SPECTRUM BETWEEN REAL AND VIRTUAL WORLD

Extended reality (XR) refers to the spectrum of applications that fuse (i.e., superimpose) virtual and real imagery, for instance, 3D models with live camera feeds, as shown in Figure 1. At one end of the spectrum lies the physical reality and at the other end lies virtual reality (VR), where all visual imagery is computer- generated and the user is fully immersed in a digital environment. Between the extremes of the spectrum we can also find mixed reality (MR, not to be confused with the medical acronym widely known for magnetic resonance), corresponding to physical reality with the addition of virtual objects. A popular subset of MR technologies is augmented reality (AR).

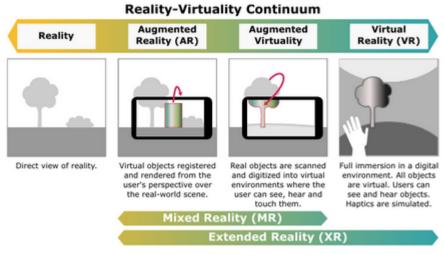


Figure 1. Reality-virtuality continuum. Spectrum of physical and extended reality, with virtual reality at one end and the real world at the other.