## Cyber Insurance Trends

Verengai Mabika Senior Policy Advisor - Africa

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Internet

Society

### Cyber Insurance – market dynamics The cost and risks of cyber attacks are increasing

### **Cyber Threat Landscape**

- Cybersecurity events and costs are increasing:
  - 79% of survey respondents detected a security incident in the past 12 months<sup>1</sup>
  - Average total cost of a data breach increased 23% over the past two years<sup>2</sup>
  - Average cost paid for each lost / stolen record increased 6%<sup>1</sup>

#### Industry Outlook

- Data breaches are expected to reach \$2.1 trillion globally by 2019<sup>3</sup>
- 76% of survey respondents<sup>1</sup> were more concerned about cybersecurity threats than in previous 12 months:
  - Increase from 59% in 2014

### **Reputational Risk**

- An IT security breach can have serious implications in how a company is perceived:
  - 46% of companies suffered damage to reputation & brand value due to a security breach<sup>4</sup>
  - 19% of companies suffered damage to reputation & brand value due to a third-party security breach or IT system failure<sup>4</sup>
- The risk of losing customer trust is significant and rising:
  - 82% of customers would consider leaving an institution that suffered a data breach<sup>5</sup>

#### How much does **cyber-crime** cost the world's leading 10 economies?

a particular focus on the impact on the world's top 10 economies, according to GDP. \$200bn+ annual cost to top four economies. 5. UK 3. Germany 8. Russia \$445bn<sup>1</sup> annual cost to \$4.3bn \$59bn \$2bn the global economy 1. US \$108bn <sup>1</sup>CSIS/McAfee 7. France 9. Japan \$980m 2. China \$60bn 10. Italy \$900m 50%+ top 10 6. India economies share of \$4bn annual cost \$250bn cost of cyber-crime to 4. Brazil \$7.7bn world's 10 leading economies Rankings according to cyber-crime costs **Country Ranking** Cyber-crime as Estimated **Country Ranking** Cyber-crime as Estimated a % of GDP<sup>2</sup> cost<sup>3</sup> by GDP<sup>1</sup> a % of GDP<sup>2</sup> COSt<sup>3</sup> by GDP<sup>1</sup>

UK

Brazil

Russia

Italy

India

\$2.7tm

\$2.4tm

\$2.1tm

\$2.1tm

\$1.9tm

.16%

.32%

.10%

.04%

.21%

6

0

8

9

10

\$4.3bn

\$7.7bn

\$2bn

\$900m

\$4bn

This AGCS atlas examines the estimated total cost to the global economy from cyber-crime per year, with

Sources: 1World Bank (2013) 2Net Losses: Estimating the Global Cost of Cyber-Crime, CSIS/McAfee 3Allianz Global Corporate & Specialty

\$108bn

\$60bn

\$980m

\$59bn

\$3bn

\$16.8tm

\$9.5trn

\$4.9trn

\$3.7trn

\$2.8trn

.64%

.63%

.02%

1.60%

.11%

US

China

Japan

Germany

France

a

2 8

4

6

Breakdown of key statistics for In-Scope countries:

	Ť <b>Ť</b> Ť	Population (2016 Est.)	7	GDP (2016)	1 7	ternet users & ubscribers (2016)	2	Estimated Cost of cyber- crime (2016)		Estimated No. of Certified Professionals
Africa		1,185,529,578		\$2.89T		340.783.342		\$2B	Ĭ	6892
Nigeria		186,879,760		\$481.066	3	97,210,000		\$550M	L	1500
Kenya		46.790.758		\$63.398B		37.716.579		\$175M		1400
Tanzania		52,482,726		\$44.895B		17,263,523		\$85M		250
Ghana 🦉		26,908,262		\$37.86 B		19,125,469		\$50M		460
Uganda 🎽		38.319.241		\$26.369B		14.564.660		\$35M		300

\*Certified Professionals is limited to the following certifications: CISA, CISM, GIAC, SANS, CISSP, CEH, ISO 27001 and PCI DSS QA \*Economic and internet usage data extracted from respective country Internet regulator reports and World Bank site.

### Malawi Veep to lead in cyber security meeting

#### SECURITY

### Tanzania creates first cyber-crime laws



### US Man Sues Ethiopian Government for Spyware Infection

By AFP on February 19, 2014

### Rwanda National police warns internet users against cyber crime

The Observer (Kampala) »

19 AUGUST 2015

Uganda: Banks, Telecoms Remain Top Cybercrime Targets -Experts

Tagged: Business • East Africa • ICT • Legal Affairs • Uganda

# How developed is Cyber Security in select member countries?

- Report developed by International Telecommunication Union (ITU)
- Key indicators for cyber security development are:
  - •Legal
  - Technical capacity
  - •Organizational
  - •Capacity Building
  - Cooperation

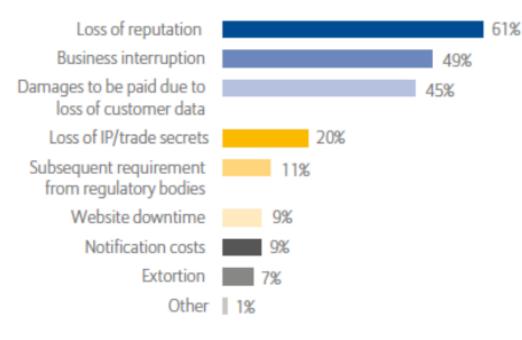
Country	<b>GSI Rank</b>				
Mauritius	1				
Uganda	2				
Rwanda	3				
Kenya	5				
South Africa	6				
Tanzania	11				
Botswana	12				
Malawi	12				
Zambia	13				
Burundi	14				
Angola	15				
Mozambique	16				
Swaziland	16				
Zimbabwe	17				
Ethiopia	17				
Namibia	18				
Lesotho	18				

Source: GLOBAL Cybersecurity Index & Cyberwellness Profiles Report 2015 Cyber Risk • any risk of financial loss, disruption or damage to the reputation of an organisation from some sort of failure of its information technology systems (includes networks & the internet).

### Where is the market headed?

"The pace of change is slow in insurance. [Real change] will be slower than [in] other industries. The question is when it will happen – 5, 10, 20 years?" -Anonymous Director

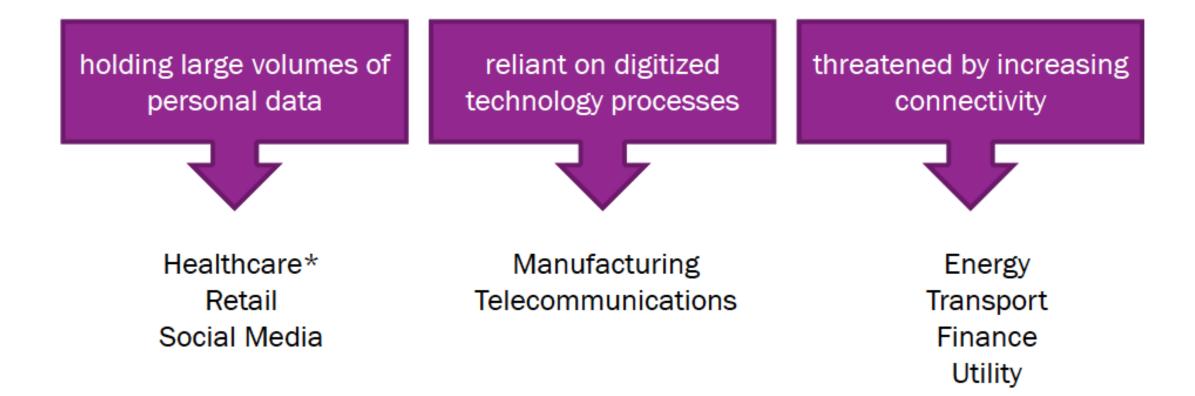
# Which cyber risks are the main cause of economic loss?



- Few new products or services being offered by insurers
- · Move from selling products to comprehensive services

Source: Allianz Risk Barometer 2015. Figures represent a percentage of all eligible responses to the questions (127 in total). More than one risk selected.

## Sector Trends: Current and Future Insurance Customers



### **Cyber Insuarance Coverages fall into 4 categories:**

1. **Liability**—defense and settlement costs for the liability of the insured arising out of its failure to properly care for private data

2. **Remediation**—response costs following a data breach, including investigation, public relations, customer notification, and credit monitoring

**3. Regulatory Fines and/or Penalties**—the costs to investigate, defend, and settle fines and penalties that may be assessed by a regulator; most insurers do not provide this coverage, although there can be coverage for defense costs

4. PCI (Credit Card) Fines and Penalties, including forensic services and card reissuance costs

### **Regional Trends**

North America: 87% of the overall cyber insurance market Mandatory legislation in several U.S. states 2015: U.S. insurance industry generated \$1 billion in direct written premium volume for cyber insurance

Europe: Incoming 2018 regulations regarding data protection and security

Asia Pacific: Negligible Projected to increase due to ransomware

# Conclusion

- Cyber risk is an emerging risk in the world
- Legal framework for insurable legal liability is generally under development across east & southern African countries
- There is demand for cyber risk insurance
- Where pricing data is not available proxies can be developed
- Underwriting will depend on risk management and culture of the client