

## **A Call to Africa:**

# **Fighting Cybercrime through Cybersecurity Awareness**

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## The mobile phone explosion in Africa

- Mobile phones will account for almost one-tenth of African GDP by the end of the decade

Africa calling: mobile phone revolution to transform democracies

<https://www.theguardian.com/world/2016/aug/08/africa-calling-mobile-phone-broadband-revolution-transform-democracies>, Aug 2016



## The mobile phone explosion in Africa

- The (mobile) sector contributed \$100bn (£76bn) to sub-Saharan Africa's economy in 2014 and is expected to account for three times that in 2020.
- As handsets and data become more affordable, greater accessibility to mobiles ... is changing the way in which public services are delivered and business and politics are being conducted.
- Pros and Cons
- Biggest consequence – increase Cyber crime



## Greater use of mobile technology

- increase in cybercrime



## Cisco 2017 Annual Cybersecurity Report.

- ‘... African countries lost at least \$2 billion in cyberattacks in 2016’
- Kenya recorded the highest losses — \$171 million — to cyber criminals.
- Tanzania lost \$85 million while
- Ugandan companies lost \$35 million.

<https://www.standardmedia.co.ke/business/article/2001235820/kenya-worst-hit-in-east-africa-by-cyber-crime>, April 2017



**How do we fight this cybercrime?**

**Increase Cybersecurity Awareness**

- decrease cybercrime



## 2015 Cyber Security Report

**‘...confirms Security Awareness and Training measurably reduces Cyber Security Risk’**

**‘An investment in user awareness and training effectively changes behavior and quantifiably reduces security-related risks by 45% to 70%’**

<https://www.wombatsecurity.com/press-releases/research-confirms-security-awareness-and-training-reduces-cyber-security-risk>



## Recent KPMG Cyber Forum

‘... stressed the need for increased drive for (security) awareness ... in Nigeria and indeed Africa’

<https://guardian.ng/business-services/at-forum-kpmg-intensifies-call-for-more-cyber-security-in-nigeria/>





## AFRICA CYBER SECURITY REPORT 2016

Top priorities for

- the Continent – Security Awareness and Training
- Individual organizations – Security Awareness and Training

<http://www.serianu.com/downloads/AfricaCyberSecurityReport2016.pdf>



**If we want to fight cybercrime in Africa,  
we must urgently increase cybersecurity awareness**

- **Citizens**
  - **Users**
  - **NGOs**
- **Companies**
- **Government departments**



## Where do we start?

- Cybersecurity Awareness (CSA) programs
- Most cost effective solution
- Best investment to cyber protect against cyber attacks



- **Africa is crying out for comprehensive CSA programs!**
  - Many reports indicate that
    - GCSCC - Oxford
  
- **Are there any success stories of running CSA programs**



## CSA initiative in SA

- **Centre for Cyber Security (CCS), University of Johannesburg**  
**[www.cybersecurity.org.za](http://www.cybersecurity.org.za)**
- Certificate in Cyber Security (part time)  
(about 170 Certificates awarded since 2012)
- Certificate in Cyber Security (online – available world wide)
- Certificate in Cyber Security Awareness (5 days)
  - \* Government department
  - \* Train the trainer
  - \* Trainers will offer the course
  - \* monitored and overseen by CCS
  - \* Certificate in CS Awareness



# Proposal

- **Create an African wide standardized Introductory Course for Cyber Security Awareness**
- **Role players**
  - SADC
  - AU
  - ???
- If we have the political will, it CAN and WILL be successful



# Breaking News

**New IEEE SIG for ‘Big Data and Cyber Security’**

**Vice-Chair for Africa**



# Thanks

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