USING VIRTUAL REALITY FOR SCENARIO BASED PRODUCT DESIGN

M. Tideman, M. C. van der Voort, F. J. A. M. van Houten

Laboratory of Design, Production & Management
University of Twente
P.O. Box 217, 7500 AE Enschede, The Netherlands
Phone: +31 53 489 3192, Fax: +31 53 489 3631
E-mail: {m.tideman, m.c.vandervoort, f.j.a.m.vanhouten}@utwente.nl

Abstract: Application of virtual reality technology within the product design processes can offer more than only a tool for analysis; it also offers opportunities for intended users to synthesize conceptual designs themselves. Within the virtual environment’s constraints - set and managed by the designer - users can experience usage scenarios, define designs, and assess those designs by directly experiencing them within the scenarios. By observing and measuring the choices that users make within the scenarios - and combining these observations with oral or written feedback - the designer is expected to develop a profound insight into ‘real-world’ problems and needs. Moreover, the designer is directly presented candidate designs. This paper describes how virtual reality can be used within scenario based product design. Products resulting from this approach are expected to perform more satisfactorily and to behave more corresponding to users’ preferences.

Key words: Virtual Reality, Scenario Based Design, Gaming, Virtual Prototyping, Intelligent Agents