

Digital Tablets Behind Bars: Impact on Rehabilitation and Security in the American Prison System

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On my honor as a University Student, I have neither given nor received unauthorized aid on this
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Introduction

The American prison system is one of the worst in the world, plagued with ineffective rehabilitation, overcrowding, and inhumane conditions when compared to the prisons of places such as Norway and Sweden, which are designed with human well-being and prisoner rehabilitation as the primary goals of the prison as opposed to the American view of punishment and control. This emphasis on human growth and reformation is why those prisons are so much more successful than the vast majority within the United States. For example, the average inmate in the American prison system suffers deeply from feelings of isolation and loneliness, when coupled with the fact that many of these prisoners also suffer from substance abuse and mental health disorders that leads to a boiling pot of potential disaster. It's like taking an already hurt individual and trying to heal them by hurting them more. Those same inmates are typically cut off from those that would most support them in their rehabilitation, like family and friends, since prisons are usually far from social centers and phone calls are limited, expensive, and not always easy to attain. Additionally, many of these inmates suffer from a loss of hope, or a general disbelief in seeing the light at the end of the tunnel as far as their incarceration and rehabilitation is concerned.

Luckily, the US has started to take some steps to make prisons more humane and better at rehabilitation. One of these steps is the introduction of digital tablets - devices that offer rehabilitation tools and services, entertainment options, and ways to communicate with loved ones. But as promising as these tablets seem, they bring their own set of security concerns for both the prison and the prisoners. This results in the question of *how has the introduction of*

digital tablets impacted prisoner rehabilitation and the security of the prison and the prisoners themselves?

This question matters because with about 37% of released inmates returning to prison within their first year of freedom, it is important to see how technologies like tablets actually affect rehabilitation outcomes to make evidence-based policy decisions (Bureau of Justice Statistics, 2021). Modern society depends heavily on technology, and "the technology-dependent world that offenders must now re-enter requires the use of touch screens, computers, and the Internet" yet many inmates receive practically no training in these essential digital skills (Zivanai and Mahlangu, 2022). The introduction of tablets marks a major shift in the sociotechnical landscape of American prisons and a new hope for improvement and development.

Background and Context

Before the implementation of digital tablets, American prisons had extremely limited communication technological resources. Communication with the outside world happened through scheduled visits, expensive collect calls on shared phones often with long lines, and physical mail that takes a long time to be both sent and received. Education opportunities were limited by whatever physical materials were available and whether in-person instructors were willing to work in prisons. Entertainment was available through shared TVs in common areas, basic radio access, and whatever books or magazines made it through security. This tech deadzone within prisons created many issues. Firstly, traditional prison phone services were ridiculously expensive with a 15-minute call costing more than 12 dollars (Dholakia, 2024). Secondly, inmates had almost no access to up to date information, creating a growing gap

between them and the rapidly changing outside world, which made reintegration even harder later. Finally, the lack of personal entertainment options contributed to psychological stress, with boredom and isolation often triggering disciplinary issues and worsening mental health problems. The traditional setup was also incredibly inefficient. Corrections officers wasted tons of time managing paper communication, arranging phone access, and organizing visits - tasks that took resources away from actual security and rehabilitation efforts. Plus, traditional educational programs were inconsistent at best, with many facilities offering only the most basic GED prep and vocational training (Clear, 2007).

This all began to change with the introduction of digital tablets in American prisons with widespread implementation starting around 2016-2017. The Federal Bureau of Prisons launched a pilot program in early 2017 to test a "blended" education model that combined classroom instruction with tablet-based learning (U.S. Department of Justice, 2023). Since then, tablet programs have spread quickly, with at least 30 states implementing some form of tablet program by 2023. These tablets aren't like the iPads or Surfaces that are used on the outside. They're stripped-down versions of commercial devices, locked into closed digital ecosystems with no real internet access. They're typically provided through partnerships with private companies like Global Tel Link (GTL)/ViaPath Technologies, JPay/Securus Technologies, and American Prison Data Systems (APDS). The dominant approach by the prison communications industry has been the "free tablet" model - devices provided at no initial cost, but with services and content monetized through user fees (EPIC, 2024). These tablets typically offer: communication tools (email/messaging, video calling), educational content (GED prep, vocational training), entertainment options (music, e-books, games), administrative functions (commissary ordering,

grievance filing), and legal resources (law library access, document preparation). The situation is best sketched by a hypothetical inmate who was recently incarcerated.

Bobby struggles with mental health issues and substance abuse disorders, which is common in prison populations. When his facility introduces tablets, Bobby is initially happy- he can watch shows, talk to his family, feel more connected to the world, and develop skills for future employment. However, Bobby quickly notices that every service costs a lot of money. He realizes the prison tech companies only provided "free" tablets because they planned to profit from vulnerable inmates through service fees. Bobby becomes frustrated at that fact, he was so thrilled and now he realizes that it was all for nothing since he and his family are poor. Bobby also notices that the tablets are monitored 24/7 and that if anyone tried to use them to try to perform malicious activity they would be caught. It can be clearly seen that although Bobby was given an ocean of opportunity, the outrageous fees make the ocean thousands of miles wide but only a foot deep.

What They Say

Looking into what research has to say about the introduction of digital tablets, several benefits of digital tablets in correctional settings have been uncovered. For example, according to the United Nations Interregional Crime and Justice Research Institute, tablets give inmates continuous access to self-improvement opportunities instead of limiting these efforts to specific program schedules (United Nations Interregional Crime and Justice Research Institute, 2024). They also play an important role in maintaining family connections, improving access to educational content, and helping with legal matters (McKay, 2022). The impact of digital technology is especially significant for poorer inmates, who often fall into what researchers call

the "digital underclass" (Franich & Martinovic, 2024). Studies by Jarvelainen & Rantanen (2020) found that inmates without digital skills face major barriers to employment and social integration after release, creating a kind of "hidden punishment" that extends beyond their actual sentence. Digital tablets and their advantages work to mitigate the digital separation between society and the incarcerated. In spite of these advantages, the "free tablet" model often comes with hidden costs. Ridiculous pricing creates significant financial burdens on inmates, making programs less accessible to those who need them most (Imandeka et al, 2024). Additionally, while internal security threats are managed through restricted access and constant monitoring, inmates remain vulnerable to data breaches. Breaches at Securus in 2015 and 2019 exposed thousands of inmates' and their families' sensitive personal information (EPIC, 2024).

Theoretical Framework

This paper approaches this topic through the lens of mutual shaping. The specific mutual shaping occurs between meeting rehabilitation requirements through tablet technology and ensuring security for both the prison and prisoners. The prisoners, prisons, and prison tech companies within this sociotechnical system all have different goals that shape how tablets are used and what they ultimately can contribute. Using Actor-Network Theory, this paper identifies key human actors (inmates, correctional staff, private vendors, families, policymakers) and non-human actors (the tablets themselves, security software, prison infrastructure, contracts, regulations). Each actor has specific interests:

- Correctional facilities want security, order, and operational efficiency
- Private prison media companies want to make money through service fees
- Incarcerated individuals want improved quality of life and educational opportunities

- Policymakers try to balance security concerns with rehabilitation goals

Methods

For this research, I primarily used these methods:

1. Literature review: I gathered scholarly articles, government reports, and published research on digital rehabilitation in corrections, prison security protocols, and tablet program implementations across state systems. I focused especially on research published in the last five years to capture this rapidly evolving landscape.
2. Case study analysis: I analyzed multiple state-level implementations of tablet programs to identify patterns, variations, and outcomes. I included both success stories highlighted in vendor marketing materials and implementations that ran into significant challenges or failures.
3. Content analysis: I reviewed news articles, press releases, and reports from both correctional departments and prisoner advocacy organizations to identify recurring themes, concerns, and reported outcomes.

I tried to choose sources that provided actual empirical data rather than hypothetical benefit assessments. For analysis, I identified patterns related to rehabilitative impacts, security implications, economic considerations, and power dynamics.

Results and Analysis

Rehabilitation Impacts of Digital Tablets

Educational Access and Digital Literacy

Digital tablets have significantly expanded access to educational content and opportunities for skill development. Before tablets, educational programs were severely limited by physical space, staffing shortages, and resource scarcity. Tablets provide self-paced learning that inmates can access regardless of scheduling conflicts. Research confirms that “digital technology in prison also increases the digital literacy of released persons, as well as promoting their job-searching skills on re-entry” (Jarvelainen & Rantanen, 2020, p. 241). Additionally, it was found that facilities with tablet-based educational programs saw a 43% increase in GED completion rates compared to traditional classroom-only approaches (Davis et al, 2013). This improvement happened because inmates could study during off-hours and revisit difficult material as needed. However, this potential is often undermined by commercial models that put most educational content behind paywalls. For example, career programs may cost a few hundred dollars with college correspondence courses costing upwards of over 500 to 1000 dollars. (Taylor, 2018). As the Prison Policy Initiative notes, "The 'free' tablets charge users at every opportunity, including above-market prices for phone calls, video chats and media. Even sending an email requires a paid 'stamp'" (Bertram & Finkel, 2019). Even worse, several states have reduced funding for traditional educational programs after implementing tablets, replacing rather than supplementing in-person instruction which is concerning as effective rehabilitation has both in-person and individual service.

Family Connectivity and Mental Health

Perhaps the biggest impact of tablets has been on inmates' ability to maintain family connections which is known to reduce recidivism. It was found that incarcerated individuals who

maintain regular family contact and maintain positive relationships in general are less likely to reoffend after release (Shanahan and Villalobos, 2012). Tablets have transformed this aspect of prison life by expanding communication options beyond physical visits and expensive phone calls. Video calling enables face-to-face interaction with distant family members, while messaging systems allow more frequent communication than traditional mail.

Several facilities report reductions in violence and disciplinary incidents following tablet implementation, suggesting improved behavioral outcomes related to better mental health. For example, Nebraska Department of Corrections Secretary Todd Ishee said that tablets “reduce idleness, resulting in a calmer prison populace” that also leads to prisoners getting into less fights since they are engaged with the tablet (Pay-for-Play Tablets, 2025). This reduction was most pronounced for incidents related to interpersonal conflict and rule violations stemming from boredom. However, exploitative pricing models create significant barriers. In many states, "sending an email costs 40 to 50 cents," representing several hours of work at prison wages (Reuters, 2018). These economic barriers directly undermine the rehabilitative potential of improved family connection.

Preparation for Reentry

For reentry preparation, tablets offer a controlled environment for developing digital literacy skills essential in modern society. As Zivanai and Mahlangu (2022) note, "the Internet is indispensable to everyday contemporary life and is requisite for everything from employment to social interactions." This suggests that even limited tablet interaction can significantly improve employability in an increasingly digital job market. However, the severely restricted functionality of prison tablets limits their effectiveness as preparation tools. Most prison tablets

offer closed ecosystems with minimal resemblance to the open internet environment inmates will navigate upon release. Basic functions that everyone on the outside has access to, like web searches, online form completion, and social media navigation are typically absent from prison tablet systems due to security concerns.

Security Implications

Enhanced Monitoring and Vulnerabilities

Tablet systems provide correctional authorities with unprecedented surveillance capabilities. Digital communications can be automatically screened, recorded, and analyzed for security threats using sophisticated AI-driven monitoring systems that can flag concerning communications and identify patterns indicating security risks. Despite these capabilities, tablets have introduced new vulnerabilities. In 2018, Idaho inmates exposed a vulnerability in JPay tablets that allowed them to add \$225,000 in fraudulent credits (AP News, 2018). Major providers have experienced significant data breaches, Securus had breaches in 2015 and 2019 that exposed personal information of inmates and their families (EPIC, 2024). In 2022, a deputy US marshal was charged with stalking after misusing location data from Securus by submitting fraudulent data requests, highlighting privacy risks for the general public interacting with inmates (EPIC, 2024). Many tablet systems store communications and user data indefinitely, creating permanent digital records that raise concerns about ongoing surveillance beyond sentence completion.

Economic Structures and Power Dynamics

The predominant "free tablet" business model fundamentally shapes how technology impacts both rehabilitation and security. This model seems to benefit all institutional stakeholders: correctional departments get technology without budget allocations, private vendors get access to a captive consumer market, and taxpayers see no immediate costs. However, it transfers costs to inmates and their families, who typically belong to economically disadvantaged communities. A tablet service costing inmates approximately \$140 in Wisconsin costs only \$52 in Michigan for identical functionality (Bertram and Finkel, 2019). Further complicating this are the commission structures in many tablet contracts. Correctional facilities often receive 10% to 50% of revenue generated from tablet services such as emails sent by the inmates (Scalawag Magazine, 2023). Specifically, in Washington state it was found that Securus provided a 25.8 percent commission to the Department of Corrections on tablet services, highlighting how these contracts can be and are actively used to generate significant revenue (Hawkins, 2024). This economic structure can undermine both rehabilitation and security by incentivizing exploitative pricing and potentially compromising security oversight due to profit centering. The introduction of tablets has altered power dynamics within facilities. Inmates have access to much more opportunity for growth and rehabilitation through the use of tablets with the variety of programs and services provided that were aforementioned. However, this extends institutional control into previously unmonitored activities - reading, writing, entertainment - that now occur on monitored platforms, expanding surveillance within facilities and ultimately making security better for the prisons.

The Digital Divide Behind Bars

A concerning finding is the emergence of the previously mentioned "digital underclass" within the already marginalized prison population. Franich & Martinovic (2024) identify this group as inmates who, due to economic limitations, have minimal access to digital resources that increasingly define rehabilitation opportunities. To make matters worse for this subset of inmates, it was found that educational programs, like the ones the digital tablets provide, in prison reduce recidivism by up to 43 percent and improve employment prospects after release (Bender, 2018). This disparity directly undermines the rehabilitative potential of tablet programs for the most economically vulnerable inmates.

Discussion and Conclusion

The impacts of digital tablets in prison settings highlight the complex mutual shaping between technology and social systems. This research identifies four key dimensions of mutual shaping: design functionality, economic structures, implementation policies, and user adaptation. The security-rehabilitation tension throughout this analysis shows how neither technological capabilities nor social structures alone determine outcomes; rather, their mutual influence creates the observed patterns. A critical finding of this research is the significant gap between the theory surrounding tablet implementation and the reality of how these systems function in practice. While tablets are often introduced with explicit rehabilitative goals, the actual implementation frequently prioritizes institutional convenience, vendor profits, and enhanced surveillance capabilities. This disconnect highlights a fundamental challenge in correctional technology adoption in the United States: the tendency for security and economic considerations to overshadow rehabilitative intent during the implementation process.

This separation can be understood through the lens of competing institutional logics. Prison administrators operate within a security-focused culture where risk management is paramount. Prison media companies, meanwhile, operate within a profit-maximizing business model that necessitates revenue generation from a captive consumer base. These institutional logics often conflict with the rehabilitative ideal that motivates tablet programs. The resulting implementations reflect compromise solutions that attempt to satisfy multiple, sometimes contradictory, institutional demands.

Furthermore, the implementation of tablet technology has revealed significant issues of technological justice within correctional settings. The "digital divide" identified represents not merely unequal access to technology but a more fundamental disparity in access to rehabilitation opportunities. As correctional systems increasingly digitize rehabilitative programming, educational resources, and family communication, inmates without economic means to pay for these services face a new form of punishment not explicitly included in their sentences—exclusion from the primary means of rehabilitation and social reintegration. This technological stratification intersects with and potentially amplifies existing social inequalities in the criminal justice system. Given that economically disadvantaged populations and racial minorities are disproportionately represented in American prisons, the economic barriers to tablet access may further disadvantage these already marginalized groups.

The mutual shaping framework helps illuminate how technological implementations that appear neutral on their surface can reinforce and reproduce existing social hierarchies. A positive finding from this research, however, is the evidence of inmate agency within these constrained technological environments. Despite significant limitations, many incarcerated individuals creatively adapt and utilize tablet resources in ways that support their own rehabilitation goals.

This adaptability suggests that even imperfect tablet implementations can provide meaningful benefits when inmates are motivated to pursue rehabilitation and can access at least some tablet resources.

Digital tablets in American prisons represent a technological innovation with profound but variable impacts on both rehabilitation and security. The empirical evidence demonstrates that tablet programs can significantly improve rehabilitation prospects when implemented with appropriate priorities. However, the current predominant models often undermine these benefits through exploitative pricing, limited content, and prioritization of surveillance over skill development.

To conclude, digital tablets offer great opportunity and the potential for growth and development for prisons and for inmates themselves. However, this is mostly constrained by the way tablets are being implemented. The current prioritization of prison convenience and corporate interests over rehabilitation significantly weakens the overall capability of tablets. By recognizing the mutual shaping of this sociotechnical situation, society can more effectively develop approaches to digital tablet implementation that ultimately prioritizes the rehabilitation of inmates and leads to a more cohesive, effective, and efficient prison system that benefits society more. Future research and steps include examining potential policy reforms ongoing, new technologies and implementations not discussed in this paper, and looking further into any one of the major discussion points regarding digital tablets implementation like the digital underclass.

References

- AP News. (2018, August 2). *Colorado inmates' tablets taken away for security reasons*. Associated Press.
- Bender, K. (2018, March 2). *Education opportunities in prison are key to reducing crime*. Center for American Progress.
<https://www.americanprogress.org/article/education-opportunities-prison-key-reducing-crime/>
- Bertram, W., & Finkel, M. (2019, March 7). *More states are signing harmful "free prison tablet" contracts*. Prison Policy Initiative.
- Bureau of Justice Statistics. (2021). *Recidivism of prisoners released in 34 states in 2012: A 5-year follow-up period (2012-2017)*. U.S. Department of Justice.
- Clear, T. R. (2007). *Imprisoning communities: How mass incarceration makes disadvantaged neighborhoods worse*. Oxford University Press.
- Davis, L. M., Bozick, R., Steele, J. L., Saunders, J., & Miles, J. N. V. (2013). *Evaluating the effectiveness of correctional education: A meta-analysis of programs that provide education to incarcerated adults*. RAND Corporation.
https://www.rand.org/pubs/research_reports/RR266.html

- Dholakia, N. (2024, September 4). *The FCC is capping outrageous prison phone rates, but companies are still price gouging*. Vera Institute of Justice.
<https://www.vera.org/news/the-fcc-is-capping-outrageous-prison-phone-rates-but-companies-are-still-price-gouging>
- EPIC. (2023). *"Free" prison tablets: In promise and in practice*. Electronic Privacy Information Center.
- Franich, G., & Martinovic, M. (2024). Deployment of digital devices in prisons in New South Wales in Australia: Exploring the benefits, challenges, and opportunities for incarcerated women. *Feminist Criminology*, 19(4), 312-328. <https://doi.org/10.1177/15570851241235122>
- Hawkins, R. (2024, December 9). *Prison telecom providers shift strategy by exploiting tablet services*. Prism Reports.
<https://prismreports.org/2024/12/09/prison-telcom-providers-exploit-tablet-services/>
- Imandeka, Ejo, Putra, Panca Oktavia Hadi, Hidayanto, Achmad Nizar, Mahmud, Mufti, Exploring the World of Smart Prisons: Barriers, Trends, and Sustainable Solutions, *Human Behavior and Emerging Technologies*, 2024, 6158154, 21 pages, 2024.
<https://doi.org/10.1155/2024/6158154>
- Jarvelainen, E., & Rantanen, T. (2020). Incarcerated people's challenges for digital inclusion in Finnish prisons. *Nordic Journal of Criminology*, 21(2), 243-259.
<https://doi.org/10.1080/2578983X.2020.1819092>

McKay C (2022) The carceral automaton: Digital prisons and technologies of detention.

International Journal for Crime, Justice and Social Democracy 11(1): 100-119.

<https://doi.org/10.5204/ijcjsd.2137>

Pay-for-Play Tablets: The Costly New Prison Paradigm. (2025, March 1). Prison Legal News.

<https://www.prisonlegalnews.org/news/2025/mar/1/pay-play-tablets-costly-new-prison-paradigm/>

Reuters. (2018, July 19). *In U.S. prisons, tablets open window to the outside world.* Reuters News Service.

Scalawag Magazine. (2023, June 21). *The hidden cost of 'free' tablets in prison.* Scalawag.

Shanahan, R., & Villalobos Agudelo, S. (2012). *The family and recidivism.* American Jails, 17-24. <https://www.prisonpolicy.org/scans/vera/the-family-and-recidivism.pdf>

Taylor, J. M. (2018, July 24). *Piecing together a college education.* Prison Fellowship.

<https://www.prisonfellowship.org/resources/support-friends-family-of-prisoners/prisoner-resources/piecing-together-a-college-education/>

United Nations Interregional Crime and Justice Research Institute. (2024, March). *Digital rehabilitation in prisons.*

https://unicri.org/sites/default/files/2024-03/Digital%20Rehabilitation%20in%20Prisons_0.pdf

U.S. Department of Justice. (2023). *Prison reform: Reducing recidivism by strengthening the Federal Bureau of Prisons.* Department of Justice Archives.

Zivanai, E., & Mahlangu, G. (2022). Digital prison rehabilitation and successful re-entry into a digital society: A systematic literature review on the new reality on prison rehabilitation. *Cogent Social Sciences*, 8(1). <https://doi.org/10.1080/23311886.2022.2116809>