





Cybersecurity in Namibia: Balancing Risk and Reward in the Digital Age

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Introduction

- Introduction
- Cyberthreat landscape in Namibia
- Effects of cybercrimes on critical infrastructure
- Creation of a National Cybercrimes and Cybersecurity Center
- Mitigating Risks









Introduction

- Cybersecurity is the protection of computer systems, networks, and data from unauthorized access, use, disclosure, disruption, modification, or destruction.
- It is essential for all organizations, including government agencies, to implement robust cybersecurity measures to protect their critical systems and data.
- Namibia is increasingly becoming reliant on digital technologies, which makes it important to address the growing cybersecurity risks.









Types of Cybercrime



- Cyber-dependent crime crimes committed through the use of a networked device, where the networked device is both the target and means of committing the crime: ransomware, hacking, etc
- Cyber-enabled crime traditional crime facilitated using a networked device: identity theft, distribution of CSAM, drug trafficking on the dark web, etc.







Namibia Digitization Efforts

- Namibia's rapid digitalization has led to a significant increase in internet penetration, reaching approximately 17% in 2021 (source: Internet World Stats).
- Alongside this growth, the e-commerce market in Namibia has flourished, estimated at USD 46 million in 2020 and showing steady growth (source: Statista).
- These digitization efforts will lead to new jobs and new businesses.









Cyberthreat Landscape in Namibia

- Namibia has faced a number of high-profile cyberattacks in recent years, including ransomware attacks on government agencies and businesses.
- The country is also vulnerable to phishing attacks and other forms of social engineering.
- Namibia's cybersecurity capacity is still developing, and there is a shortage of skilled cybersecurity professionals.









Effects of Cyber Attacks on Critical Infrastructure

- Economic disruption: Cyber attacks can disrupt critical infrastructure systems, such as power grids, transportation networks, and communication systems.
- Public safety risks: Cyber attacks on critical infrastructure can also pose a risk to public safety.
- National security risks: Cyber attacks on critical infrastructure can also pose a risk to national security.









Balancing Risk and Rewards



- Digital technologies offer many benefits, but they also introduce new cybersecurity risks.
- It is important to balance the risks and rewards when implementing new digital technologies.
- Greater use of digital technologies result in greater cybercrimes against unsuspecting users.
- There was a significant increase in online child sexual exploitation from 2020 onwards.







Creation of Cybercrime and Cybersecurity Center

- Namibia should create a cybercrime and cybersecurity center, which may include divisions for investigations, digital forensics, CSIRT, Outreach, and legal affairs.
- Individual components can still report to respective ministries: CSIRT to CRAN, Prosecutors to Ministry of Justice, etc.
- Colocation of agencies will streamline investigation and prosecution of cybercrimes.

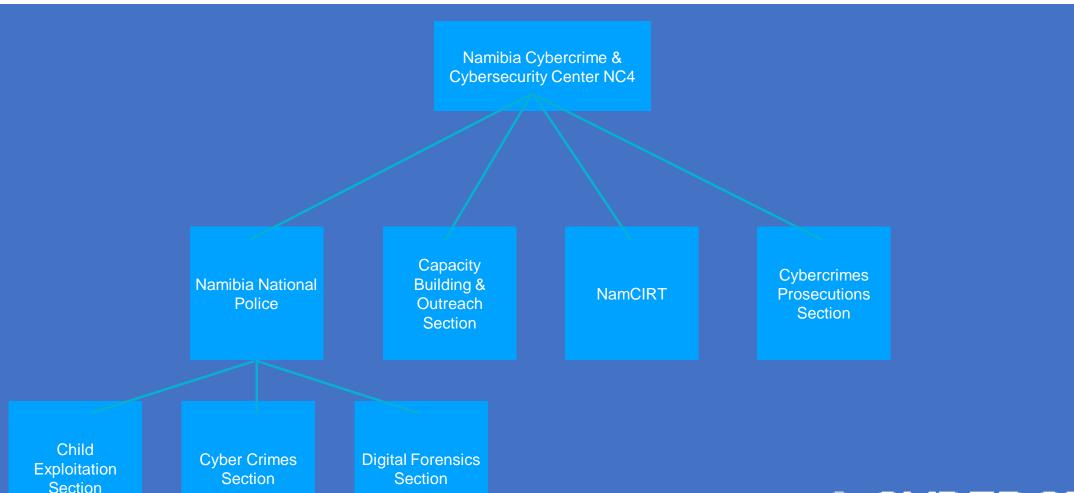








Creation of Cybercrime and Cybersecurity Center



CYBERCRIME





Mandatory Reporting of Cybercrimes

- Require the reporting of any cyber intrusion or breach that impacts critical infrastructure.
- Define critical infrastructure sectors and outline reporting obligations for entities operating within these sectors.
- Create an online reporting portal for reporting cybercrimes.
- Create singular portal for reporting cybercrimes.
- Victims should be able to report using the internet, short codes, and dedicated reporting apps









Create Digital Evidence Handling SOPs



- The Namibian government should establish standard operating procedures on handling digital evidence.
- Law enforcement should collect, preserve, and analyze digital evidence using a forensically sound methodology.
- Digital forensics labs should be established at the CSIRT and law enforcement agencies.
- Because digital evidence is volatile, collecting it properly is important to help attribute cybercrimes.







Cybersecurity Requirements

- Namibia should develop and implement a national cybersecurity strategy.
- Namibia should work with industry stakeholders to develop and maintain cybersecurity standards and best practices for critical infrastructure sectors.
- Critical infrastructure sectors and government agencies should implement cybersecurity measures in accordance with international standards.
- Regular cybersecurity audits and assessments shall be conducted to ensure compliance with the established standards.
- Compliance with these standards shall be encouraged through incentives and recognition.









International Cooperation

- International cooperation allows law enforcement agencies to share information about cybercriminals and cyber attacks.
- International cooperation can help law enforcement agencies to investigate and prosecute cybercrimes that cross borders.
- International cooperation is also important for developing and implementing international cybersecurity standards.
- In 2022, the disruption of the Emotet botnet was the result of a coordinated effort between law enforcement agencies in the United States, the United Kingdom, and the Netherlands.









Awareness Campaigns

- Namibia should launch national cybersecurity and cybercrime awareness programs aimed at educating citizens, businesses, and organizations.
- Cybersecurity and cybercrime education should be integrated into the national curriculum at primary, secondary, and tertiary levels to promote cybersecurity awareness from an early age.





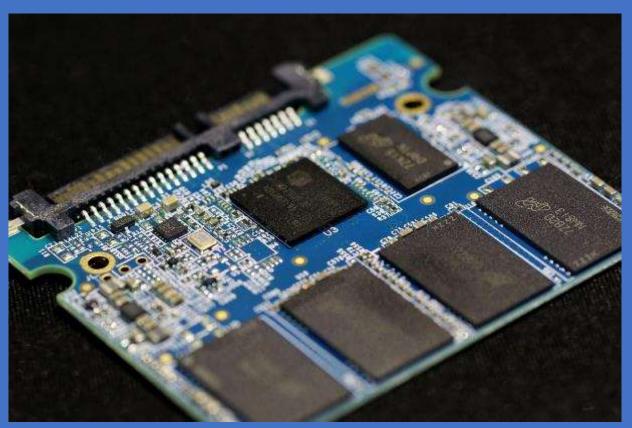




Budget and Resource Allocation

Funding cybersecurity and cybercrime will ensure :

- Developing and implementing cybersecurity policies and standards.
- Attract and retain skilled cybersecurity professionals.
- Reduce the risk of cyber attacks.
- By investing in cybersecurity, Namibia can make it more difficult for cybercriminals to launch successful attacks.
- Funding should be provided to establish and maintain digital forensics labs.









Mandatory Data Retention

- Specify the types of data that electronic service providers are required to retain.
- Mandate a minimum data retention period of at least one year for the specified data types.
- Mandate stringent data protection requirements to prevent abuse.
- Mandate a data preservation process for electronic service providers.









Legal Processes for Requesting Data

- Namibia should create a streamlined process for requesting digital evidence from ESPs.
- Subpoena A subpoena is an administrative request that compels a person or organization to produce evidence in a legal proceeding.
- Search Warrant A search warrant is a court order that authorizes law enforcement to search a particular place or seize specific items. Court Order - A court order is a general term for any order issued by a judge









QUESTIONS?









