



Trust in, and value from, information systems

Kenya Chapter



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President's Address

Dear Esteemed Member

As we head into the 08 August 2017 elections, we would like to urge our members to continue observing peace and upholding the highest standards of professionalism, before, during and after the elections. ISACA is non-partisan and we are respectful of one another despite different political views.


Elections are important for our democratic society and the nation is bigger than each of us. There will be Kenya after 08/08/2017.

Let peace reign in every heart, in every homestead and every corner of our country.

**Thank you and GOD Bless you,
GOD Bless Kenya
President - ISACA Kenya**

**SECURE KENYA
ANNUAL
CONFERENCE**

**MANAGING INFORMATION SECURITY IN A
DISRUPTIVE IT LANDSCAPE**

 **24th - 26th May 2017**

The 2017 ISACA annual conference on managing information security in a disruptive IT landscape took place at the Pride Inn paradise resort between May 24th and May 26th, 2017. The theme was congruent to the current trends in technology disruptions in various sectors posing a challenge to organizations in keeping abreast with the various information security threats and attacks. For more <http://www.isaca.or.ke>



ENSURING ELECTIONS' CREDIBILITY THROUGH SECURING TECHNOLOGY

by David Kyalo Musyoka

Information Security is becoming something we cannot ignore or sweep under the rug. The impact and consequences of weak information security controls have been felt across different realms in recent days. From businesses to military and now elections. Information Security cuts across the board!

For instance, last year's USA elections were riddled with claims that the elections had been hacked. However, it is worth noting that the claims contain no evidence that the hackers were successful in manipulating the physical vote count. Rather, the reports suggest that the hackers gained access to confidential information and leaked it influencing the voter's judgement and choice.

Similarly, simple technological failures that comprised of lack of electricity in some polling stations, devices running out of battery charge and network connectivity issues played a role in undermining the credibility of Kenya's 2013 elections.

The lesson here is that it is not sufficient to only secure the physical count of the votes. There are many other aspects of an election, besides the physical votes, that must be safeguarded for an election to be considered credible. For example, if the physical vote count is not manipulated but the results are delayed, this may bring suspicion and undermine credibility. Therefore, securing the technology in use, ensuring timeliness of the results tallying and so on, are part of ensuring credible elections.

In the upcoming elections, Kenya's IEBC, has adopted the Kenya Integrated Election Management System (KIEMS) to support various aspects of the election. These include: Biometric Voter Registration System (BVR), Candidates Registration System (CRS), Electronic Voter Identification System (EVID) and the Results Transmission and Presentation System (RTS).

Below are key focus areas around Information Security that the IEBC should ensure are well-addressed.

Firstly, the IEBC should ensure adequate testing and training of users of the technology. There should be no usability concerns. The IEBC should also diffuse any vulnerabilities by having redundancies in terms of connectivity and locations where the servers are hosted. Decentralizing the systems and having backups achieves much in ensuring that the systems cannot all be hacked simultaneously and avoids a situation where there is a single point of failure. There should be no downtime at all.

Strong user access controls restricting access to only authorized users of the systems will help avoid unauthorized access. A cleaned up voter register will ensure integrity of the registration data, both accuracy and completeness.

The Commission should also put in place adequate incident management processes and escalation procedures in the unlikely event of unforeseen technology issues or system failures.

Ensuring Audit logs are maintained is also crucial. Audit trails maintain a record of system activity both by system processes and by users. Audit trails can assist in detecting security violations, performance problems, and flaws in the systems. Vulnerability Assessments and Penetration Tests can also improve confidence around the control environment. Reliance on different telecommunication providers for transmission is also imperative to avoid claims of bias.

In conclusion, the technology must be of impeccable credentials and just like Caesar's wife – beyond reproach! There should be no room for suspicion or doubt around the technology deployed. I am confident that this time round, Technology will be an enabler of credible elections rather than a stumbling block or a point of suspicion. GOD Bless Kenya!

David Kyalo Musyoka is Research Director – ISACA Kenya Chapter

HOW TO DEAL WITH RANSOMWARE - PREVENT, DETECT RECOVER

David Kitonga, ISACA Kenya Chapter Member

Every 10 seconds, a consumer gets hit with ransomware. (up from every 20 seconds in Q1 2016). Every 40 seconds, a company gets hit with ransomware. (up from every 2 minutes in Q1 2016). Ransomware is a type of malware (malicious software intended to cause damage) that blocks access to the victim's data and threatens to publish or delete it until a ransom is paid.

Have a thought leadership article that you would like to share, please submit to the editorial team. Email: Communications@isaca.or.ke

RECENT RANSOMWARE STATISTICS 2016-2017

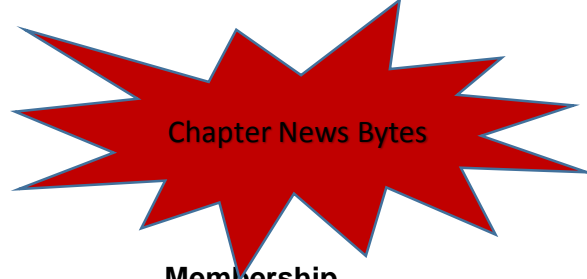
- Ransomware emails spiked over 6,000%
- 40% of all spam email had ransomware
- 59% of infections came from email
- 92% of surveyed IT firms reported attacks on their clients.
- Infections hit 56,000 in a single month.
- Attacks expected to double in 2017.
- Healthcare & Financial Services hardest
- 70% of businesses paid the ransom.
- 20% of businesses paid more than \$40,000.
- Less than 25% ransomware attacks reported.
- Most businesses face at least 2 days of downtime.

Statistics courtesy of: <http://invenioit.com>
blog.sparkly.com

	PREVENT	DETECT	RECOVER
END USER	<ul style="list-style-type: none"> • Targeted user awareness • Updated operating systems • Non admin accounts 	<ul style="list-style-type: none"> • Antivirus with proactive defense • Email filtering and antispam 	<ul style="list-style-type: none"> • Data loss protection software
SERVERS	<ul style="list-style-type: none"> • Hardened server configurations • Lock down service accounts 	<ul style="list-style-type: none"> • Server anti virus • Server files changes monitoring systems 	<ul style="list-style-type: none"> • High availability setup • Cold stored tested backups
NETWORK	<ul style="list-style-type: none"> • Trusted zones and segmentation • Secure baseline configuration • Firewalls and DMZ 	<ul style="list-style-type: none"> • Intrusion prevention and detection • Scheduled penetration testing 	<ul style="list-style-type: none"> • Secure cold configurations stored offsite • Redundancy and load balanced networks
ALL	<ul style="list-style-type: none"> • Continuous vulnerability and patching schedules 	<ul style="list-style-type: none"> • Honeypots 	<ul style="list-style-type: none"> • Continuous testing of business resilience procedures

ISACA Kenya Chapter Newsletter vo1/2017 July –Sept 2017





Membership

- **ENJOY 50% OFF BASIC DUES FROM 1 JUNE- 31 JULY!**
- 1 June-31 July marks our annual 50% sale on basic membership dues, making this the optimal time for new members to join

ISACA NOW OFFERS TWO NEW MEMBERSHIP TYPES

- **Recent Graduate Membership:** For those that have just graduated from a college or university within the last 2 years. Total annual dues are USD 83 only.
- **Student Membership:** Student membership is limited to individuals currently enrolled full-time in accredited undergraduate and graduate programs. Total annual dues are USD30 only.

ISACA Kenya holds Inaugural Inter-Varsity Bootcamp

- ISACA Kenya hosted its first ever intervarsity Bootcamp at the USIU-A campus from Monday, April 24 to Friday, April 28. It was attended by 32 students from USIU-A, Strathmore University, University of Nairobi, Jomo Kenyatta University of Agriculture and Technology (JKUAT) and Moi University.
- The camp which was organized by Mrs. Paula Musuva-Kigen the Academic Relations Director at ISACA and was facilitated by five other ISACA Members Denis Mutinda (President), Raymond Bett (Vice President), Fredrick Bitta (Certifications Director), John Walubengo and Jona Owitti.
- The event was a week-long training focusing on two coveted industry certifications provided by ISACA. These are the Certified Information Systems Auditor (CISA) and the new Cyber Security certification Cybersecurity Nexus (CSX) fundamentals.
- The bootcamp will be an annual event hosted at different universities with the aim of mentoring the next generation of Information Systems Audit and Cyber Security professionals. It will provide a forum for industry professionals to work with academia in bridging the gap between academic qualifications and market competencies. ISACA Kenya members are encouraged to participate in future events particularly in publicizing them and volunteering to facilitate sessions. Members will earn mentorship CPE hours in appreciation.

Upcoming CPE Events

1. Africa CACS Conference

Venue : Accra , Ghana

Date: 11th to 12th Sept 2017

2. Risk Based IT Audit Master Class

Venue : Mombasa

Date: 20th -22nd Sept 2017

3. COBIT 5 Foundation & Assessor

Venue: Nairobi

Date: 25th -30th Sept 2017

For more Info on the above and other CPE events, visit <http://www.isaca.or.ke>

& ISACA International

<https://www.isaca.org/pages/default.aspx>

Congratulations to our Exam top performers

June 2016 CGEIT

No. 1 411636 Mr. Paul Ekeno Koriang, CRISC

December 2016 CGEIT

No. 1 955211 Mr. Sukumerr Joseph Sukure

September 2016 CISA

No. 1 805640 Ms. Faith Moraa Ombongi

December 2016 CISA

No. 1 1027637 Mr. Mirigi Elias Kuria, CISA

September 2016 CISM

No. 1 998495 Mr. Brent William Roelens, CISM

December 2016 CISM

No. 1 881472 Mr. Martin Kioko Kilungu

June 2016 CRISC

No. 1 943467 Mr. Bernard Kihiko Kiore, CRISC

December 2016 CRISC

No. 1 160534 Ms. Hildah Waithira Nduati



Feedback , Updates and Social

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@IsacaKenya



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<http://www.isaca.or.ke>

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