

Online Auctions and Ads via Games

Kapil Adhikari, Anubhav Dhawan - Ansal University

Gurgaon, Haryana, India

Anubhav756@live.in

Kapil.1308@outlook.com

Prof. Dr. Aynur Ünal

Founder, Digital Monozukuri, Palo Alto, CA, USA

aynurunal@stanfordalumni.org

Abstract – Online auctions have effectively created a giant virtual marketplace where people can gather to buy, sell, trade and check out the goods of the day. They are enormously popular where you can begin selling your product immediately. In 2002, online auctions were projected to account for 30% of all online e-commerce due to the rapid expansion of the popularity of the form of electronic commerce.

We plan to conduct online auctions through Maze games where people can move around in a virtual maze just like an actual auction site. It will be similar to walking around in a shopping center.

Also, we use this maze game as a platform for digital advertisements. These advertisements are different from the conventional advertisements, as they are more interactive, user-friendly, less – imposing, and at the same time, eye – catching.

Keywords – Online auction, Maze Game, Unity3D, e-commerce, ads – via – games, quotes on walls, embedded advertisements, IGAs (In – Game Advertisements).

I. INTRODUCTION

Auctions are one of humankind's oldest business pursuits, probably dating back to the earliest sales of food and animal hides. Auctions also represent one of

the world's simplest business models: an item or service is offered for sale to the highest bidder.

A conventional auction typically requires travel to a central site where you can sell goods or examine the items that will be put up for bid. Sellers have no guarantee that interested buyers will show up for the auction, and buyers have no guarantee that they will find something they want or need.

In 1995, the Internet turned the ancient auction process totally on its head. Now, online auction Web sites make it easy for almost anyone on the planet who has a computer and Net access to buy from, or sell to, almost anyone else who can log on to the same auction site.

Auctioning is similar to advertising, and thus these two concepts can be implemented at the same time. People buy goods only if they are thoroughly impressed by its features. These features may be anything about the product to be sold/auctioned, from its design, usability, quality, quantity, manufacturer, price, seller, or even the surroundings where the product is being sold/auctioned. We can improve a lot of these factors if we bring the trading environment from the physical world, to the digital world. We can have a better control of many of these factors and change them according to our needs, or what we think is better for the selling of the product.

The concept of Digital Monozukuri consists of creating Digital games for conducting e-commerce

activities like online auctions, advertisements and online shopping.

II. HISTORY OF ONLINE AUCTIONS

- The first Web-based commercial activity regarding online auctions that made significant sales began in May 1995 with the company Onsale.
- In September 1995, eBay also began trading.
- Today, there are thousands of websites dedicated to the practice of online auctioning.

III. HISTORY OF ADVERTISEMENTS

- Egyptians used papyrus to make sales messages and wall posters.
- Commercial messages and political campaign displays have been found in the ruins of Pompeii and ancient Arabia.
- In Europe, as the towns and cities of the Middle Ages began to grow, and the general populace was unable to read, instead of signs that read "cobbler", "miller", "tailor", or "blacksmith" would use an image associated with their trade such as a boot, a suit, a hat, a clock, a diamond, a horse shoe, a candle or even a bag of flour. Fruits and vegetables were sold in the city square from the backs of carts and wagons and their proprietors used street callers (town criers) to announce their whereabouts for the convenience of the customers.
- In the 19th century, Thomas J. Barratt from London has been called "the father of modern advertising".
- Advertising increased dramatically in the United States as industrialization expanded the supply of manufactured products. In order to profit from this higher rate of production, industry needed to recruit workers as consumers of factory products. It

did so through the invention of mass marketing designed to influence the population's economic behavior on a larger scale.

IV. ADVERTISEMENTS IN VIDEO GAMES ARE NOT COMPLETELY UNKNOWN

The idea of advertising a product in a video game is not completely new. In fact, advertising your product in a video game is known as In – Game advertisement. These advertisements can be either Static, or Dynamic.

Similar to product placement in the film industry, static IGAs cannot be changed after they are programmed directly into the game (unless it's completely online). However, unlike product placement in traditional media, IGA allows gamers to interact with the virtual product. For example, Splinter Cell has required the use of in-game Sony Ericsson phones to catch terrorists.

Unlike static IGAs, dynamic IGAs are not limited to a developer and publisher determined pre-programmed size or location and allow the advertiser to customize the advertisement display.

A number of games utilize billboard-like advertisements or product placement to create a realistic gaming environment. For example, many sports games incorporate these advertisements to simulate the heavy advertising within professional sports. Similarly, many games employ brand-name products such as guns and cars as in-game status symbols. These brand references may not be advertisements and are instead placed in the game purely for plot or design reasons. However, trademark owners sometimes object to unlicensed references to their trademarks. Increasing Internet connectivity and bandwidth has increased the use of dynamic IGA, which allows the game manufacturer or its advertisement vendor to deliver advertisements

remotely, update advertisements after the game is launched, and target advertisements based on time or geography. This approach combines the customization of web banners with the functionality of traditional billboards and posters as most in-game advertisements do not link to a website outside the game. Dynamic IGAs allow the game manufacturer or its advertisement delivery service to track advertisements in real time and capture viewing data such as screen time, type of advertisement, and viewing angle. This information may be used to improve future advertisement campaigns and to correct copy problems or make a current advertisement more appealing to players. Dynamic advertising campaigns allow IGA to be part of a time-sensitive advertisement campaign because they do not need to be designed months or years before the game is finished. Dynamic advertisements can be purchased after a game is released to the general public are featured in a developer determined in-game location.

V. HOW DOES DIGITAL AUCTIONING WORK?

The process of buying and selling in an auction format is made possible through the use of auction software, which regulates the various processes involved. Auction software is application software that can either be deployed on a web server for online auctions or as standalone software for commercial or charity or live and silent auctions.

Before you buy or sell an item, you are required to register at a site. This is required to keep track of items you bid on and items you sell. The information from registration is also used to determine the running and building a database on seller and bidder feedback.

Many sites employ a software known as a proxy bidder – which automatically places bids on your behalf. In using the proxy bidder you designate the maximum amount you wish to spend on the item.

Then each time a bid is placed higher than yours, the proxy bidder gets in and places a bid for you, it will increase your bid amount by as much as it is necessary to top the current bid and will not exceed the maximum amount you stated, unless you instruct it to do so.

There is a schedule time for each auction and once the scheduled time elapses, the bidding for each auction closes. In case if no one bids at or above the reserved price, the auction closes without a winner. At the end of a successful auction, the buyer and the seller communicate, usually by email, to arrange for payment and delivery of the goods.

Once the deal is done, the buyer needs to get the product and the seller needs to get paid. Buyers have several payment options to use, these include credit cards, debit cards, personal checks, money order, cash on delivery and escrow services, however the seller can choose which one to accept. Because of the fraud in buying and selling online, escrow services are used to combat this problem. These services generally take the buyer's payment, hold it in a safe place and release payment to the seller only after the buyer has received and approved goods.

VI. IS IT WORTH ALL THE EFFORT?

Making a simple passive image advertisement would be highly inefficient, especially nowadays, when there are so many investment firms, ready to invest millions in making quality advertisements, to catch the eye of the buyer, in the market. Many types of media, from voice, images, graphics, videos, animations have been used, both separately and in combination, to produce quality advertisements. They tend to include emotions (like humor), to create a separate space in the viewer's mind. They also use a technique called subconscious – hammering, in which a simple, catchy sentence, or a signature character is constantly exposed to the general public, in more than one ways, like public hoardings, video ads, newspaper ads, websites, ads in various websites. So, there is a very less scope in further

investing in these techniques, particularly if you're competing against big competitors in the market, selling similar products. Ads – via – games is an advertising technique which has not been exploited so much, and is still an eye – catchy approach. This technique, if used properly, can make your firm stand aside, and look different in the vast pool of advertisers still using conventional techniques, without necessarily investing more than the competitors. Although, this requires a lot of computer work, as compared to other techniques, but the output is equally fruitful.

VII. WHY ONLINE?

- ❖ Internet is considered to be the fastest way of advertisement.
- ❖ The exposure you get via the internet is more than any other media, like the television, newspaper, radio, flyers, etc.
- ❖ Getting impressed is just one side of the coin. None of the other advertisement techniques let the buyer buy the product at the same place where it is being advertised, except for the showrooms. But they too have a disadvantage of being physically away from where the buyer lives.
- ❖ You can buy an item even if you are just in your house or office.
- ❖ The buyer can get the chance to check all the information about the item for sale. She/he can even review the terms of payment and feedback ratings of the online seller. You may even check the other items that he/she is selling.
- ❖ Shopping is more time consuming as compared to online auctions.
- ❖ The buyers have the chance to view various similar items before coming up with a decision to join the online auction.

VIII. OUR CONCEPT

Instead of using the conventional way of carrying an online auction, or advertising digitally, we at Digital Monozukuri, believe in innovation via games. Buyers and sellers are made to communicate with each other via an online game, where each buyer and seller is provided with a character or a player just like in any game. They move around in a virtual world which resembles the auction site, or the advertisement “environment”, or both. This will provide a very fun and interactive experience to the people with a mix of virtual and real world. It is similar to going to a shopping center to find the item of your desired choice.

IX. OUR OWN IMPLEMENTATION OF THE PROPOSED CONCEPT

Here is the link for **The Maze game**:
<http://dm.amidstsky.com/games/walking-around/>

This game is developed as a proof of concept for the digital ads – via – games. The game offers a virtual environment, in which you can move around (using the W A S D keyboard keys), and look around (with the mouse cursor), and much more, in a multiplayer environment. So, if another person, at the same time, logs into the game, they both will be able to interact with one another. Also, the game features advertisements of various popular websites, on the walls of the maze, and a user can go near them, and press the enter key to visit the link for that website. The game is a platform independent game, and supports touch screen input. This ensures adequate exposure for the game, and thus the advertisements.

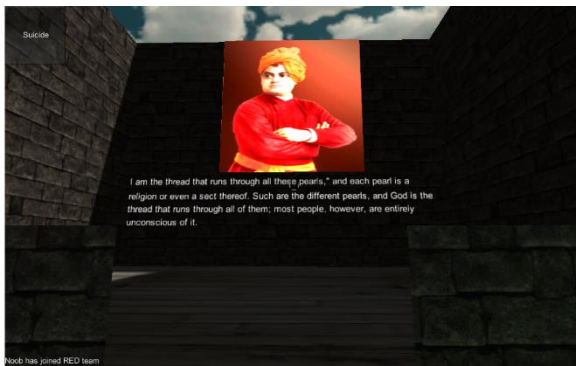
Screenshots of the game:



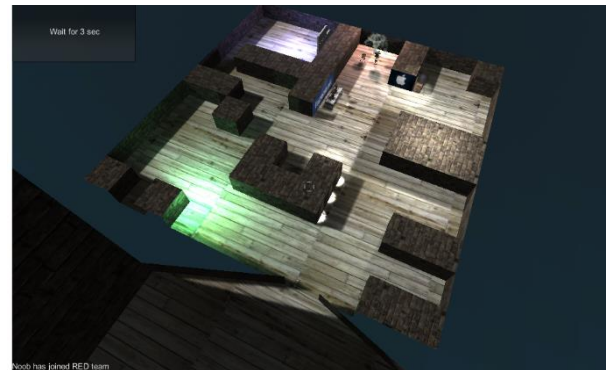
A view of the maze



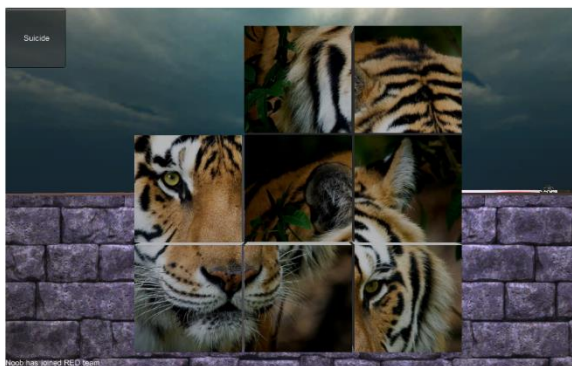
Maze - game environment



A room with Swami Vivekananda quote, and his picture on the wall (you can also hear an audio of one of his quotes in this room)



Bird's eye view (spawn - time view) of the maze



A mini – puzzle within the maze

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