

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141033595 A

(19) INDIA

(22) Date of filing of Application :26/07/2021

(43) Publication Date : 30/07/2021

(54) Title of the invention : **Virtual reality based skill development system for construction workers**

(51) International classification

:G02B0027010000,  
G06F0003010000,  
G09B0005060000,  
G06Q0010100000,  
G06Q0010060000

(31) Priority Document No

:NA

(32) Priority Date

:NA

(33) Name of priority country

:NA

(86) International Application No

:PCT//

Filing Date

:01/01/1900

(87) International Publication No

: NA

(61) Patent of Addition to Application  
Number

:NA

Filing Date

:NA

(62) Divisional to Application Number

:NA

Filing Date

:NA

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(57) Abstract :

The building workforce is in decrease with a well-trained staff. To address this shortfall, we have created a simulated education environment using a new method for the training of rookie construction workers on virtual reality (VR). First, an exhaustive job analysis was performed to determine the need for training. Then, the VR head-mounted display built a virtual construction site, and a 3D video instruction was installed with Head Mounted Device (HMD). To assess the efficacy of this technology, individuals who learned through the VR training tool were compared to those who received basic 2-D video training. VR training has led to higher retention, task performance, speed of learning, and commitment than the equivalent in video formation and the usability of the technology.

No. of Pages : 21 No. of Claims : 6