OPTIMIZING PLAYER THROUGHPUT FOR INTERACTIVE MOTION BASED KIOSK GAMES – A CASE STUDY FROM THE PTT TECHNOBOTS CAMPAIGN

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Abstract: Maintaining booths that are attractive to exhibition attendees is one of the main goals of exhibitors. One of the popular tactics to attract attention is to utilize new and emerging technology to create fresh new types of interactive booths, in which motion-based kiosk games are gaining popularity in this domain. However motion-based kiosk games are usually designed using conventional computer game design principles and are not optimized for exhibitions which results in a low player throughput. This paper examines the issues behind conventional game design principles, and proposes changes that would improve player throughput and is empirically validated upon a real world case study in which the author has worked on. The case study selected is the Petroleum Authority of Thailand (PTT) Technobots Campaign, in which a series of motion-based kiosk games were deployed at a number of popular department stores in Bangkok, Thailand during the period of May-Aug 2013.

Keywords: KIOSK MANAGEMENT, EXHIBITIONS MANAGEMENT, PLAYER THROUGHPUT OPTIMIZATION, MARKETING CAMPAIGN, DEMOGRAPHICS TARGETING, GAME DESIGN.

1 INTRODUCTION

At tradeshows and exhibition fairs, booths serve the purpose to attract special attention of fair attendees over a short period of time. By gaining the attention of attendees, the exhibitor can gain the attendees in which could lead to sales generation, solidifying relationships, media presence, introduce new products, and put forward important messages that the exhibitor has presented. Due to the proximity of many competing booths that are open in the same fair, exhibiters aim to create custom booths that attract the attention, in which many strategies exist (Soilen, 2013). One of the most common approaches is to utilize booths that require the player's attention such as booths that have prize giveaways. Another approach that is popular is to utilize the latest technology to create interactive kiosks that are new and fresh to the attendees. The marriage of utilizing game and technology to create new types of booths such as interactive motion-based kiosk games is one strategy that could be utilized (Sandifer, 2003). Though the creation of motion-based kiosk games can drive attention to a booth, there are outstanding issues in the creation and maintenance of such kiosks. The most pressing issue of these types of booths is that interactive kiosks require huge time for a player to compete a game, which leads to low throughput. Having a low throughput is not optimal as less attendee would be able to try the game, and is especially detrimental when the tradeshow/fair is packed with visitors.

This paper explores about issues surrounding the creation of an interactive motion-based kiosk game which consists of the following. For the background section, the PTT Technobots campaign is first described along with motion-based games. After the background is discussed, the paper explores why the original game based on conventional game design provides the low player throughput, proposes optimizations techniques that could improve player throughput,