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Smart Policing as Institutional Transformation: Technology Adoption, Organisational Capacity, and Social Implications in Namibia

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ABSTRACT

Smart policing is increasingly associated with the digital transformation of law-enforcement organisations, yet the presence of digital technologies does not by itself constitute institutional transformation. This study examines how smart policing is experienced as an organisational and social transformation process in Windhoek, Namibia, with particular attention to institutional capacity, technology adoption, organisational adaptation, and community experience. The study employed a qualitative design involving 19 participants: 10 police officials, three executive leaders from technology providers, two policy analysts, two City of Windhoek officials, and two community members. Data were collected through semi-structured interviews and a focus group discussion and analysed using thematic analysis. The findings show that technology adoption is uneven across organisational units and depends on infrastructure, maintenance, staff capability, managerial support, and the ability of institutions to integrate digital systems into existing work practices. Participants described improvements in information access, case management, coordination, and responsiveness, but also identified fragmented implementation, insufficient training, uncertainty concerning responsibility, and limited public understanding of technology-mediated policing. Community accounts further indicate that increased visibility of surveillance can produce feelings of insecurity or being watched even where technology is associated with greater physical security. The study argues that smart policing in Namibia should be understood as an institutional transformation process in which technological investment interacts with organisational capacity and social experience. It proposes an institutional transformation framework linking technological adoption, organisational capability, governance arrangements, and social experience. The study contributes empirical evidence from a Southern African context and highlights why smart-policing initiatives need to be evaluated not only through technological deployment but also through organisational integration and their consequences for police–community relations.

Keywords: Digital Transformation; Institutional Capacity; Namibia; Smart Policing; Surveillance

INTRODUCTION

Digital technologies are changing the way public organisations organise information, coordinate activities, deliver services, and exercise institutional authority. In public administration, digital transformation is not simply the conversion of analogue processes into digital formats. It involves changes in organisational structures, routines, capabilities, relationships, and the ways public value is produced. Vial (2019) describes digital transformation as a process in which digital technologies trigger significant changes in organisational properties, while Mergel et al. (2019) emphasise that transformation in government involves changes to core processes and services rather than technology adoption alone. More recent public-sector research similarly shows that organisational and managerial conditions can determine whether digital technologies produce incremental changes or deeper transformation (Haug et al., 2023; Tangi et al., 2021).

Policing provides a particularly important setting for examining this transformation because police organisations operate at the intersection of technology, public authority, security, and everyday social relations. Smart policing encompasses the use of digital information systems, communication technologies, data analytics, surveillance infrastructures, and other technologies to support policing activities. The technological dimension is therefore inseparable from organisational questions: who can access information, who is trained to use a system, how different units coordinate, who maintains infrastructure, and how decisions are made when technological outputs are uncertain. Research on digital policing in Nigeria, for example, shows that digital tools can create new channels for police–citizen interaction while also raising

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questions about sustainability and institutional capacity (Odeyemi & Obiyan, 2018). Research in Jigawa State further identifies insufficient technology and limited ICT skills as barriers to the effective use of digital policing (Ismail & Abdullahi, 2024).

The African context is particularly important because digital transformation often occurs alongside uneven infrastructure, resource constraints, fragmented organisational arrangements, and rapidly changing technological expectations. A technology introduced into a well-resourced institutional environment cannot simply be assumed to operate in the same way when transferred to another setting. Smart-city scholarship has similarly stressed the importance of contextual conditions, governance arrangements, and organisational configuration rather than the simple replication of technological models (Meijer et al., 2016). Digital transformation research also indicates that organisational barriers, managerial support, and the ability to coordinate change influence the trajectory of public-sector transformation (Tangi et al., 2021).

Namibia provides an underexamined setting for studying these dynamics. Windhoek is both the national capital and a major site of public-sector and urban digital development. The city provides an empirical setting in which police organisations, technology providers, public officials, and communities encounter the consequences of technology adoption in different ways. Police personnel may experience digital technologies as tools for faster information access and coordination, while communities may experience the same technologies through visible surveillance and changing expectations of privacy. These different experiences make smart policing a social and institutional issue rather than a narrowly technical one.

The central problem addressed in this study is therefore not whether smart policing technologies exist, but how technological adoption becomes integrated—or remains unevenly integrated—within organisational and social environments. Existing discussions of digital policing frequently emphasise operational benefits, technological capabilities, or surveillance risks. Less attention has been given to the organisational transformation process connecting technological investment with institutional capacity and community experience in a Southern African context. This study addresses that gap by examining smart policing as a process of institutional transformation in Windhoek.

The study asks three questions. First, how do institutional and community stakeholders experience the adoption of smart policing technologies in Windhoek? Second, what organisational and technological capacity factors shape the uneven adoption of smart policing technologies? Third, what social and governance implications emerge from technology-mediated policing in the context of Namibia?

The contribution is threefold. Empirically, the study adds qualitative evidence from Namibia to a literature that has more frequently examined digital policing in other national settings. Conceptually, it shifts attention from technology deployment to the relationship between technology, organisational capability, governance arrangements, and social experience. Practically, it identifies institutional conditions that need attention when police organisations introduce or expand digital technologies. The argument is not that technology is inherently beneficial or harmful. Rather, the consequences of smart policing depend on how technological systems become embedded in organisational routines and public interactions.

Digital transformation differs from digitisation and digitalisation because it involves changes in organisational arrangements and value-creation processes rather than only the use of digital tools. Vial (2019) conceptualises transformation as a process involving technological disruption, strategic responses, structural change, and organisational barriers. Verhoef et al. (2021) similarly distinguish stages of digital change and emphasise the organisational capabilities required to move beyond the simple adoption of digital assets. In government, Mergel et al. (2019) show that digital transformation involves rethinking processes and services, while Gil-Garcia et al. (2018) position digital government research at the intersection of technology, public management, and institutional change.

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This distinction is important for smart policing. A police organisation can acquire cameras, digital reporting systems, communication platforms, or analytical tools without transforming the underlying organisation. Transformation occurs when technology changes how information flows, how units coordinate, how staff perform their tasks, how managers make decisions, and how the organisation interacts with citizens. Haug et al. (2023) distinguish incremental digitally induced changes from more transformative changes that affect organisational structures as a whole. This provides a useful lens for examining whether smart policing in Windhoek represents isolated technological additions or a broader institutional transformation process.

Institutional capacity refers here to the organisational resources and arrangements that enable institutions to implement, maintain, coordinate, and adapt technological change. It includes infrastructure, financial resources, technical expertise, human resources, managerial capability, coordination mechanisms, and organisational learning. Digital transformation studies consistently indicate that technological investment alone is insufficient. Tangi et al. (2021) found that organisational barriers and lack of support can hinder digital government transformation, while managerial activities and a clear vision can facilitate change. Mergel et al. (2019) likewise emphasise organisational processes and culture in defining public-sector digital transformation.

Capacity is also relational. Police organisations frequently depend on technology providers, telecommunications infrastructure, municipal systems, and national policy institutions. Digital transformation therefore creates interdependencies between public organisations and external actors. These relationships affect procurement, maintenance, data flows, technical support, and institutional responsibility. A transformation framework that treats the police organisation as a self-contained technical user therefore overlooks the institutional ecosystem within which smart policing operates.

Technology adoption becomes organisationally significant when employees incorporate new systems into everyday work. Organisational routines may change gradually, and existing practices can persist alongside new technologies. Verhoef et al. (2021) emphasise the importance of organisational structures and capabilities in digital transformation, while Haug et al. (2023) show that digitally induced change can remain incremental when technological interventions do not alter organisational structures. This is especially relevant to policing, where operational routines, professional discretion, hierarchical structures, and resource differences can influence how technology is used.

Research on digital policing in Nigeria illustrates this problem. Ismail and Abdullahi (2024) found that limited access to technology and insufficient ICT skills constrained digital policing in Jigawa State. Their findings suggest that the effectiveness of technology adoption depends on the interaction between technological availability and organisational capability. Odeyemi and Obiyan (2018) similarly demonstrate that digital policing technologies can create new channels for police–citizen interaction, but their sustainability and utility depend on institutional arrangements. These studies support an analytical focus on adoption as a process rather than a procurement event.

Smart policing also transforms the relationship between police organisations and communities. Digital surveillance can expand the capacity to observe, record, analyse, and respond to events. However, the social meaning of surveillance depends on how people understand and experience it. Fussey and Sandhu (2022) show that digital policing creates new regulatory and discretionary challenges because surveillance technologies can exceed governance arrangements developed for earlier policing practices. The problem is therefore not simply whether surveillance is technologically possible, but how rules, discretion, accountability, and organisational practice evolve alongside technological capabilities.

African research further illustrates the importance of police–citizen relations. Odeyemi and Obiyan (2018) found that digital communication tools can create mechanisms for interaction and accountability, while also raising questions about their sustainability. The social consequences of technology can therefore move

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in different directions. Technology may make police services more accessible while simultaneously increasing perceptions of monitoring. This study treats those different experiences as empirically important rather than assuming that technological modernisation produces a single social outcome.

Digital transformation is shaped by institutional context. Meijer et al. (2016) argue that smart-city initiatives require attention to contextual conditions, governance models, and public value. This insight is relevant to smart policing because policing technologies are embedded in urban and public-sector systems. A city's infrastructure, human resources, governance arrangements, and relationships between public and private actors influence what technologies can achieve. Digital transformation should therefore be examined through the institutional configuration in which it occurs.

This contextual approach is particularly relevant to the Global South. Public-sector organisations may experience digital transformation while simultaneously dealing with infrastructure gaps, uneven resources, legacy systems, and limited technical capacity. The resulting transformation may be uneven rather than linear. The present study therefore does not treat Namibia as a deficient version of a technologically advanced policing model. Instead, it examines the institutional conditions through which digital transformation is locally assembled and experienced.

The study uses an institutional transformation perspective informed by digital transformation research. The framework links four analytical domains: technological adoption, organisational capacity, governance and coordination, and social experience. Technological adoption concerns the availability and use of digital tools. Organisational capacity concerns skills, infrastructure, maintenance, leadership, and resources. Governance and coordination concern responsibility, information flows, institutional rules, and relationships among police, technology providers, government actors, and communities. Social experience concerns how technology-mediated policing is encountered and interpreted by community members.

The framework assumes a recursive relationship rather than a linear causal chain. Technology changes organisational practices; organisational capacity determines whether those changes can be sustained; governance arrangements shape how technology is controlled and coordinated; and social experience can generate pressures for institutional adaptation. The empirical analysis therefore examines both enabling and constraining processes. This approach is consistent with research showing that public-sector digital transformation is shaped by organisational, managerial, and contextual factors rather than technology alone (Haug et al., 2023; Tangi et al., 2021).

RESEARCH METHOD

This study employed a qualitative research design to examine smart policing as an institutional and social transformation process in Windhoek, Namibia. A qualitative approach was appropriate because the study sought to understand how different actors experience technological adoption, organisational change, institutional capacity, and social consequences. Rather than measuring the effectiveness of individual technologies statistically, the study examined participants' accounts of how technologies are incorporated into policing practices and experienced by communities.

The analytical orientation was interpretive. The study treated participants' accounts as evidence of experience and perception and did not infer independently measured effects on crime rates or policing outcomes from those accounts. This distinction is important because the purpose was to understand institutional transformation and social implications rather than to estimate causal effects.

The study was undertaken in Windhoek, the capital city of Namibia. Windhoek was selected because it provides an important setting for examining the intersection of policing, urban digital development, public institutions, technology providers, and community experience. The city hosts national and municipal institutions and has

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experienced increasing use of digital technologies in public-sector activities. The setting therefore allows examination of smart policing within a wider process of urban and institutional digitalisation.

The study considers smart policing as part of an institutional environment involving police organisations, technology-sector actors, government and policy institutions, municipal authorities, and members of the public. This multi-actor configuration is central to the research because technology adoption depends on relationships extending beyond the police organisation itself.

Purposive sampling was used to identify participants with direct involvement in, professional knowledge of, or relevant exposure to smart policing and digital transformation. A total of 19 participants were included. The sample consisted of 10 police officials, three executive leaders representing technology providers, two policy analysts from the Office of the Prime Minister, two City of Windhoek officials, and two community members. The police participants included senior officers, operational personnel, and IT-related personnel. The technology-sector participants represented MTC, Telecom Namibia, and Paratus.

Table 1. Distribution of Participants by Stakeholder Category

Participant category	Number	Data source
Police officials	10	Namibian Police Force
Technology-provider executives	3	MTC, Telecom Namibia, and Paratus
Policy analysts	2	Office of the Prime Minister
City of Windhoek officials	2	City of Windhoek
Community members	2	Community outreach
Total	19	Authors' own data

Source: Authors' Own Data

Participants were eligible when they had direct involvement in smart policing or relevant exposure to digital technologies, had at least two years of experience in their current role where applicable, and were willing to participate voluntarily. Recruitment of institutional participants was facilitated through professional networks and gatekeepers, while community participants were approached through community outreach platforms. The use of multiple stakeholder categories was intended to capture differences in institutional position and exposure to digital transformation.

Data were collected between March and June 2025 through semi-structured interviews and a focus group discussion. Semi-structured interviews were conducted with police officials and other institutional stakeholders and lasted approximately 45–60 minutes. Interviews were conducted in person or through secure digital platforms depending on participants' availability and preferences. With informed consent, interviews were audio-recorded and transcribed verbatim.

The interview questions addressed the use and understanding of smart policing technologies, organisational and technical capacity, digital skills, training, technology implementation, governance, coordination, privacy, surveillance, and community interaction. The two community participants took part in a focus group discussion designed to capture public perspectives concerning awareness of smart policing, experiences of technology-mediated policing, perceptions of surveillance and privacy, and understanding of digital technologies used in policing.

Data were analysed using thematic analysis. The analysis began with repeated reading of interview and focus group transcripts to establish familiarity with the material. Relevant segments were then assigned initial codes. Codes were compared across participant groups and organised into broader analytical categories. Themes were subsequently developed by examining recurring patterns, contrasts, and relationships across the dataset. The final themes were reviewed against the research questions and the institutional transformation framework.

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The analysis was primarily inductive but was informed by four sensitising domains derived from the literature: technological adoption, organisational capacity, governance and coordination, and social experience. These domains were not treated as predetermined findings. Instead, they provided an organising lens through which emerging empirical patterns could be interpreted. Particular attention was given to differences between police and institutional accounts and community accounts, as well as differences within the institutional groups themselves.

The analysis distinguished between reported perceptions and independently demonstrated outcomes. For example, when participants described faster response, improved information access, or deterrence, these statements were interpreted as participant experiences or perceptions rather than as statistical evidence of causal effects. This approach helped maintain analytical consistency between the qualitative design and the claims made in the findings.

Trustworthiness was strengthened through stakeholder variation, comparison across participant groups, iterative coding, and attention to divergent accounts. Including police personnel, technology providers, policy analysts, municipal officials, and community members allowed the study to compare institutional and social perspectives. The researcher also examined convergent and divergent patterns rather than treating the participant group as homogeneous. Interpretive claims were grounded in participant quotations and connected to the relevant analytical themes.

RESULTS AND DISCUSSION

Smart Policing as an Operational Transformation

Participants described digital technologies as changing everyday policing work, particularly through faster access to information, case management, coordination, and responsiveness. One police participant stated, "The inception of digital systems in the police has significantly improved how we respond to crime incidents." Another explained, "We track information in real time now, and this has to some extent allowed police officers to act much faster than before." These accounts indicate that participants experienced digital transformation first through changes in operational routines rather than through abstract technological innovation.

A further participant described the organisational consequences more directly: "Technology has made our work easier, in particular in managing cases and accessing much-needed information quickly on crime incidents and reports associated with insecurity. It reduces delays and improves coordination between units." The emphasis on information flow and coordination is significant. It suggests that the value of technology is partly produced through changes in organisational relationships: information must be available to the right actors, at the right time, and in a form that can be incorporated into operational work.

This finding corresponds with the broader digital-transformation literature, which treats organisational change as a central component of transformation rather than an incidental consequence of technology deployment (Mergel et al., 2019; Vial, 2019). It also resonates with research on digital policing in Nigeria, where digital systems were examined not only as technical instruments but as mechanisms affecting police–citizen interaction and organisational practice (Odeyemi & Obiyan, 2018). In Windhoek, participants' accounts similarly suggest that the transformation process is visible in changes to information management and operational coordination.

However, the evidence does not support a claim that smart policing independently improves crime outcomes. The findings show how participants perceive operational changes. Whether those changes translate into measurable changes in crime, response performance, or public safety would require additional

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quantitative or administrative evidence. The distinction is important because institutional transformation can occur even when the broader outcome remains uncertain.

Uneven Capacity and Fragmented Organisational Transformation

The strongest evidence of institutional transformation as an uneven process comes from differences between organisational units. One participant stated: "In some stations and units, there are advanced digital systems; meanwhile, in other stations, manual operations are still preferred. This means, technology depends on where you work, the resources available, priority areas and present management." This account challenges the assumption that technological adoption proceeds uniformly once a technology has been introduced at organisational level.

Participants linked uneven implementation to several capacity conditions. A technology-sector participant explained: "The challenge is not just the expense of acquiring technology, but also it is about a lack of training to all stakeholders, funding to maintain the technology systems, and a lack of strategic foresight. Without those, the systems cannot work properly." The statement identifies a chain of organisational dependencies: procurement creates technological availability, but training, maintenance, funding, and strategic planning determine whether that technology becomes embedded in practice.

This finding is consistent with public-sector digital transformation research showing that organisational barriers and managerial support shape transformation trajectories (Tangi et al., 2021). Haug et al. (2023) similarly distinguish incremental change from transformation that affects organisational structures. In the Windhoek case, differences across police units suggest that technological deployment can remain incremental when institutional conditions are uneven. The same organisation can therefore contain multiple stages of digital transformation simultaneously.

The finding also has implications for how smart policing should be conceptualised in developing institutional contexts. A technology-centred approach might measure whether a system has been purchased or installed. An institutional approach asks whether the organisation can sustain the system, whether personnel can incorporate it into their routines, and whether units can coordinate around the information it generates. These are different questions. The participant evidence indicates that the second set of questions is essential for understanding actual organisational transformation.

The implication is not that resource constraints make transformation impossible. Rather, resource constraints influence its form, speed, and distribution. Meijer et al. (2016) make a related argument in smart-city research: technological practices need to fit contextual conditions and organisational configurations. Windhoek illustrates this principle within policing, where the same technological ambition can produce different organisational realities depending on local resources, leadership, and institutional priorities.

Technology Adoption and Organisational Learning

Technology adoption also requires organisations to learn. Participants described training as a major condition of implementation, but their accounts suggest that training cannot be separated from organisational learning. Learning includes the ability to understand systems, adapt procedures, troubleshoot problems, coordinate with other units, and recognise the limits of technological outputs.

One participant explained that there is a "gap between what we know as police officers and what the community members are accustomed to or understand in relation to technology use in smart policing initiatives." This indicates that digital transformation produces different knowledge positions. Police personnel may possess operational knowledge of systems while community members encounter the technology from the outside. The gap can affect communication, expectations, and the social interpretation of police technology.

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The organisational learning dimension is important because digital transformation is not completed when personnel receive initial training. Systems change, software is updated, operational requirements evolve, and new technologies are introduced. Verhoef et al. (2021) emphasise the importance of organisational capabilities in sustaining digital transformation, while Mergel et al. (2019) identify organisational change as a defining feature of public-sector digital transformation. The Windhoek findings indicate that training is therefore part of a continuing institutional process rather than a one-time implementation activity.

The data also point to the need for differentiated learning. Police officers, IT personnel, managers, technology providers, policy officials, and communities do not require identical forms of knowledge. Operational users need functional competence; managers need strategic and governance knowledge; technical personnel need system expertise; and communities need understandable information about how technology affects public interaction. Treating digital capacity as a single skill therefore understates the institutional complexity of smart policing.

Governance, Responsibility, and the Problem of Institutional Boundaries

Technology adoption also creates questions about institutional responsibility. One participant observed: "If something goes wrong, there are unclear mechanisms through the policy gap on who is responsible; the police officer, the system itself, the service providers or the people who designed the system." This statement reveals a governance problem created by distributed technological infrastructures. Smart policing depends on relationships among police agencies, technology providers, telecommunications firms, government institutions, and technical specialists. Responsibility can therefore become difficult to assign when technological systems fail or produce contested outcomes.

This finding is consistent with research on digital surveillance governance. Fussey and Sandhu (2022) show that regulatory arrangements designed before contemporary digital technologies may not adequately address new forms of surveillance and police discretion. Digital transformation can therefore outpace institutional arrangements. In the Windhoek context, participants' concerns suggest that governance needs to develop alongside technological adoption rather than after implementation.

The issue is also organisational rather than purely legal. Even when formal rules exist, employees need to know who is authorised to make decisions, who maintains systems, who manages data, and who responds when an automated or digitally mediated process produces an unexpected result. Institutional transformation therefore requires clearer allocation of responsibility across organisational boundaries.

This is particularly important in public-sector technology because accountability cannot be delegated entirely to vendors. Technology providers contribute infrastructure and technical expertise, but public institutions remain responsible for how technologies are incorporated into public authority. The presence of three technology-sector leaders in the present study is useful because it demonstrates that smart policing is an ecosystem rather than a police-only activity.

Surveillance, Visibility, and Community Experience

The community accounts provide a different perspective on smart policing. One participant stated: "There is a feeling that you are always being watched." Another explained that people want security but also want their rights respected. These accounts demonstrate that the social meaning of smart policing is not determined only by its intended institutional purpose. Technologies designed to improve security can also change how people experience public space.

Another community participant stated: "People want to feel secure, but they also want their rights to be respected, as provided for in Chapter Three of the Namibian Constitution." The statement connects technological policing with expectations of rights and public authority. The participant did not reject security

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technology outright. Instead, the concern was about the conditions under which surveillance is considered acceptable and how citizens understand its limits.

This finding is important in light of research on digital policing and surveillance. Fussey and Sandhu (2022) argue that new technologies alter the relationship between surveillance practices, police discretion, and regulatory governance. In Nigeria, Odeyemi and Obiyan (2018) show that digital policing can also create opportunities for interaction and accountability. The Windhoek findings therefore support a dual interpretation: digital technologies can extend police capacity while simultaneously producing new questions about visibility, privacy, and public control.

The evidence should not be interpreted as demonstrating that smart policing necessarily reduces public trust. The qualitative evidence is more specific: some community participants perceived increased surveillance and uncertainty about how technology is used. This distinction allows the analysis to remain close to the data. The social implication of technology is mediated by how citizens interpret the technology, how much information they receive, and how clearly institutional boundaries are communicated.

From Technological Adoption to Institutional Transformation

The findings can be integrated into a model of smart policing as institutional transformation. The first stage is technological adoption: digital systems become available within policing and related public-sector infrastructures. The second is organisational capability: personnel, infrastructure, maintenance, resources, and managerial support determine whether technologies can be used consistently. The third is organisational integration: digital systems become incorporated into routines, coordination, and decision processes. The fourth is governance adaptation: responsibility, oversight, and institutional rules develop in response to new technological possibilities. The fifth is social experience: communities encounter the consequences of technology through services, surveillance, communication, and changing expectations of public authority.
These stages are not strictly sequential. Organisational problems can interrupt adoption; social concerns can generate demands for governance adaptation; governance rules can affect organisational integration; and new technologies can create new capacity requirements. The model therefore represents a recursive transformation process rather than a linear implementation pipeline.

The model extends the conventional technology-adoption perspective by placing organisational capacity and social experience at the centre of transformation. It also responds to public-sector digital transformation research showing that technology, organisational structures, management, and context interact in determining transformation trajectories (Haug et al., 2023; Tangi et al., 2021). In the context of Namibia, this framework helps explain why technology can simultaneously produce operational improvements, organisational unevenness, governance uncertainty, and community concern.

The framework also provides a more appropriate interpretation of smart policing in the Global South. The objective is not to reproduce a technologically advanced model of policing but to understand how digital transformation is assembled under local institutional conditions. The Windhoek case shows that institutional capacity, organisational learning, and governance adaptation are not secondary issues. They are part of what smart policing becomes in practice.

CONCLUSION

This study examined smart policing in Windhoek as an institutional transformation process rather than simply a technological modernisation programme. The evidence shows that digital technologies have changed how some police participants access information, manage cases, coordinate activities, and perceive responsiveness. At the same time, technological adoption remains uneven across organisational units because infrastructure, maintenance, training,

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resources, and management differ. The findings therefore indicate that technology deployment and institutional transformation should not be treated as synonymous.

The study also shows that smart policing has social implications beyond police operations. Community participants described concerns about surveillance, privacy, transparency, and uncertainty about how technology-mediated policing is used. These accounts do not establish a general decline in trust or legitimacy, but they demonstrate that technological transformation changes the conditions under which police–community relations are experienced. For Namibia, the practical implication is that smart-policing initiatives need organisational integration, sustained capacity development, clearer responsibility across institutional and technology-provider boundaries, and communication with communities about the use of digital technologies.

The main contribution of the study is an institutional transformation framework connecting technological adoption, organisational capacity, governance adaptation, and social experience. The framework positions smart policing as a recursive process in which technological systems and institutional arrangements develop together. The qualitative design and single-city setting limit the generalisability of the findings. Future studies can compare police organisations across Namibian cities or other African contexts and combine qualitative evidence with administrative, operational, or community-level data to examine how institutional transformation develops over time.

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AUTHOR CONTRIBUTIONS

The author was responsible for the conceptualization, research design, data collection, data analysis, interpretation of findings, manuscript preparation, revision, and final approval of the manuscript.

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CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest related to the research, authorship, and publication of this article.

DATA AVAILABILITY

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

AI USE DECLARATION

The authors declare that no generative artificial intelligence (AI) tools were used in the preparation, analysis, or writing of this manuscript.

ETHICAL CLEARANCE

Ethical clearance was not required for this study because the research did not involve human participants, identifiable personal data, or procedures requiring formal ethical approval.

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