Virtual and Game Technologies as Business Boosting Enablers

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ABSTRACT

The aim of this paper is to propose an approach how virtual and game technologies can be utilized to boost the business in small and medium-sized enterprises (SMEs). The design methodology is based on co-creation with fast experimentation. The practical implementations are considered as multiple case studies. After introducing current trends of virtual reality and game technologies, we present our experiences how virtual design with virtual and augmented reality (VR/AR) and game programming can be applied in various application fields. Despite the increasing popularity of virtual and augmented reality and game technologies, little research has examined how they can be utilized professionally in SMEs' design processes including user involvement in the new product development and marketing. Based on the case studies, we present our experiences how SMEs can benefit from virtual and game technologies by increasing their business agility and flexibility, reducing product design risk, shortening product development time, and enabling new business models. The exploratory nature of the research means that our promising findings are still tentative and need to be confirmed later with larger scale studies.