Cyber Insurance Trends

Verengai Mabika
Senior Policy Advisor - Africa
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\(^1\)
  - Average total cost of a data breach increased 23% over the past two years\(^2\)
  - Average cost paid for each lost / stolen record increased 6%\(^3\)

Industry Outlook

- Data breaches are expected to reach $2.1 trillion globally by 2019\(^3\)
- 76% of survey respondents\(^1\) 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\(^4\)
  - 19% of companies suffered damage to reputation & brand value due to a third-party security breach or IT system failure\(^4\)
- The risk of losing customer trust is significant and rising:
  - 82% of customers would consider leaving an institution that suffered a data breach\(^5\)
How much does cyber-crime cost the world’s leading 10 economies?

This report examines the estimated total cost to the global economy from cyber-crime per year, with a particular focus on the impact on the world’s top 10 economies, according to GDP.

1. US $108bn
2. China $60bn
3. Germany $59bn
4. Brazil $7.7bn
5. UK $4.3bn
6. India $4bn
7. France $3.8bn
8. Russia $2bn
9. Japan $380bn
10. Italy $90bn

50%+ top 10 economies share of annual cost.

$250bn cost of cyber-crime to world’s 10 leading economies.

$100bn+ annual cost to top four economies.

$445bn+ annual cost to the global economy.

Rankings according to cyber-crime costs.

<table>
<thead>
<tr>
<th>Country Ranking by GDP¹</th>
<th>Cyber-crime as a % of GDP²</th>
<th>Estimated cost²</th>
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<tbody>
<tr>
<td>1 US</td>
<td>$16.8bn</td>
<td>$108bn</td>
</tr>
<tr>
<td>2 China</td>
<td>$5.5bn</td>
<td>$60bn</td>
</tr>
<tr>
<td>3 Japan</td>
<td>$4.9bn</td>
<td>$580bn</td>
</tr>
<tr>
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</tr>
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<td>$90bn</td>
</tr>
<tr>
<td>10 India</td>
<td>$1.9bn</td>
<td>$4bn</td>
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Sources: ¹World Bank (2013) ²Net Losses: Estimating the Global Cost of Cyber-Crime, CIS/McAfee ³Allianz Global Corporate & Specialty
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<tr>
<td>Africa</td>
<td>1,185,529,578</td>
<td>$2.89T</td>
<td>340,783,342</td>
<td>$2B</td>
<td>6,892</td>
</tr>
<tr>
<td>Nigeria</td>
<td>186,879,760</td>
<td>$481.066B</td>
<td>97,210,000</td>
<td>$550M</td>
<td>1,500</td>
</tr>
<tr>
<td>Kenya</td>
<td>46,790,758</td>
<td>$63.398B</td>
<td>37,116,579</td>
<td>$175M</td>
<td>1,400</td>
</tr>
<tr>
<td>Tanzania</td>
<td>52,482,726</td>
<td>$44.895B</td>
<td>17,263,523</td>
<td>$85M</td>
<td>250</td>
</tr>
<tr>
<td>Ghana</td>
<td>26,908,262</td>
<td>$37.86 B</td>
<td>19,125,469</td>
<td>$50M</td>
<td>460</td>
</tr>
<tr>
<td>Uganda</td>
<td>38,319,241</td>
<td>$26.369B</td>
<td>14,564,660</td>
<td>$35M</td>
<td>300</td>
</tr>
</tbody>
</table>

*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

Tanzania creates first cyber-crime laws

Cyber crime worries Zambian police

Mobile Money Revolution Rises Cyber Security Risk In Africa

US Man Sues Ethiopian Government for Spyware Infection

Rwanda National police warns internet users against cyber crime

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

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<td>3</td>
</tr>
<tr>
<td>Kenya</td>
<td>5</td>
</tr>
<tr>
<td>South Africa</td>
<td>6</td>
</tr>
<tr>
<td>Tanzania</td>
<td>11</td>
</tr>
<tr>
<td>Botswana</td>
<td>12</td>
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<tr>
<td>Malawi</td>
<td>12</td>
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<tr>
<td>Zambia</td>
<td>13</td>
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<tr>
<td>Burundi</td>
<td>14</td>
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<tr>
<td>Angola</td>
<td>15</td>
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<tr>
<td>Mozambique</td>
<td>16</td>
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<td>Swaziland</td>
<td>16</td>
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<tr>
<td>Zimbabwe</td>
<td>17</td>
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<tr>
<td>Ethiopia</td>
<td>17</td>
</tr>
<tr>
<td>Namibia</td>
<td>18</td>
</tr>
<tr>
<td>Lesotho</td>
<td>18</td>
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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?

- Loss of reputation: 61%
- Business interruption: 49%
- Damages to be paid due to loss of customer data: 45%
- Loss of IP/trade secrets: 20%
- Subsequent requirement from regulatory bodies: 11%
- Website downtime: 9%
- Notification costs: 9%
- Extortion: 7%
- Other: 1%

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

- Few new products or services being offered by insurers
- Move from selling products to comprehensive services
Sector Trends: Current and Future Insurance Customers

- Holding large volumes of personal data:
  - Healthcare*
  - Retail
  - Social Media

- Reliant on digitized technology processes:
  - Manufacturing
  - Telecommunications

- Threatened by increasing connectivity:
  - Energy
  - Transport
  - Finance
  - Utility
Cyber Insurance 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