Cybersecurity Risks & Outlook
A Business Perspective
June 9, 2020
Agenda

What Does it Cost?
Threats to the Enterprise
Reducing the Cost of a Breach
Workforce Challenges
Protecting Yourself

All views expressed are those of the presenter unless otherwise noted and do not represent the opinion or position of any entity with which the presenter has been associated in the past, present or future.
## What Does It Cost?

<table>
<thead>
<tr>
<th>Global Averages</th>
<th>United States Averages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average total cost of a data breach</strong></td>
<td><strong>Average total cost of a data breach</strong></td>
</tr>
<tr>
<td>$3.92M</td>
<td>$8.19M</td>
</tr>
<tr>
<td><strong>Average size of a data breach</strong></td>
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<tr>
<td>25,575 records</td>
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</tr>
<tr>
<td><strong>Cost per lost record</strong></td>
<td><strong>Time to identify and contain a breach</strong></td>
</tr>
<tr>
<td>$150</td>
<td>279 days</td>
</tr>
<tr>
<td><strong>Time to identify and contain a breach</strong></td>
<td><strong>Cost per lost record</strong></td>
</tr>
<tr>
<td>245 days</td>
<td>$242</td>
</tr>
<tr>
<td><strong>Country rank for total cost</strong></td>
<td><strong>Highest industry average cost of $3.35 million</strong></td>
</tr>
<tr>
<td>1</td>
<td>Healthcare</td>
</tr>
<tr>
<td><strong>Highest country average cost of $6.19 million</strong></td>
<td><strong>Healthcare</strong></td>
</tr>
<tr>
<td>United States</td>
<td></td>
</tr>
</tbody>
</table>

Global spending on security hardware, software and services will top $103 billion in 2019, up 9.4 percent from 2018, with large enterprises spending the most, according to IDC data.

IDC projects that global spending on security will grow at a compound annual growth rate of 9.2 percent from 2018 to 2022. In 2022, IDC forecasts security-related spending till be $133.8 billion.

Worldwide spending on information security products and services will reach more than $114 billion in 2018, an increase of 12.4 percent from last year, according to the latest forecast from Gartner, Inc. In 2019, the market is forecast to grow 8.7 percent to $124 billion.

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*Cost of a Data Breach Report – 2019; Ponemon Institute, IBM Security*

https://databreachcalculator.mybluemix.net/executive-summary

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What Does It Cost?

Data breach root causes

- Malicious or criminal attack: 24%
- System glitch: 25%
- Human error: 51%

Data breach total cost broken down into four cost categories

- Detection & escalation: $1.42 million (20.2%)
- Notification: $1.22 million (17.1%)
- Post breach cost: $0.27 million (3.8%)
- Lost business cost: $0.21 million (3.1%)

Total cost: $3.92 million

Cost of a Data Breach Report – 2019; Ponemon Institute, IBM Security
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What Does It Cost?

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Top Threats & Actors

Verizon 2020 Data Breach Investigations Report
https://enterprise.verizon.com/resources/reports/dbir/

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The Biggest Cybersecurity Risks in 2020

A compilation of the biggest cybersecurity challenges based on approximately 500 presentations that were submitted for the February 24-28, 2020 RSA Conference, the world's largest gathering of CISOs, technologists and cybersecurity specialists.

1. Fakes and deep fakes
2. Smartphones are being used in surveillance attacks
3. Ransomware is getting more sophisticated as companies pay out.
4. Supply chain attacks are on the rise
5. DevOps speeds up software development but increases security risks
6. Emulation and decoy environments
7. Cloud incident response requires new tools and skills for in-house security teams
8. Artificial intelligence and machine learning
9. Hardware and firmware attacks are back
10. Power users need protection
11. The security industry is finally taking action on DNS spoofing

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The Biggest Cybersecurity Risks in 2020, December 20, 2019; Greg Day, Palo Alto Networks

Reducing the impact of a breach

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The Cybersecurity Workforce

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