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Addressing the Fragmentation in Criminal Detection: The Need for Integrated Data Systems

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Abstract

Law enforcement agencies in Sri Lanka face significant challenges in detecting and apprehending criminals due to the absence of integrated data systems. Fragmented data across national identity management systems, customs records, financial institutions, and criminal databases create silos that impede effective criminal investigations. These information gaps delay access to crucial data, enabling criminals to exploit these weaknesses and evade detection. The objective of this research is to examine the barriers caused by disconnected data systems and their impact on criminal detection. A mixed-methods approach was used, involving qualitative interviews with law enforcement officials and quantitative analysis of crime data. The results reveal that fragmented data systems lead to operational inefficiencies, delays in criminal investigations, and missed opportunities for interagency collaboration. Technological limitations, lack of standardized protocols, and legal and privacy concerns were identified as key barriers to data integration. The research also highlights the urgent need for a unified data system that can improve the efficiency of criminal detection and enhance public safety. This study offers recommendations for overcoming these challenges, including the establishment of standardized data formats, enhanced collaboration between agencies, and technological advancements to address the existing limitations. The findings contribute to the growing body of knowledge on how integrated data systems can improve law enforcement practices and ensure more effective criminal detection.

Keywords: *Criminal detection, Integrated data systems, Data fragmentation, Law enforcement challenges, Interagency collaboration*