

Thesis Project Portfolio

Analyzing Candidates for Home Electronic Incarceration on Return-to-Custody Rates for Inmates

(Technical Report)

The Players Involved within the Regulation of the Online Sports Betting Industry

(STS Research Paper)

An Undergraduate Thesis

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Bachelor of Science, School of Engineering

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Sociotechnical Synthesis

The technical report delivers the results of an investigative analysis into the Albemarle Charlottesville Regional Jail, specifically targeting the participants on Home Electronic Incarceration(HEI). The STS research paper will divert to a study of the tumultuous history surrounding the legitimization of online sports betting with the goal to present a foundation for ethical discussions of future ramifications. The relationship between the technical report and STS research paper lies in the concept of freedom for the individual and its consequences for the whole of society. In the case of the technical report, HEI allows for individuals to live outside of the jail albeit under electronic surveillance with the rest of society accepting the risk. The STS research paper analyzes the legalization of a previously taboo industry and its incredible recent growth leading to a possible unfavorable aftermath.

Prisons and jails alike have continually faced an overcrowding issue which grew alarmingly dangerous during the COVID-19 pandemic. Superintendents then faced a crisis in minimizing the risks of both the spread of the contagion, but also the ever increasing inmate population. As a result, at the Albemarle-Charlottesville Regional Jail they chose to increase the number of inmates serving on Home Electronic Incarceration to lessen the population within the jail. The technical portion of this thesis will delve into the decision making strategies for placing individuals on Home Electronic Incarceration which makes use of ankle monitors and other related technologies to keep tabs on inmates. Specifically, this will be done by examining the Return to Custody rates of different demographic groups with the hope of advising decision-makers on the most successful participants. Lastly, Charlottesville policy makers may instead choose to improve confinement strategies to reduce the strain on prison systems.

Internet Sports Betting within the United States is expected to reach a market evaluation of 9.7 billion dollars this year(2024) and increase to 15.8 billion in the next four years. The STS research portion will be predominantly focused on presenting the reader with an accurate and simplified explanation of current events that have led to this meteoric rise. This will be done through an account of the most prominent pieces of legislation and the political and societal circumstances around which they were created. Furthermore, two giants of the industry, FanDuel and DraftKings, will be used to present the history through a more concrete approach. Lastly, the Social Construction of Technology Theory will be used alongside an analysis of the possible negative consequences using relevant literature to impart a holistic view of the current state of affairs surrounding online sports betting.

The United States Prison System is regularly a cause for continued research, especially now as societal temperaments move toward a more rehabilitative approach for inmates. The advent of new technologies have opened the door for programs such as HEI which allow participants to continue living with the least amount of disturbances to their normal lives. The negative consequences of imprisonment within prisons and jails away from support systems is well documented. However, the added risk of possible convicted inmates outside of the jail is worn by the rest of society. Similarly, the internet gambling boom has been followed by a wealth of newly taxable legal exchanges, but has also opened the door for people to gamble more frequently, easily, and at younger age. Unfortunately, these consequences will not be able to be examined for years to come, but it is of great importance to understand the history and gravity of the situation.