Prospectus

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Jacqueline Mazzeo
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Social construction of technology is a theory that argues "technology does not determine human action, but that rather, human action shapes technology" (Klein & Kleinman, 2002). End-users response to persuasive technology: prolonged engagement time, social influence, customer loyalty and behavior changes, contribute to end-users preferring said persuasive technology over non-persuasive technology (Choi, 2004). Companies are incentivized to create aesthetic, easy to use and relatable technology, this technology sells better. Technology that is relatable is persuasive, meaning the technology relates to its users by identifying and fulfilling users' motivational needs. Users' motivation goals include competence and social relatedness and these goals govern end-users' behavior. It is seen that "satisfying players' need for competence may therefore be the key to increasing the persuasiveness of persuasive games," (Reit, 2018, p. 91). Satisfying players, the end-user, will increase sales, popularity and playing-time. The impact seen on end-users when persuasive technologies are used influence designers to adapt these tactics and include persuasive tactics more frequently, expressing just how valuable human action is in shaping technology.

Persuasive design elements are prevalent in technology and include similarity, praise, gratification, immersion and feedback (Fogg, 2011). These tactics are intended to encourage increased playing time and customer loyalty. The similarity tactic is used when designers create technology with anthropomorphic traits similar to end-users' personalities. In an experiment completed by Brian Fogg, an American social scientist and a research associate at Stanford University, participants were tasked with interacting with a computer program similar to a chat bot. Half of the chat bots were given dominant personality traits and the other half were given submissive personality traits. Half the participants identified with a dominant personality and the other half identified with a submissive personality. The participants were given a scenario and

had to work with their computers to rank a list of items based on priority. “After we ran the experiment and analyzed the data, we found a clear result: participants preferred working with a computer they perceived to be similar to themselves in personality style,” (Fogg, 2011, p. 97). In the time of big data, it has never been easier for gaming companies to build user profiles to better understand their audience. Designers can take advantage of knowing what type of clothes users wear, music they listen to, trends that are popular, what they find attractive, slang words they use and integrate this information into the design of the game. Video game designers are purposefully designing with the knowledge of end-users’ opinions, attitudes and styles to make their games more successful.

Technologies become addictive to end-users, introducing dependency, detachment, tolerance, compulsion and withdrawal symptoms related to interpersonal and health-related problems, and time management (Chen & Chang, 2008). The designers creating an immersive, enjoyable and satisfying user environment can easily take advantage of end-users. Darren Chappell studied the highly-addictive nature of Massively Multiplayer Online Role-Playing Games (MMORPGs) and specifically looks at the video game EverQuest. Chappell evaluates online forums to learn more about how EverQuest has come to dominate users’ lives because of excessive playing (Chappell, 2006). Findings have included that “most of the individuals in this study appear to display (or allude to) the core components of addiction such as salience, mood modification, tolerance, conflict, withdrawal symptoms, cravings and relapse.” “[Users] used EverQuest as a way of altering their mood state, they built up tolerance to the activity over time, and they got withdrawal symptoms if they were unable to play the game and/or they try to cut down the amount of time that they spend playing the game” (Chappell, 2006, p. 214). As a

strategy to increase the revenue and popularity of their product, companies are ignoring the cost persuasive and addictive technology has on its end-users.

Research questions & methods:

I will be researching the use of persuasive technology and strategies in the design of video gaming applications. I will gather information on both negative and positive consequences of persuasive technologies in video game design. The significance of this research is to study different use cases to determine at what point persuasive technology in video gaming does more harm than good. I will use the theory of social construction to interpret the user cases and determine the level of harm these technological design strategies has on its users. We know companies are incentivized to utilize user data and insights to construct aesthetic, easy to use and relatable technological platforms, and these platforms may be beneficial to society. Yet, it is known how detrimental video game applications that are purposely designed to be persuasive, personal, and anthropomorphic can be. A designer working to build a superior design that will promote product popularity, revenue and market dominance, cannot overlook the hazards that come with persuasive technology. Looking at use cases that have positive implications on society will illustrate how designing with persuasive technologies is not always ill-intended. There may be a point in which an excessive amount of or specific persuasive techniques is damaging to the end-user. Looking at a variety of use cases with different impacts on society will be meaningful in my investigation of persuasive technology and strategies in the design of video gaming applications.

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