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LEVERAGING TECHNOLOGY-DRIVEN NUDGING FOR DECISION-MAKING IN CRIMINAL JUSTICE - EXPERT PERSPECTIVES

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ABSTRACT

Aim/Purpose	This study investigates how technology-driven nudging can enhance decision-making quality and consistency in the U.S. criminal justice system, addressing declining public trust.
Background	In today's digital age, Information Technology (IT) plays a crucial role in improving decision-making in the criminal justice system, especially in the United States. Despite the technological adoption and advancements in the domain, trust in decision-making within the system is decreasing.
Methodology	The study employs qualitative research through focus groups and grounded theory analysis, as it is an exploratory study. Participants were chosen using a

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	<p>mix of convenience and purposive sampling in multidisciplinary domains such as criminal justice, human-computer interaction, artificial intelligence, law, and behavioral psychology. The participants were experts with more than ten years of experience in their respective domains. Further, grounded theory approach was utilized for data analysis.</p>
Contribution	<p>The study presented a conceptual framework derived from the insights of the focus group data that addresses fundamental factors which influence the implementation, adoption, and evaluation of the efficacy of technological interventions in the U.S. criminal justice system, by focusing on intervention, outcomes, and contextual factors in a practical and more realistic approach.</p>
Findings	<p>The study identified benefits of using technology driven nudges to support decision-making in the criminal justice system while identifying considerations for implementing technology-driven nudging interventions. In addition, the study found six contextual factors which affect interventions and outcomes, including voter influence, public perception, environment and resources, decision-making scenarios, and decision-makers' attitudes. Further, the study proposed a conceptual(theoretical) framework that can be utilized by practitioners and researchers to design, implement and evaluate the technological interventions in criminal justice decision making.</p>
Recommendations for Practitioners	<p>Practitioners can use the study's conceptual framework as a guide to design, implement, and evaluate nudging interventions tailored to the criminal justice context.</p>
Recommendations for Researchers	<p>Researchers can build on the proposed theoretical framework, to initiate research experiments and refining it through empirical testing and expanding it to accommodate a wider range of scenarios within criminal justice and beyond.</p>
Impact on Society	<p>The findings support the development of guidelines or regulations for the ethical and effective application of digital tools in decision-making within the criminal justice system. Additionally, this study can contribute to rebuilding trust in the criminal justice system by employing technology-driven nudging methods that enhance transparency and accountability.</p>
Future Research	<p>Future research should empirically validate the nudging framework by assessing long-term societal impacts and explore applications in other domains.</p>
Keywords	<p>technology-driven nudging; grounded theory; decision-making; information technology, criminal justice; qualitative research</p>

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Joel Kwesi Appiah is a Graduate Research Assistant at the University of Cincinnati, where he is also pursuing his PhD in Information Technology. His research interests span cyber security, the Industrial Internet of Things (IIoT), systems administration, and vulnerability assessment.



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Dr. Hazem Said is a Professor of Information Technology and the director of the School of Information Technology (SoIT) at the University of Cincinnati (UC). He is a certified Project Management Professional (PMP). Dr. Said founded the UC Information Technology Solutions Center (ITSC) in 2012, where he consults with government, public and private organizations, and leads teams of professionals, as well as graduate, undergraduate, and high school students, to investigate, develop, and support a variety of information technology solutions. In addition, Dr. Said is a co-founder and co-director of the Ohio Cyber Range Institute and the Justice, Law, and Information Technology Institute. Dr. Said is the recipient of over 200 grants and contracts totaling over \$30 million and has authored over 27 articles on topics related to information technology education.