Virtual Reality Technology for Employee Training in High-Risk Industries: Benefits and Advancements

Authors : Yeganeh Jabbari, Sepideh Khalatabad

Abstract : This study explores the development of virtual reality (VR) technology for training applications, specifically its the potential benefits of VR technology for employee training and its ability to simulate real-world scenarios in a safe and controlled environment are highlighted, along with the associated cost and time savings. The adoption of VR technology in high-risk industrial organizations such as the oil and gas industry is discussed, with a focus on its ability to improve worker performance. Additionally, the use of VR technology in activities such as simulation and data visualization in the oil and gas industry is explored, leading to enhanced safety measures and collaboration between teams. The integration of advanced technologies such as robotics is mentioned as a way to further promote efficiency and sustainability. Also, the study mentions that the digital transformation of the oil and gas industry is revolutionizing operations and promoting safety, efficiency, and sustainability through the use of VR technology.