VIRTUAL STREAMYX TRAINING ENVIRONEMNT (VSTE)

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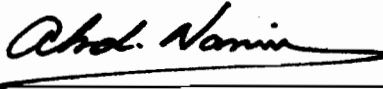*(has presented his/her project paper of the following title)*

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ABSTRACT

Over the last decade, there has been a tremendous growth in the use of computers for the implementation of training processes at all levels within training system. Undoubtedly, this growth was initiated to achieve high productivity with minimal cost in training in most organizations. As for virtual environment, nowadays, it has become the advanced computer graphics in virtual environment enabled training applications. Since most organizations are equipped with sophisticated and attractive facilities, virtual training environment has now become the important technique for both knowledge dissemination and skill acquisition. In this paper, a prototype of Virtual Training Streamyx Environment (VSTE) has been developed and discussed. Virtual Streamyx Training Environment is an application that enables user to undergo a training course anywhere at anytime to be an expert in a short time. Results for user evaluation on VSTE indicate that it has neutral usability in terms of three dimensions: Learnability, Perceived Ease of Use and Outcome/Future Use. The result also indicates that there is a no significant difference between novice and expert for these three dimensions.

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LIST OF ABBREVIATION

VSTE   Virtual Streamyx Training Environment

TM   Telekom Malaysia

CBT   Computer-based Training

CBI   Computer-based Instructions

VE   Virtual Environment

VR   Virtual Reality

HMD   Head Mounted Display

RAD   Rapid Application Development

3D   Three Dimensional

2D   Two Dimensional

ISO   Standard International Organization

GUI   Graphical User Interface

CHAPTER 1

INTRODUCTION

1.1   Background

According to Wikipedia, Virtual Environment is a "computer-based simulated environment intended for its users to inhabit and interact via avatars. This habitation is usually represented in the form of two or three-dimensional graphical representations of humanoids (or other graphical or text-based avatars) (Oliviera *et al.*, 2000). Virtual Environments (VEs) have many potential applications, including education, training, design and prototyping, entertainment, rehabilitation, and research. The utility of VEs for many applications increases that spatial judgements are similar to the VEs as in the real world (Betty, Creem-Regehr, and Thompson., 2006).

The effectiveness of a VE may be defined in terms of enhancement of task performance, effectiveness of training, improvement of data comprehension and other applications (Micheal Meehan *et al*, 2002). VE can bring simulation-based training environments closer to real-life experience (Jeff Rickel, 1995). Virtual environments have been increasingly used for a variety of contexts; teaching in the lab, informal learning, distance learning, business, and e-commerce. (Selim and Elif, 2004).

The contents of the thesis is for internal user only

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