of the reasons businesses like Walmart are investing in VR for onboarding and training is that VR helps people retain information longer than training through traditional PowerPoint slides. A recent study by the University of Nottingham found that with VR training, employees were more engaged, long-term retention was better and they were more interested in attending future training sessions. Plus the training can be done remotely,

too. A fascinating use of VR in the age of COVID-19 has been the emergence of VR industry events. In March, the HTC VIVE conference, a technology conference usually held in person each year in China, was replaced with a completely interactive VR conference, where all the speakers presented using virtual avatars. This kind of VR experience might not work in every situation—I still prefer seeing videos of actual people presenting—but it's an interesting way to maintain social distancing while still letting people gather and interact. As a safety tool, VR can be used to familiarize workers with risky procedures before they attempt them in real life or to operate machinery that may require significant practice. Large-scale construction cranes, for example, are one of highest risk machines to operate, with the potential for serious consequences to property and safety. Bechtel, a global construction company, uses a VR Crane Simulator to train operators in a virtual environment and then evaluate their skill level before flying them to jobs in other parts of the world. By doing so, they reduce risk and ensure the right people are doing the right jobs. VR has even become indispensable as a tool for neurosurgeons. They've been able to use VR to "fly" though detailed MRI scans of spinal columns in order to design specific procedures that will be the least invasive. In a similar way, brain surgeons can plan and even practice a particularly challenging operation virtually before attempting the procedure in real life. And the possibilities to support even more complicated procedures are just now being explored. Applications using VR for training, inspection, and even reducing risks continue to grow rapidly, especially during this year when travel to actual places is limited. In contrast, applications using augmented reality lets us interact with and understand the world around us when we are physically there.

Augmented Reality Enhances What's Already There

Augmented reality (AR) overlays virtual elements onto the real world. Unlike VR, which creates an entirely new environment, AR enhances an existing environment with additional data. Snapchat has been teaching us how to do this for years, with their "lenses" that adjust to our faces—and even our pets—in real time. Snap says more than 70% of its daily active users play with its lenses every day. In a more serious use case, neurosurgeons, whom we've already mentioned, are using AR to actually highlight veins and nerves in a patient during an operation, making it easier for them to navigate complicated surgeries. It's this kind of augmentation of the real world that makes it easier to accomplish complicated jobs or difficult tasks. For drivers, navigating unfamiliar roads or even handling maneuvers like parallel parking can be difficult for some, and that's why automobile makers have been experimenting with AR for decades. Back-up cameras that highlight vehicle turning paths or warn of close objects are becoming increasingly common as a result. Heads-up displays in vehicles—a technology that's been attempted many times over the years—look like they are about to become the next big thing. Both Mercedes-Benz and Volkswagen are introducing AR displays for upcoming 2021 models that provide information overlays on a driver's windshield. These displays can highlight intersections, display distances to the vehicle ahead, and can guide drivers through roundabouts. These tools may dramatically improve driver awareness and safety, but on the other hand, like other Advanced Driver-Assistance Systems (ADAS), they will increase the complexity and cost of repairs. The good news is that extended reality can also help support the automobile repair process. Here at Mitchell, we've talked about the use of XR headsets in automobile repair to give technicians hands-free access to resources they need for a repair, during the repair, without having to stop what they're doing. With these tools, a repair technician can view up-to-date procedures at the same time as they're working on a vehicle. Extended reality isn't just a future vision—it's here, and the use cases for the property and casualty industries are growing quickly. XR has the ability transform the way we interact with customers, our colleagues, and the work we need to do, both now and in the future.

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