

# EMERGING TRENDS & CONTROLS CYBER CRIME & CRYPTO CURRENCY

Presented in Mombasa

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#### Menu .....

■ Introduction

□ Cyber and Crypto

□ Conclusion

Question and Answer

#### FRAUD IS .....



- 1. Wrongful or criminal deception intended to result in financial or personal gain.
- 2. Is an intentionally deceptive action designed to provide the perpetrator with an unlawful gain, or to deny a right to a victim.
- 3. In law, fraud is deliberate deception to secure unfair or unlawful gain, or to deprive a victim of a legal right.

#### Factors that lead to Fraud ....



Three elements must exist for an individual to act unethically: "The Fraud Triangle"



## Factors that lead to Fraud ....



Perpetrators of Fraud need an Incentive/ Pressure to engage in Misconduct

There must be an **Opportunity** to commit fraud

The perpetrators are often able to Rationalize and justify their acts

Capability by *Lambrosso* 

#### Types of Fraud....



☐ Asset Misappropriation : Cyber crimes

☐ Bribery and Illegal Gratuity

☐ Financial Statement Fraud

#### Types of Fraud ....



#### 5. Money Fraud:

- Skimming Stealing info from a credit card through an electronic device called wedge that records info
- Phishing Using internet Banking to access info
- Card Stealing of ATM Cards
- Counterfeit Money Production of Fake bills

## Ways of Preventing Fraud .....



☐ Keeping the three layers of defence:

Process Owner – Risk Management – Internal Audit

☐ Each Role must be Robust

#### Cybercrime is?



An illegal act by use of a computer to carry out criminal activity by hacking i.e. Stealing organization info for personal benefit, e.g. Financial fraud, identity theft, website defacement, cyber bullying, e.t.c



#### Types of Cybercrime....



- Computer Assisted Crimes e.g. Mpesa Hacking
- Computer Targeted Crimes e.g. Systems Failure
- Computer is Incidental e.g. Illegitimate Websites

#### Who Commits Cybercrime....



- 1. Crackers they intent on causing loss to satisfy hidden motives or for fun
- 2. Hackers Explore other private secured networks or computer systems to get to know info for a purpose
- 3. Career criminals
- 4. Cyber terrorists
- 5. Cyber bullies

Personalities again is important

#### Hitting an Organization....



- ☐ Viruses Number six will shock you....wewe ni mshindi
- ☐ Hacking Gives access to Restricted information
- ☐ Cracking Causes loss of information



#### How do you Investigate....

- ☐ Create a Hypothesis :true or false....avoid decoys
- ☐Accept or close
- ☐ Analyse facts
- □ Interview and be factual no recommendation

#### Controlling Cybercrime....



- 1. Regular backup of information
- 2. Restricted access to sensitive information
- 3. Installation of firewalls
- 4. Upgrading your operating systems regularly
- 5. Install intrusion detection and an emergency notification system
- 6. Enforcing the Computer Use and Cybercrimes Act 2018

#### Crypto currency ....



A Crypto currency is a digital asset designed to work as a medium of exchange that uses strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets.

Cryptography is a language known to only two individuals

Nakamoto - Unknown

## How does Crypto currency work ....



Cryptocurrency is an encrypted, decentralized digital currency transferred between peers and confirmed in a public ledger via a process known as mining.

#### Types of Crypto currencies....



## The 6 Most Common Crypto currencies Other Than Bitcoin

- 1) Litecoin (LTC) Litecoin, launched in the year 2011,
- 2) Ethereum (ETH)
- 3) Zcash (ZEC)
- 4) Dash (DASH)
- 5) Ripple (XRP)
- 6) Monero (XMR)

### Working of the Blockchain....



A blockchain is a digitized, decentralized, public ledger of all cryptocurrency transactions.

A global network of computers uses **blockchain technology** to jointly manage the database that records Bitcoin transactions.

That is, Bitcoin is managed by its network, and not any one central authority.



Thank

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