

# Perceived Visual Enjoyment Factor in Artistic Playability: In Case Study Real Time Strategy (RTS) Game

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**Abstract:** Each game has their own unique feature, which attracts gamers by constantly playing the game daily. The game appeal also regards the interface attributes, Game mechanics, and interfaces as a factor towards excitement in playing the game. Nevertheless, there is limited discussion pertaining to perceived visual enjoyment factor in artistic playability, especially among youth based on the Real Time Strategy (RTS) game to support the statement. For this purpose, *Defence of the Ancients 2 (DOTA 2)* were used as a case study as inspired game play. The game according to gamers is essential for each level to deliver challenges that encourage the gamers themselves as motivational goal. In contrary in winning factor, there are also aspects of UX indicates substantially important as the game experience, that is: anatomy of function, and menus, plays important role in achieving goals, especially for the gamers. Therefore, this paper discusses the components of successful game. **Method:** The sample was tested using System Usability Scale (SUS) for interviews and questionnaire. Despite of a small sampling, SUS is trusted with its accuracy and reliability, also has established an industry standard, with numerous previous references. Based on findings, the online questionnaire distribution (N=10)

**Results:** The result indicates that the players were satisfied with the mechanics of the game, comparatively, the player felt enthusiastic with the competitive challenge to finish the game, and to achieve their objectives. The findings in the paper also established that the visual was not the driven factor for the user's engagement in continuously playing the game, but desire to complete the challenge in order to gain satisfaction upon completion. The significant finding in this article, that DOTA 2 game largely by definition depends on CTPM (Critical Thoughts Per-Minutes) and communication within the team because critical thinking is highly required in order to perceive the enjoyment; but the intensity, breadth, and acceleration also significantly required in the game to enhanced gamers excitement.

**Index Terms:** Real Time Strategy (RTS), Artistic playability Video Game, Visual Interests, CTPM (Critical Thoughts Per-Minutes), *Defence of the Ancients 2 (DOTA 2)*.

## I. INTRODUCTION

Currently, we are at the era of technology with millions of gadget and platform that can be used to play video games. Most of the current and previous generations playing games since 1996, and the computer game industry has been increased from \$20 to \$32 billion in value,

and video game software sold worldwide soaring since 2008. In this article, investigation take place on one of the most popular video game Real Time Strategy (RTS) genres, *DOTA 2*. It can be played either offline or online using a *steam* platform developed by Valve Corporation [1]. Currently, *DOTA 2* is the highly preferred among gamers in online *steam* platform. Literally, *Steam* platform is one of the most heavily trafficked digital game platforms in the world due with influx of gamers worldwide [2]. According to *Steam Powered*, the Valve built- in analytics, *DOTA 2* being played almost more than 1000 hours every day [3-4]. *Defence of the Ancients (DOTA 2)* is currently the top video game played in *steam* platform by gamers worldwide. *DOTA 2* initially released on July 9, 2013, on Steam, upon its releases, *DOTA 2* has reached 10 million subscribers worldwide, with USD1 billion in revenue for parent company Blizzard Entertainment [5]. The Game industries are soaring rapidly and globally generate more engrossment than the motion picture and the music industries [6]. Furthermore, the game also considered a big source of entertainment [7]. Due to rapid changes, the industry is increasingly investing significant resources in research and development for video games to sustain. This allowed the developer to produce realistic graphics, rich level and complex artificial intelligence (AI) to increase gamers experience, that also lead the game even closer to reality [8]. Therefore, this article provides empirical evidence on how various types of digital characters, User experience (UX), and graphics as a potential to affect viewers' attitudes towards them [9]. In previous studies, [10] to keep the player more interested in playing the game is addressing the game by convincing a supporting story and realistic environment. As contested by [11] there is plenty aspect that inspired game play, but it is essential for each level to deliver challenges that encourage the game designer to improve the game. In contrary, the UX indicates substantial important as anatomy of function, tutorials, and menus, plays important role in achieving goals, especially [12] for the gamers. While the tutorial is available at the beginning of the game, this can be easily forgotten by gamers when they are highly engaged in different level of the game. In order to identify the importance of the engagement by the gamers and users, this article focuses to the main factors of visual interest among *DOTA 2* gamers and other factors visual components of the game. This research and article hope to contribute future game designers as reference in understanding and increasing future game playability. From the education perspective, the

