

Angry Bots – The Concept of the Future

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Abstract

Evolution in technology has shown a noticeable gap between Gen X and Gen Z. Both generations manifest excessive screen time. To understand the market research, the focus was on surveys, focus groups, interviews, observations and field trials. The majority of both generations use cell phones over any other electronics. Cell phones are portable, which indicates the immoderate times of screen time. Screen time has proven to damage both mental and physical health of an individual. After reviewing the response survey from both generations, it proved they are entirely dependent on electronics, making this trend irreversible. There has to be a solution to avoid using gadgets, and increase the amount of face-to-face interactions between both generations.

Keywords: Gen Z, Gen X, Mobile games, eGames, Hyper casual games, Physical games, Virtual games, Mixed reality

1. Introduction

Generation X (often shortened to Gen X) is the demographic cohort following the Baby Boomers and preceding Millennials. Researchers and popular media often use the mid 1960s as starting birth years and the late 1970s as ending birth years, with the generation being generally defined as people born from 1965 to 1980.

Gen X is the generation following the Baby Boomers, and preceding Millennials. The year range is from the years of 1965 to 1980. Gen Z follows the Millennials, and precedes Gen Alpha. The year range consists from the late 1990s to 2012.

Technology is advancing. An example is the advancement of artificial intelligence. These years, everyone is dependent on technology. It can be as simple as checking the time. Gen Z is very popular for using technology during get-togethers. Gen X is known for having more face-to-face interactions. Gen X and Gen Z are very different personalities. The problem rests on how to bridge the gap between them, by finding some similarities.

2. Market Research

The purpose of this research is to conceptualize an innovation to bridge this gap. In doing so, the initial step was to identify the different perspectives between Gen X parents, and Gen Z children, over screen times. Screen times are crucial to limit, due to the health issues it creates to damage an individual's health. Children often bond over screens, and should be pushed to talk face-to-face. This allows children to take frequent breaks from the screen, allowing them to rest their eyes. Having an excessive amount of screen time has proved to impair social skills. Children continue to lose their manners, and relate to nobody due to their screen times. Having a lack of social skills leads to isolation, which leads to anxiety. Having a continuous increase of screen time, shows an addiction to their phones. This blocks the individual's mind from thinking, and believing the potential false beliefs of the internet, and losing the touch of reality.

The main challenge was to identify the roots of the screen time. This would help reduce the amount of screen time to make children in Gen Z participate more in Gen X activities. Using SurveyMonkey.com, the results were gathered from both generations.

New Jersey consists of 9.2 million people. 10% include Gen Z and 35% consist of Gen X. For Gen Z, the sample size was 15 and Gen X was 38. This incorporates the confidence level of 80%, and margin of error of 10%. This survey was sent out to Gen X and Gen Z, who filled it out anonymously. Gen X's age range consisted of 41-52 year olds, and Gen Z's age range consisted of 11-24 year olds. After receiving the forms back, the results were given as per what each participant thought of their screen times.

Gen X study was included through surveys and answers. Gen X parents believe their children spend their time on a screen on an average of 3, out of a 1 to 5 scale (5 being the most). The average times children spend on screen are around 3pm to 8pm. Gen X believes their children's screen time consists of 2-3 hours a day. Gen X believes they should limit their screen time to 1-2 hours a day, unless used for productive uses. If not busy, Gen X spend around 1-2 hours a day with their children, whether it be by talking, playing or car rides. Gen X resulted in around 2-4 hours of a day on screen time.

The next step was to interview Gen Z. They stated they have an average of 2 hours of screen time watching TV/playing games. They believe their screen time should be increased, and spend more time on their gadgets. Gen Z was shown to have a rare amount of productivity on screen time, showing results mainly on streaming apps and games. Gen Z was asked their preference of playing indoors or outdoors with their friends. Their common answers

were playing indoors, sharing the common interest of playing games inside.

The average screen time spent was shown between 3pm and 7pm. Both Gen Z and Gen X receive around 1 hour to spend time together. This includes without limitations including chores, homework, office work, recreational or competitive sports. For some bonding time, they use their screens. This chart represents the average amount of time minors spend on their electronics.

Around 75% of parents believe their kids spend too much on screen time. As represented in Figure 2, the majority time spent on electronics was cell phones, desktop computers and laptops.

The average screen time per day was averaged around 2-3 hours a day. Gen Z believes that their screen time is situational. An example being, if they bring their friends along, their screen time is automatically reduced. Gen X parents believe they have to limit their kid's screen time to an hour a day, any exceptions are for productive uses.

Gen X parent's times are average to 2-4 hours a day, including their job and non-productive uses. Parent's spend around 1-2 hours a day with their kids. Meanwhile, Gen Z children believe they require additional time for entertainment purposes, rather than productive purposes on their gadgets.

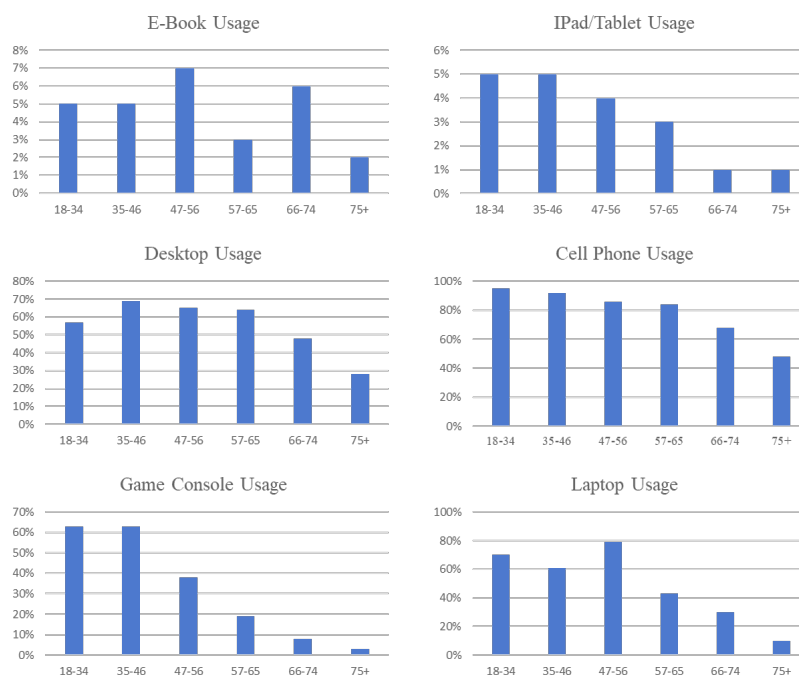


Figure 1. Engagement with Digital Devices Source – Pew Research

The habitual games played from Gen Z consists of Roblox, Fortnite, Angry Birds, Candy Crush and Temple Run. In special circumstances, if their friends come to play, they would rather play together online, besides conversing amongst one another. Pew Research claims they spend more time bonding through technology, such as watching movies, prank calling, or playing video games. This proves that both Gen X and Gen Z are dependent on gadgets, leading to an increase of screen times.

3. Solution

Both our physical and virtual worlds are blurring our boundaries, but we can create a new world. Phytual games can be brought to life, combining both physical and virtual, to help bridge the gap between the generations.

The reduction of screen time is simple. The process begins with combining physical and virtual games. Mixing reality scientific games can enable families to enjoy together, while lessening hyper casual game time. This can be beneficial to both generations - Gen X would have their face-to-face interactions, whereas Gen Z can access their virtual games in real life.

Angry Birds can be thought of as a paradigm. Angry Birds requires the player to shoot a bird off the slingshot, and hit the enemy pigs. Bringing this game to life, there can be life-sized slingshots, with stuffed toys on both sides(birds and pigs). The goal is to shoot off the pigs towards the tower, to knock it off. The total control would be through a phone but action happens in real life. A person can experiment through this, by playing indoors or outdoors. There would be different external factors such as wind, rain, or any other type of interference. This allows the players to understand the different depths of the game, which wouldn't be restricted to just a screen. These games would be taken from 2D and brought to a 3D perspective. By bringing this game to life, forces both generations to bond, while playing an entertaining game. A conceptualized drawing is depicted below as shown in Figures 3 and 4.

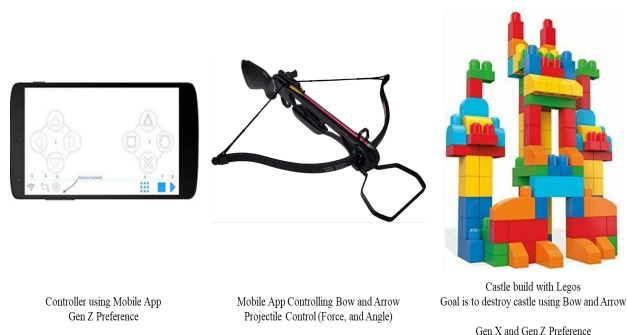


Figure 3. Conceptual architectural diagram of mixed reality game by combining Angry Birds and Legos.

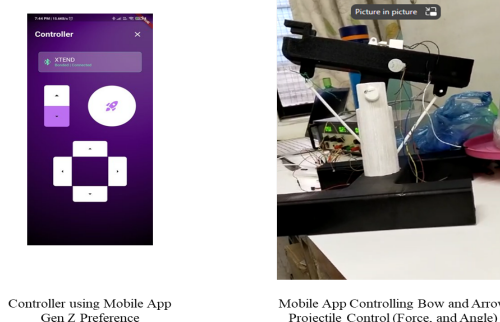


Figure 4. Working prototype

4. Potential Counterarguments/Alternative Views

An often confusion occurs between Virtual Reality(VR) games and Mixed Reality games. VR games incorporate the player from wearing a headset, allowing them to experience sounds and images produced by a computer. This can be hazardous, causing players to experience motion sickness, barrages of stimuli and risk of collisions from obstacles.

Mixed reality allows every player to experience the game in real life, along with being on technology. Normal board games cost around \$12-50. To match this, mixed reality games are priced around \$14-52.

Players could easily find board games to make them bored. With the innovations of mixed reality, such as

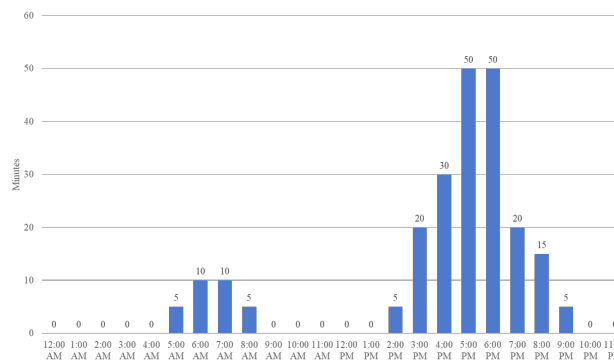


Figure 2. Average time spent by Gen Z and Gen X together on Phone for Recreational/Leisure Activities

Snapchat filters, they can change the theme to keep the attention of the player.

5. Conclusion

After describing the conceptual diagram, approximately 80% of surveyed Gen X parents and Gen Z children thought it would be a good toy to promote bonding amongst Gen Z's.

This generation is completely reliant on their gadgets for their daily lives. It makes this trend irreversible. Gadgets and electronics are slowly advancing, meaning individuals are going to adapt to use more technology for complex work. In the future, hyper casual games will advance, just like artificial intelligence has. This will leave a desperate need of revamping it with mixed reality. Screen times are calculated on phones, which tracks which apps each user has used. This can raise awareness of how long a person's screen time should average around. The main challenge was to find an enjoyable game that allows both generations to come together and play. This game would allow the generations to be entertained together, which will eventually overpower the addiction of gadgets.

Acknowledgments

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