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Navigating the Terrain: Unravelling the Role and Challenges of the Crime Information Management and Analysis Centre within the South African Police Service

Mpho Maboa; Juanida Horne

University of South Africa, South Africa

E-mail: Hornejs@unisa.ac.za; etshihm@unisa.ac.za

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#### Abstract

Traditionally, the visibility of police has been considered paramount in crime reduction efforts. However, recent studies challenge this notion, asserting that it is the strategic deployment of resources through effective crime analysis that truly suppresses criminal activities. Despite the awareness of crime analysis dating back to 1963, its integration into law enforcement agencies, including the South African Police Service (SAPS), remains a contemporary challenge. This article explores the role and challenges of the Crime Information Management and Analysis Centre (CIMAC) within the SAPS. Although crime analysis is recognised by law enforcement, its full integration into policing operations remains a work in progress. The study, conducted through qualitative methods with interviews of SAPS officials and international law enforcement members, focuses on the National and Provincial Crime Registrar, CIMAC officials, station commanders, visible policing heads, and detective commanders from Gauteng. The findings reveal that CIMAC, positioned at the grassroots level of police stations, is crucial in preventing, reducing, and investigating crime. It serves as a proactive force, not merely analysing crime data, but also guiding operational objectives to deter, disrupt, or detain offenders. However, challenges such as resource constraints, inadequate training, and communication gaps regarding CIMAC responsibilities persist. Despite these challenges, the research emphasises that CIMAC can be a valuable tool in crime mitigation when provided with sufficient resources, comprehensive training, and due recognition of its pivotal role. The article underscores the need for a strategic and holistic approach to fortify CIMAC's position within the SAPS, enhancing its effectiveness in the relentless pursuit of the organisation's mission to combat crime and safeguard life and property. In conclusion, this study not only provides a comprehensive understanding of CIMAC, but also formulates recommendations for its effective utilisation at the police station level. It advocates for recognising and leveraging CIMAC's potential as a critical component in the ongoing battle against criminal activities, emphasising the importance of a well-supported and strategically positioned crime analysis unit within law enforcement agencies.

**Keywords:** Crime Analysis; Crime Analysis Unit; Crime Prevention; Crime Information/Crime Data Analysis; Crime Information Management and Analysis Centre (CIMAC)

#### Introduction

Traditionally, the visibility of police was believed to be the key to reducing criminal activities. However, studies conducted have revealed that the mere quantitative visibility of the police is hardly a deterrent to suppress crime. It is the planned deployment that renders the suppression of crime possible (Gottlieb & Arenberg, 1992:1). Effective and efficient crime analysis – which has become the most common feature of law enforcement authorities' efforts to improve public safety, identify emerging crime trends, allocate resources, and plan crime prevention strategies – enables planned deployment of resources (Matties & Chiu, 2014:2-3). Planned deployment is possible through effective and efficient crime analysis, which has become the most common feature in law enforcement authorities' efforts in enhancing public safety, identifying emerging crime trends, allocation of resources, and planning crime prevention strategies (Matties & Chiu, 2014:2-3).

Although law enforcement agencies around the world have been aware of crime analysis since 1963, the incorporation of crime analysis units into policing is still relatively new (Gottlieb & Arenberg, 1992:1). The integration of crime analysis into policing is still a challenge, even today, decades after crime analysis was introduced to law enforcement agencies. Although hot spots policing and problemoriented policing are dependent on crime analysis, much more work needs to be done to truly make crime analysis an integral part of policing (Santos & Taylor, 2013:517). On the other hand, Belur and Johnson (2018:783) indicate that crime analysis is now fully accepted by the force for both rational and institutional reasons, but still has some way to go before it becomes central to guiding police operations. Similarly, the concept of crime analysis is also relatively novel to the South African Police Service (SAPS). The SAPS has enacted legislation to help with crime data analysis and has also identified the need for a dedicated crime analysis team (Mashiloane, 2014:108). To ensure effective crime control and the analysis of crime, the SAPS established the Crime Registrar as the component in charge of crime analysis, and providing and explaining the crime picture. This component aims to provide an understanding of the "what, where, when, how, and why" aspects of the crime through crime analysis (SAPS, 2018:2).

The component Crime Registrar reports directly to the National Commissioner and is structured into the National Crime Registrar, the Provincial Crime Registrar, the cluster CIMAC (currently deferred), and the station CIMAC. At the police station level within the SAPS, the office responsible for analysing crime information is referred to as the Crime Information Management and Analysis Centre (CIMAC). All-inclusive approaches are required to respond to violent crimes in the most effective and efficient manner possible, ensuring the safety of communities that are still being ravaged by crime and its perpetrators. Such approaches should take into account both the underlying causes of crime and the specific causal factors that contribute to them (Adams, Caddell & Krutsinger, 2012:02). This article seeks to explore the role and challenges of the Crime Information Management and Analysis Centre within the SAPS, and also to provide recommendations on the effective CIMAC utilisation at the station level. Therefore, the premise of this study is primarily on crime analysis and CIMAC's pivotal role and contribution as a structural component of the SAPS in its inviolable mission to combat crime by protecting life and property (Matties & Chiu, 2014:2-3).

This study was carried out utilising a qualitative approach and 48 interviews were carried out among officials deployed in the SAPS National and Provincial Crime Registrar, CIMAC officials, station commanders, visible policing heads, and detective commanders from Gauteng, as well as International Association of Crime Analysts' (IACA) affiliated members. This article is organised as follows: Following the introduction is the literature review, which sheds light on crime analysis and the use of CIMAC in the SAPS, followed by research methodology, findings, and discussions.

#### Research Method

This research employed a case study design and employed a qualitative research approach to explore the role and contribution of the CIMAC as a structural component of the SAPS in combating crime. The study targeted key stakeholders, including the National and Provincial Crime Registrar, CIMAC members, station commanders, VISPOL heads, and detective commanders from Gauteng, as well as IACA members. Personal interviews were conducted with 48 participants, utilising a combination of purposive and simple random sampling methods.

Purposive sampling was applied to select two international/IACA participants (Sample F) and five national and provincial crime registrars (Sample A), while simple random sampling was used for 12 CIMAC members (Sample B), 7 station commanders (Sample C), 9 VISPOL heads (Sample D), and 13 detective commanders (Sample E).

Adopting a qualitative and interpretive perspective, the researchers aimed to understand the participants' perceptions and experiences. Semi-structured interviews were conducted with 46 participants, and two international participants were engaged through e-mail interviews using a semi-structured interview schedule. The study embraced an interpretivist and constructivist character, drawing on audio-recorded statements and e-mail responses as essential inputs to address the research questions.

Data analysis followed a thematic analysis method, involving the preparation of field notes and transcripts, identification of themes during initial data exploration, and systematic coding. Data interpretation was guided by deduction, logical reasoning, systematisation, and an in-depth study of interview questions. Coding facilitated the grouping of data codes into categories and themes, allowing for comparisons to identify overarching concepts. The presentation of findings utilised quotes, tables, and a written interpretation. Data validation measures included member validation, verification, comparison of explanations, and triangulation of data collection methods.

#### Theoretical and Conceptual Background

Victims of crime can report the crime by calling or visiting the nearest police station. The case is registered on the SAPS Crime Administration System (CAS) at the police station after the crime is reported (SAPS, 2020). As a result, regardless of when the crime was committed, the actual documentation of a crime occurs when the crime is reported to the police or when the crime is discovered by the police (SAPS, 2016:2). To identify trends, CIMAC must conduct statistical analyses of crime at each police station. Crime analysis aids operational and administrative members in their planning and deployment of physical and human resources for the prevention and combating of criminal activity (Brown, 2012:44). A crime analyst's job is to identify and analyse crime-related patterns, trends, and incidents; to study data and its disorder; and to develop, create, and disseminate actionable information and data to help operational police officers and police departments prevent, combat, reduce, and investigate crime (Santos, 2014:147).

#### **CIMAC's Station Level Duties and Responsibilities**

The CIMAC's objectives at the station level are to provide the station commander with the following services: implementing and monitoring compliance with relevant policy, standards, and operational procedures; quality assurance regarding crime statistics; and ensuring the availability of reliable and validated crime information to station management to address crime (SAPS, 2015:3). CIMAC at the station level, has the following main objectives: crime mapping; linkage analysis; conducting fieldwork; briefing and debriefing of shifts, informing station management and operational

Volume 7, Issue January, 2024

members about hot spots and criminals' modes of operation; and conducting crime statistics analysis (De Kock 2014:5-7). The three key performance areas for the station CIMAC as outlined in SAPS (2017:9) are crime data quality assurance, providing crime pictures, and explaining crime pictures or situations.

Policing, like any other problem-solving initiative, should be founded on careful and tactful analysis (Edelstein, Arnott & Faull, 2020:5). As a result, the CIMAC's problem-solving responsibilities include reviewing all reported crime and providing a weekly update on crime statistics, which includes individual crime categories, crime patterns, and developing crime trends (Wywadis, 2012:164). This process enables law enforcement agencies to target high crime areas, and concentrating resources to reap the greatest benefit in terms of crime reduction and arrests (Wywadis, 2012:164). In this regard, the crime analysis unit evaluates the reliability and validity of information obtained from various sources.

Palmiotto (2013:16-19) summarises the duties and responsibilities of the crime analysis unit as follows: correlating and analysing information received from various sources to determine its reliability and validity; developing general information factors such as information on the suspect vehicle, loss, property, victim descriptors, and relevant geographic factors; developing and analysing specific elements for each type of crime committed to determine linkages and patterns with similar crimes committed; and providing findings to operational sections, divisions, and members. Members of CIMAC are in charge of collecting, managing, analysing, and interpreting crime data on a daily basis. They should be the station's crime experts, knowing the "what, when, where, why, who, and how" of the priority crime aspects reported in the jurisdiction of their police station (Sekhukhune, 2017:11). The crime analysis section investigates serious crimes on a daily basis to determine the location, time, special characteristics, similarities to other criminal attacks, and other significant factors that may aid in identifying a criminal or the existence of a pattern of criminal activity. This information is useful in planning the operations of a division (Grana & Windell, 2017:196).

#### **CIMAC's Application in Crime Prevention and Reduction**

Crime reduction is one of South Africa's major social challenges (Roelofse & Gumbi, 2018:13). Annual crime statistics have consistently revealed upward and broad national trends in most crime types, with some police stations still bearing the brunt of certain violent crimes and property-related crimes (Breetzke, 2008:2; Swabe, De Kock & Currin, 2017:8). Notably, areas such as the Cape Flats and KwaZulu-Natal exhibit alarming murder rates, necessitating an exploration of reasons behind the decadelong surge in these crimes and an assessment of the efficacy of interventions aimed at their root causes. In such a dire situation, answers to the following pertinent questions are required: Why have these crimes increased in the last decade, if the pattern has been present for many years? Why haven't specific interventions to identify and address the underlying causes of violent crime been implemented? And, if such interventions were undertaken, why did they fail? (Kemp, 2019:10). The clarity of answers to the questions above requires detailed crime statistics from the CIMAC at police stations, which is required for analysis of the crime trends, patterns and causal factors associated with particular crimes (Swabe, De Kock & Currin, 2017:8). Accessing crime statistics information is only partially crucial in identifying whether a policing precinct has a problem relating to a specific crime type. Solutions for specific crime types requires a determination of whether specific sectors or areas within a police precinct are more prone to such types of crime; or whether the crime pattern is random and scattered (Kemp, 2019:10). The findings of analysed crime data broaden one's understanding of crime, helping to improve a variety of approaches and functions in crime reduction and investigation (Horne, 2009:75).

The CIMAC provides operational crime information and station crime intelligence profiles to operational personnel so that they can identify specific crime trends, patterns, crime series, hotspots, geographical focus areas, crime priorities for that police station, and investigative leads for the purposes

of crime detection and investigation (Edelstein et al., 2020:5; SAPS, 2017:8). According to Seimela (2000), as cited by Horne (2009:71), "statistical analysis of crime trends (over time), geographic distribution at different levels of policing, and geographic shifts in crime trends are critical in the successful reduction and investigation of crime". The use of CIMAC crime statistics at the police station level is critical in determining "when, where, and how" police resources should be deployed (Sekhukhune, 2017:4). Police departments no longer dispatch patrol units to random patrol areas in the hope of discovering or deterring criminal activity. It is critical to have detailed and accurate information about specific types of crime's locations and dates. Geographically coded information from police records, according to Govender (2011:121), can be useful in detecting crime trends and patterns, confirming the presence of people and suspects within geographic areas, and identifying concentration areas for patrol units. Crime is a difficult social phenomenon to pinpoint. CIMAC's statistically analysed crime data is critical for both reactive and proactive policing in this regard because it is used to detect and identify emerging crime patterns, hotspots, and modes of operation (Sekhukhune, 2017:4). Although CIMAC's critical role in crime reduction and prevention is not disputed, the reality is that CIMAC continues to face challenges and shortcomings.

#### **CIMAC Challenges Within the SAPS**

The SAPS faces a number of challenges at the local police station level, including: manipulation of crime statistics, missing case dockets, under-resourcing, inefficient management, a lack of discipline, and ineffective crime combating. Unprofessionalism, police corruption, and criminality have also harmed the reputation of the police service and citizens' trust in this venerable public institution (Faull, 2011:1; Ormar, 2009:1). These difficulties typically result in poor service delivery, which disrupts effective policing, creates insecurity, and fails to reduce high levels of crime. Despite these challenges, the police are expected to provide the public with effective and efficient service and to perform admirably (Faull, 2011:1). Many of these issues confront CIMAC at the police station level including CIMAC official misallocation and assignment of duties and functions; CIMAC member misplacement and movement; inconsistency in retention strategy; and insufficient resources and training.

Station level CIMAC officials, according to the National Crime Registrar (sa:21), are overburdened with responsibilities that fall outside of their purview. Handling informers, manning roadblocks, responding to complaints, serving as designated firearm officers, court officials, or transporting prisoners, acting as domestic violence coordinators or SAP 13 clerks, updating the Operational Plan and Monitoring (OPAM) system, and handling search warrant applications are examples of such additional functions. Due to station management's lack of understanding of the analyst role, the range of possible analytical products, and the lack of correlation between analysts and product efficacy, CIMAC officials are assigned duties outside of their scope (Belur & Johnson, 2018:771).

The detective and crime analysis environments of the SAPS are furthermore not designed to retain personnel (Burger, 2015:53). The SAPS as an organisation continues to lose highly skilled members as a result of a lack of properly developed retention strategies (Burger, 2015:53). Furthermore, the lack of a structured career path causes members to leave the CIMAC environment and attempt to advance in other sections of the police station, while non-performing members remain and are assigned to the CIMAC environment. As a result, the SAPS (2018b) announced that management had decided that no member should be removed from the CIMAC environment without the Crime Registrar's approval to avoid the additional costs of training new personnel to replace competent members who had been transferred out of the CIMAC environment.

The critical role that CIMAC plays in problem-solving suggests that more resources should be invested, more attention should be paid to improving analysts' work, and the analyst's status within the

organisation should be developed (SAPS, 2017:15). This is one of the most pressing issues that must be addressed in order to improve higher-quality intelligence and viable policing strategies in a constantly changing environment (Karn, 2013:36). For proactively identifying rapidly changing crime trends, as well as diverse networks and patterns of criminal activity, multifaceted investigative and analytical skills are required (Karn, 2013:36). However, a shortage of administration officials and data typists for information capturing on police station computer systems is experienced (Govender, 2011:127). In addition, a lack of vehicles, computer equipment, cameras, cellphones, adequate office space, and access to mainframe computers are also experienced (National Crime Registrar, sa:28).

Insufficient training is provided to senior managers, resulting in inefficient police operations and interpretation of analytical products, as well as a fundamental lack of understanding of the analyst's role in policing (Belur & Johnson, 2018:769). Human resource deficiencies, according to Govender's (2011:120) research, resulted in insufficient training and computer support at the station level, as well as insufficient support for detectives to process crime information. The station CIMAC members' training needs include CAS, BI, GIS, CRIM, INKWAZI and PRDCIR, which are the CIMAC's basic learning programs (SAPS, 2017:16). Members of CIMAC must be computer literate and familiar with Microsoft Word, Excel, and PowerPoint computer programs and applications. The Crime Statistics Policy (2017:14) further emphasises the importance of ongoing training for personnel involved in crime statistics recording, registration, processing, analysis, and archiving. Crime analysts must have more sophisticated skills, resources, and training to be influential in the new policing dynamics (Karn, 2013:6).

#### Findings and Discussion

This research delves into the pivotal role of the SAPS CIMAC in station level crime prevention and reduction. The significance of this centre prompted the authors to extensively review both local and international literature on crime information analysis. The study emphasises the paramount importance of effective and efficient crime analysis – a prevailing element in the endeavours of law enforcement authorities to enhance public safety. This practice enables the identification of emerging crime trends, facilitates resource allocation, and informs the strategic planning of crime prevention initiatives. Despite its central role, the authors contend that crime analysis remains an often underrated and overlooked aspect in the discourse on crime prevention and reduction.

#### **Definition and Characterisation of CIMAC**

As outlined by the SAPS in 2018, the CIMAC is specifically designated as a branch of the Crime Registrar for station level operations. These CIMAC offices, established within each police station, bear the responsibility of elucidating and analysing crime data – addressing critical questions related to the who, what, where, when, and how aspects of criminal activities. Additionally, they actively support crime statistics services and furnish pertinent information to station management, as detailed in SAPS (2018a:2-3). Operating at the station level, CIMAC conducts daily assessments of case-based data quality, including the verification of inaccurately registered crimes. Identified discrepancies are reported to the Station Crime Combating Forum (SCCF) for a comprehensive review of all crimes reported to the station on the preceding day (SAPS, 2019:7).

Empirical evidence from study participants reveals varied interpretations of CIMAC's functions, with participants using terms such as offering services, guiding, providing assistance, working with, ensuring, giving direction, gathering information, and assisting. The participants predominantly described CIMAC in terms of its supportive role across various departments within the police station. Most participants indicated familiarity with CIMAC and its functions, roles, and responsibilities, emphasising its significance in crime analysis. Some participants expressed sentiments such as "the heart of the



Volume 7, Issue 1 January, 2024

station", "the backbone of SAPS", and "the cream and light of the station", underlining the pivotal role CIMAC plays in the overall functioning of the police station. One participant characterised CIMAC as the "engine of the station" responsible for coordinating information systems where crime originates.

Moreover, participants referred to CIMAC as the Crime Registrar structure at the station level, aligning with existing literature. The study found that participants generally had a comprehensive understanding of CIMAC's meaning and description. International participants envisioned a crime analysis unit as comprising experts with diverse skill sets and levels of experience, enabling them to address various crime problems, conduct data analysis, identify trends and patterns, and effectively report and present data.

#### **CIMAC's Objectives**

The CIMAC, functioning as the station level crime analysis unit within the SAPS, operates to provide essential services to the station commander while being directly accountable to the Provincial Crime Registrar (SAPS, 2015:4). At the station level, the CIMAC pursues various objectives, including crime mapping, linkage analysis, fieldwork, shift briefing and debriefing, updating station management and operational members on criminal hotspots and modus operandi, and conducting crime statistical analysis (De Kock, 2014:5-7). SAPS (2015:3) outlines additional objectives, emphasising the implementation and monitoring of policy compliance, maintaining quality assurance in crime statistics, and ensuring the availability of reliable and validated crime information for station management.

From the empirical evidence of the study – participants from Samples A, B, C, and D – the CIMAC's objectives extend to providing direction and guidance to the station commander, operational members, and other stakeholders. These objectives also include the provision of crime data or information and a concerted effort to reduce crime. CIMAC's overarching goals encompass aiding in the investigation and prevention of criminal activity, supplying station information on reported crimes, methods of operation, hotspots, crime threats, maintaining a 24-hour crime picture, presenting monthly statistics, and developing suspect profiles. Furthermore, CIMAC strives to analyse crime statistics and prevent cases from being incorrectly registered. The study's findings indicate that participants' perceptions of CIMAC's objectives align with those documented in the existing literature.

Globally, the data collected from participants emphasises the crucial need for effective collaboration within crime analysis units throughout the crime analysis cycle. A participant from Sample F articulated this perspective, stating,

It would be to provide a supporting role and service to the policing environment that you find yourself in order to provide products and services that can be utilised for deployment purposes and for operational plans.

Rather than merely existing as a static entity, the CIMAC has transformed into an indispensable support structure for diverse units within police stations. CIMAC actively engages in the analysis of reported crimes, identification of trends and patterns, and development of crime analysis products. Consequently, CIMAC plays a pivotal role in aiding police departments in the reduction of crime within their respective policing districts.

This study has delineated and presented the operational objective for CIMAC at the police station level, derived from recurring themes identified in participant responses across Samples A, B, C, D, and E, along with insights gathered from Sample F, representing international participants. The central objective of CIMAC revolves around conducting a thorough examination of daily reported crimes within recorded

systems to pinpoint inaccuracies in case registration. Additionally, CIMAC is assigned the responsibility of analysing reported crimes and crime statistics. This analysis culminates in the creation and dissemination of refined crime information and data, encapsulated in various products such as modus operandi, hotspots, crime threats, 24-hour crime pictures, monthly statistics, and suspect profiling.

These meticulously crafted products serve as instrumental tools, intended to guide and instruct both police station management and operational members. By providing valuable insights, CIMAC aids in the facilitation of both crime prevention and investigation efforts. Ultimately, this strategic approach contributes to a tangible reduction in overall crime rates within the policing districts served by CIMAC.

#### **CIMAC Station Level Duties and Responsibilities**

The members of CIMAC bear the responsibility of daily collection, management, analysis, and interpretation of crime information. They are designated as the crime experts within the station, expected to possess a comprehensive understanding of the key aspects surrounding priority crimes reported within their police station's jurisdiction, encompassing the aspects of what, when, where, why, who, and how, as articulated by Sekhukhune (2017:11). Table 1 below offers a comprehensive summary of the roles and functions of CIMAC specifically at the station level.

Table 1: Overview of the responsibilities and functions of CIMAC at station level

SUMMARISED RESPONSIBILITIES AND KEY FUNCTIONS OF CIMAC AT POLICE		
STATION LEVEL		
Crime data quality	Providing crime picture	Crime situation or picture explanation
assurance	or situation	
• Case docket analysis.	• Geographic crime	Case docket analysis.
• Checking completeness	(hotspot analysis).	• Linkage (crime and offender or
of information on CAS.	• Statistical crime	suspect) analysis.
• Crime mapping.	analysis.	• Hotspot (environmental/geographic)
Copying strategic crime	• Crime pattern	analysis.
statistics to crime	analysis.	Fieldwork or environmental scanning.
statistics stream.		Briefing and debriefing of the
		operational members and station
		management and maintain a crime
		intelligence profile.
KEY FUNCTIONS		
Crime data quality	Providing crime picture	
occuronoo	44	l Crime situation or nicture explanation
assurance	or situation	Crime situation or picture explanation
• Perusal of all the		
		Conduct case docket analysis to
• Perusal of all the	Conducting statistical	Conduct case docket analysis to provide details of the crime information
Perusal of all the crimes recorded in the CAS.	• Conducting statistical crime analysis to	Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.
Perusal of all the crimes recorded in the CAS.	Conducting statistical crime analysis to provide direction of	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous</li> </ul>
<ul> <li>Perusal of all the crimes recorded in the CAS.</li> <li>Checking the comments section on the</li> </ul>	Conducting statistical crime analysis to provide direction of crime (whether there)	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous incidents of a specific crime, the</li> </ul>
<ul> <li>Perusal of all the crimes recorded in the CAS.</li> <li>Checking the comments section on the information recorded</li> </ul>	Conducting statistical crime analysis to provide direction of crime (whether there is a decrease or increase in crime).	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous incidents of a specific crime, the arrested persons, victims and the</li> </ul>
<ul> <li>Perusal of all the crimes recorded in the CAS.</li> <li>Checking the comments section on the</li> </ul>	<ul> <li>Conducting statistical crime analysis to provide direction of crime (whether there is a decrease or increase in crime).</li> <li>Conducting crime</li> </ul>	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous incidents of a specific crime, the arrested persons, victims and the outcomes of the adjudication process,</li> </ul>
<ul> <li>Perusal of all the crimes recorded in the CAS.</li> <li>Checking the comments section on the information recorded on the CAS system for correctness and</li> </ul>	<ul> <li>Conducting statistical crime analysis to provide direction of crime (whether there is a decrease or increase in crime).</li> <li>Conducting crime pattern analysis to</li> </ul>	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous incidents of a specific crime, the arrested persons, victims and the outcomes of the adjudication process, using case docket analysis.</li> </ul>
<ul> <li>Perusal of all the crimes recorded in the CAS.</li> <li>Checking the comments section on the information recorded on the CAS system for correctness and</li> </ul>	<ul> <li>Conducting statistical crime analysis to provide direction of crime (whether there is a decrease or increase in crime).</li> <li>Conducting crime</li> </ul>	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous incidents of a specific crime, the arrested persons, victims and the outcomes of the adjudication process, using case docket analysis.</li> <li>Conducts crime linkage analysis to</li> </ul>
<ul> <li>Perusal of all the crimes recorded in the CAS.</li> <li>Checking the comments section on the information recorded on the CAS system for correctness and alignment with the crime definitions and</li> </ul>	<ul> <li>Conducting statistical crime analysis to provide direction of crime (whether there is a decrease or increase in crime).</li> <li>Conducting crime pattern analysis to indicate the frequency of crime occurrences</li> </ul>	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous incidents of a specific crime, the arrested persons, victims and the outcomes of the adjudication process, using case docket analysis.</li> <li>Conducts crime linkage analysis to determine the possible crime series by</li> </ul>
<ul> <li>Perusal of all the crimes recorded in the CAS.</li> <li>Checking the comments section on the information recorded on the CAS system for correctness and alignment with the</li> </ul>	<ul> <li>Conducting statistical crime analysis to provide direction of crime (whether there is a decrease or increase in crime).</li> <li>Conducting crime pattern analysis to indicate the frequency</li> </ul>	<ul> <li>Conduct case docket analysis to provide details of the crime information to explain crime and crime trends.</li> <li>Collect information on previous incidents of a specific crime, the arrested persons, victims and the outcomes of the adjudication process, using case docket analysis.</li> <li>Conducts crime linkage analysis to determine the possible crime series by</li> </ul>

Volume 7, Issue 1 January, 2024

that are incorrectly registered, incorrectly mapped, incorrect crime counts and the daily crime pattern analysis.

- Conduct data quality post registration and verification of crime on CAS.
- Ensuring all crimes are mapped on GIS and manually mapping crime at police stations without GIS (to provide the spatial distribution of crime within a given geographical area).
- Ensuring that strategic crime statistics are copied to the crime statistics stream.

problematic crimes by using the crime pattern analysis matrix that is generated through the crime administration system (CAS).

- victim and offender particulars.
- Conduct environmental analysis to identify both the social and physical aspects that might be contributing to crime in the specific area.
- CIMAC also conducts interviews and takes pictures of the relevant features identified as contributing factors to the crime in the specific area.
- Plot daily crime on maps and present it to patrol officers for briefings, along with recommended policing strategies. Conduct briefing and debriefing of the station management and operational members at station during meetings.
- Maintain a crime intelligence profile, which includes the police station hotspots, crime priorities, and date and time analyses of crimes as it is a rational and appropriate foundation from which to tackle crime problems systematically.

(Source: Adapted by the researcher from De Kock (2014:5-7); Edelstein et al. (2020:5); Govender (2012:83); SAPS (2017a:9); and SAPS (2019:7)).

Based on the empirical findings of this study, a prevailing sentiment among participants from Samples A, B, C, and D is that CIMAC performs admirably within the SAPS, with the majority expressing confidence in its efficacy. However, a minority holds the perspective that CIMAC's performance is subpar. The data gleaned from international participants underscore their comprehension of the criminal analysis unit's functions, emphasising the completion of the crime analysis cycle and the delivery of law enforcement with factual, data-driven, and evidence-based products. Notably, international participants recognise CIMAC's effectiveness, but suggest there is room for improvement. They advocate for a problem-solving approach within the best criminal analysis units, wherein the unit is presented with a problem to solve independently, rather than being instructed on the solution.

According to participants, the functionality of CIMAC is contingent upon various factors, including departmental dynamics, geographical location, available resources, the created atmosphere, and whether the unit operates within a conducive context. The majority of participants argue that CIMAC offices require additional resources to optimise operational functions. Proposals include utilising the CIMAC office for operational planning and execution, as well as training CIMAC officials. International participants recommend early involvement in police investigations, inclusion in briefings to enhance crime analysts' situational awareness, and accompanying operational units, initially relying on individual expertise and field specialisation.

The feedback from participants and interview discussions with the researcher highlight key considerations for the SAPS to successfully leverage CIMAC centres. Recommendations include the provision of both physical and human resources, comprehensive training for CIMAC members, marketing of the CIMAC office, continuous monitoring, ensuring station management's understanding of CIMAC functions, active participation in operational planning, revising the rank structure of CIMAC members, and improving communication between CIMAC and station personnel.



Volume 7, Issue 1 January, 2024

Participants also suggest mandates for CIMAC, increased visibility of CIMAC products, external monitoring of the CIMAC office, and designated individuals to handle CIMAC issues at various levels. Communication through channels like WhatsApp and e-mails is proposed, with the presence of CIMAC officials at operational planning meetings and district-level monitoring to verify information provided by station CIMAC officials.

To address challenges collaboratively, participants recommend centralising CIMAC at police stations and fostering collaboration with Crime Intelligence Gathering (CIG). Adequate time for CIMAC officials during briefings, proper marketing within police station sections, and implementation of CIMAC findings by station management and operational members are deemed crucial.

International participants provided practical guidelines, procedures, and recommendations, highlighting the importance of crime analysis guidelines by stating:

Organisations typically have a crime analysis guideline; however, if a smaller organisation does not have a guideline, assistance from academia or the IACA can be sought.

SOPs are essential in my opinion. From the moment the problem is identified until the products are acknowledged, policies, procedures, and protocols are in place. Then, when indicated, treat the products as confidential, because information leakage and sensitive information sharing is a problem for all services. I know I said earlier that information sharing is critical, but we must also remember that much of our work is sensitive and must not be jeopardized, so it all boils down to more effective policies, procedures, and protocols.

Participants stress the need for a refined approach to information handling, emphasising that information should be filtered through the CIMAC office before any operation. Continuous monitoring and support from the CIMAC office are identified as essential elements for successful CIMAC centre use.

#### **CIMAC's Application in Crime Prevention and Reduction**

Tackling the pressing issue of crime reduction in South Africa is an overarching societal concern, notably marked by enduring national trends in various crime categories, particularly in specific police stations burdened by elevated rates of violent and property-related offenses. To unravel these complexities, detailed crime statistics from the CIMAC prove indispensable, furnishing crucial insights into crime trends, patterns, and causal factors. While gaining access to crime statistics is partially crucial for identifying overarching issues in policing precincts, addressing specific crime types necessitates a nuanced comprehension of whether particular sectors or areas within a precinct are more susceptible to these crimes or if the patterns manifest randomly. The analysis of crime information contributes significantly to augmenting knowledge about crime, thereby enriching diverse approaches and functions in the realms of crime reduction and investigation.

In grappling with the formidable challenge of crime reduction in South Africa, the role of CIMAC becomes pivotal in furnishing operational crime information for personnel actively engaged in crime detection and investigation. Despite the intricacies inherent in this challenge, harnessing the capabilities of CIMAC emerges as a valuable instrument in the pursuit of crime reduction, underscoring the imperative for strategic analysis and optimal utilisation of crime information to guide effective interventions.



Volume 7, Issue January, 2024

This study delves into the perception of CIMAC's effectiveness within the SAPS. The empirical evidence from the participants reveals a spectrum of opinions among participants, with the majority acknowledging CIMAC's utility, while some express scepticism or partial effectiveness. Participants highlight CIMAC's role in providing essential crime information, but concerns are raised about its efficacy in explaining and addressing problematic and violent crimes, as well as the need for improved feedback mechanisms.

Internationally, participants stress the importance of effective management and utilisation of the crime analysis unit's outcomes and stated:

Having a unit that produces excellent items is pointless if it is not implemented.

The consensus among participants is that CIMAC's potential is contingent on adequate resourcing, including both physical and human resources. Suggestions include comprehensive training for CIMAC members, granting them authority, and optimising the use of CIMAC products.

Participants unanimously emphasise CIMAC's pivotal role in crime reduction, underscoring its significance in guiding crime prevention operations and facilitating efficient resource allocation. Thought provoking statements offered by the participants include:

It is CIMAC data that will guide crime prevention operations in terms of 'when, how, and how' much capacity in terms of personnel and physical resources in the station; it will be measured if crimes are reduced, and if the analysis was done correctly, very good convictions can be obtained through CIMAC.

International participants further assert that leveraging CIMAC's crime information and products not only saves resources, but also guides law enforcement in disrupting, deterring, or detaining offenders while providing essential contextual understanding of the crime problem. In essence, CIMAC emerges as a valuable tool in the arsenal against crime, offering tangible benefits in terms of efficiency, cost-effectiveness, and strategic direction for law enforcement efforts.

#### **CIMAC Challenges Within the SAPS**

The challenges faced by the SAPS at the local police station level, as highlighted by Faull (2011:1) and Omar (2009:1), extend to CIMAC. The study unearthed various impediments faced by CIMAC officials, encompassing misallocation of duties, staff transfers, inadequacies in resource allocation, and insufficiencies in training. One notable challenge is the burdening of CIMAC officials with responsibilities beyond their purview, including administrative tasks, crime prevention, and stand-by duties. This overextension is attributed to station management's lack of comprehension of the analyst role, the array of available analytical products, and the correlation between analysts and product efficacy.

The issue of non-performing members being assigned to the CIMAC environment prompted SAPS to establish a protocol requiring the Crime Registrar's approval for any member's removal from CIMAC. The absence of a well-defined retention strategy within the SAPS was identified as a factor leading to the loss of highly competent CIMAC members, as the lack of a structured career path encourages members to seek advancement in other police departments.

Resource inadequacies at police stations were found to impede CIMAC's effectiveness, with deficits in cars, computer equipment, cameras, cellphones, office space, and access to mainframe



Volume 7, Issue 1 January, 2024

computers. Furthermore, the misinterpretation of analytical products and a fundamental misunderstanding of the analyst's role by senior management stem from a lack of understanding of CIMAC's functions.

The study also revealed that CIMAC members require training in fundamental learning programs, including CAS, BI, GIS, CRIM, INKWAZI, and PRDCIR. Proficiency in information technology, computer literacy, and familiarity with Microsoft Word, Excel, and PowerPoint applications are essential for documenting CIMAC products.

From the empirical evidence gathered from participants, the lack of resources emerged as a primary obstacle to the successful use of CIMAC at police stations. The phrase:

"the Crime Analysis Unit requires additional resources..." is frequently used.

Training, communication gaps, and a lack of awareness regarding CIMAC's obligations and tasks were also cited as hindrances to its efficient utilisation. International participants echoed similar challenges, emphasising the universal issue of resource constraints in crime analysis units and underscoring the need for additional resources to optimise their functionality. The study highlights the multifaceted nature of challenges facing CIMAC, emphasising the imperative for strategic interventions, increased resources, and enhanced training to elevate the quality of crime analysis and policing approaches within SAPS.

#### **Recommendations**

To enhance the effectiveness of the CIMAC within police stations, a comprehensive set of recommendations is proposed. First and foremost, the development and distribution of administrative reporting guidelines to station commanders are recommended, aiming to provide clarity and prevent confusion in CIMAC's administrative reporting. It is crucial to clearly define the roles and responsibilities of the Provincial Crime Registrar regarding CIMAC personnel appointments.

Additionally, there is a need for heightened awareness and communication within the police station. This involves ensuring that station management and all station members are well-versed in CIMAC's meaning, scope, and objectives. Effective utilisation of internal SAPS communication channels is encouraged to market and disseminate information about CIMAC's objectives, emphasising its importance, the products derived from CIMAC, and the significant role it plays in crime reduction.

A key recommendation involves the establishment of a daily crime reporting analysis practice within CIMAC. This includes examining daily reported crimes captured on systems, ensuring correct registration, analysing crime and statistics, and producing valuable information such as modus operandi, hotspots, crime threats, 24-hour crime pictures, monthly statistics, and suspect profiling. These analyses are pivotal in guiding police station management and operational members in crime prevention and investigation.

Quality assurance and role clarity are essential components for CIMAC's optimal functioning. It is recommended that CIMAC personnel perform crime data quality assurance, providing a clear crime picture along with explanations. Recognition of crime analysts as experts in their police station, coupled with station management and members' understanding of CIMAC's roles, responsibilities, and duties, is crucial for effective utilisation.



Volume 7, Issue 1 January, 2024

Resource allocation and building trust in CIMAC are pivotal for success. Adequate resourcing of CIMAC and allowing ample time for problem-solving tasks are recommended. Building trust includes involving CIMAC in the planning and execution of operational activities, conducting "ride-alongs" with operational units, and leveraging their expertise and fieldworker specialisations.

Emphasising the importance of CIMAC at the police station is a critical recommendation. All sections of the police station should be familiar with CIMAC products and understand their utility in achieving objectives. Additionally, a well-defined feedback mechanism is proposed, encompassing both formal and informal channels for requesting information from CIMAC and providing feedback after use.

Training and criteria development for CIMAC personnel are crucial aspects of the recommendations. Establishing a framework for identifying and training police officers as crime analysts, and regulating the movement of members in and out of the CIMAC environment is suggested. A comprehensive strategy for determining the career path of CIMAC officials and crime analysts, coupled with a robust retention plan, is recommended to secure their expertise.

Ensuring the establishment of CIMAC offices at all police stations is a priority. Furthermore, prioritising CIMAC office staffing based on workload and demand is crucial for the effective operation of CIMAC in every police station. Adequate training and budget allocations are imperative, with a separate budget suggested for station CIMAC, covering office equipment, technological/IT resources, human resources, and training for both CIMAC members and clients.

Finally, a strategic intelligence approach is encouraged, emphasising the use of crime analysis products to save resources, time, and money in police station operations. These recommendations collectively aim to elevate CIMAC's role and effectiveness within the broader landscape of crime prevention and investigation.

#### **Conclusion**

In conclusion, this study delved into the intricate realm of Crime Information Management and Analysis within the SAPS, seeking to elucidate the nature of CIMAC, assess its objectives, roles, and responsibilities, and address the challenges confronting its implementation within SAPS. The research not only provided a comprehensive understanding of CIMAC, but also formulated recommendations for its effective utilisation at the police station level.

Undoubtedly, the significance of the crime analysis unit in law enforcement cannot be overstated. CIMAC, established at the grassroots level of police stations, plays a pivotal role in preventing, reducing, and investigating crime. This article unveiled the overarching goal of CIMAC at the police station, to scrutinise daily reported crimes, rectify inaccuracies in case registration, analyse crime trends, and generate valuable insights such as modus operandi, hotspots, crime threats, 24-hour crime scenarios, monthly statistics, and suspect profiles. All these endeavours collectively contribute to the overarching mission of crime reduction.

According to our findings, CIMAC's responsibilities extend beyond mere analysis, encompassing the provision and elucidation of crime scenarios for station management. The unit's proactive approach involves directing operational objectives to deter, disrupt, or detain offenders, thus making a substantial contribution to crime reduction efforts. However, the efficacy of CIMAC is not immune to challenges, including constraints in physical and human resources, inadequately trained personnel, and communication gaps regarding CIMAC responsibilities.

Nevertheless, this article underscores that CIMAC can be a potent tool in crime mitigation when provided with adequate resources, comprehensive training for its members, and due recognition of its pivotal role in law enforcement. Emphasising the value and worth of CIMAC, and leveraging its analysed products, holds immense potential in the relentless pursuit of SAPS's mission to combat crime, safeguarding life and property. In conclusion, the study advocates for a strategic and holistic approach to fortify CIMAC's role within SAPS, thereby enhancing its effectiveness in the ongoing battle against criminal activities.

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Volume 7, Issue January, 2024

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