



Virtual and augmented reality

VR is a computer-generated scenario that simulates a real-world experience; AR combines real-world experience with computer-generated content



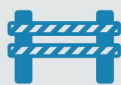
Trends shaping the landscape

- There has been an increased market interest and activity in VR/AR technologies since 2013.
- Europe is a growth market for development and diffusion of VR/AR technologies.



Drivers

- Growth in the gaming and entertainment industry
- Reduced cost of software and hardware
- Increased availability and use of mobile devices
- Increased availability and diversity of digital content



Barriers

- High cost of investment in system infrastructure
- Health concerns (e.g. dizziness and simulator sickness)
- Poor connectivity to the web
- Ethical and privacy issues



Sectors impacted

- Training and education
- Marketing
- Design, engineering, prototyping and testing
- Civil services
- Health and healthcare
- Logistics



Socio-economic implications

- The evidence is mixed as to whether VR/AR training programmes yield better performance outcomes in comparison to traditional training methods. However, in the logistics sector, the evidence suggests that VR/AR could contribute to improved employee performance.
- VR/AR could increase procedural effectiveness and produce more efficient distribution of resources, particularly in healthcare services and in the retail sector
- VR/AR could enable the vocational rehabilitation of individuals with disabilities and trauma.
- VR/AR could enable improved employee interaction and support team-working processes.
- VR/AR could improve worker safety in high-risk environments.
- VR/AR could simplify workplace tasks but result in decreased worker autonomy.