Augmented reality – an important aspect of Industry 4.0

ABSTRACT

Purpose – Augmented reality (AR) integrates the digital world with the real world and thus, provides a real-time experience to the users. With AR, the immediate surroundings become a learning platform for the users. The perception of the products has been enhanced many times with AR; thus, enriching user experience and responsiveness. The purpose of this paper is to bring forth the basics of AR and provide an overview of the research work carried out by researchers in the implementation of AR in different sectors. Design/methodology/approach – This paper summarizes the usefulness of AR in different industries. The authors have identified the peer-reviewed research publications from Web of Science, Scopus, Google Scholar, etc. The selection of literature has been made based upon the significance of AR in recent times. The industries/sectors where AR has been implemented successfully have been considered for this paper. The paper has been divided into various sections and subsections to bring more clarity to the readers. Findings – This paper presents a brief and a precise information on Industry 4.0 and AR. The basic working of AR system and its implications have also been discussed. The preference of AR over virtual reality (VR) has also been deliberated in this paper. The authors have presented the usefulness of AR in different sectors such as smart factories, shipyard building, online shopping, surgery and education. This paper discusses the ARready procedures being followed in these sectors. Originality/value – AR has been an add-on to VR systems. The processes in industries have become very handy and informative with AR. Because the application of AR in different sectors has not been discussed in a single paper; thus, this work presents a systematic literature review on the applications of AR in different sectors/industries.