THE COST OF MANAGING RISK

Washington township public schools

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Agenda

- What is risk and how is it measured?
- IT Risks
- No golden bullet
- System Patching & IT Risk

What is Risk and how is it measured?

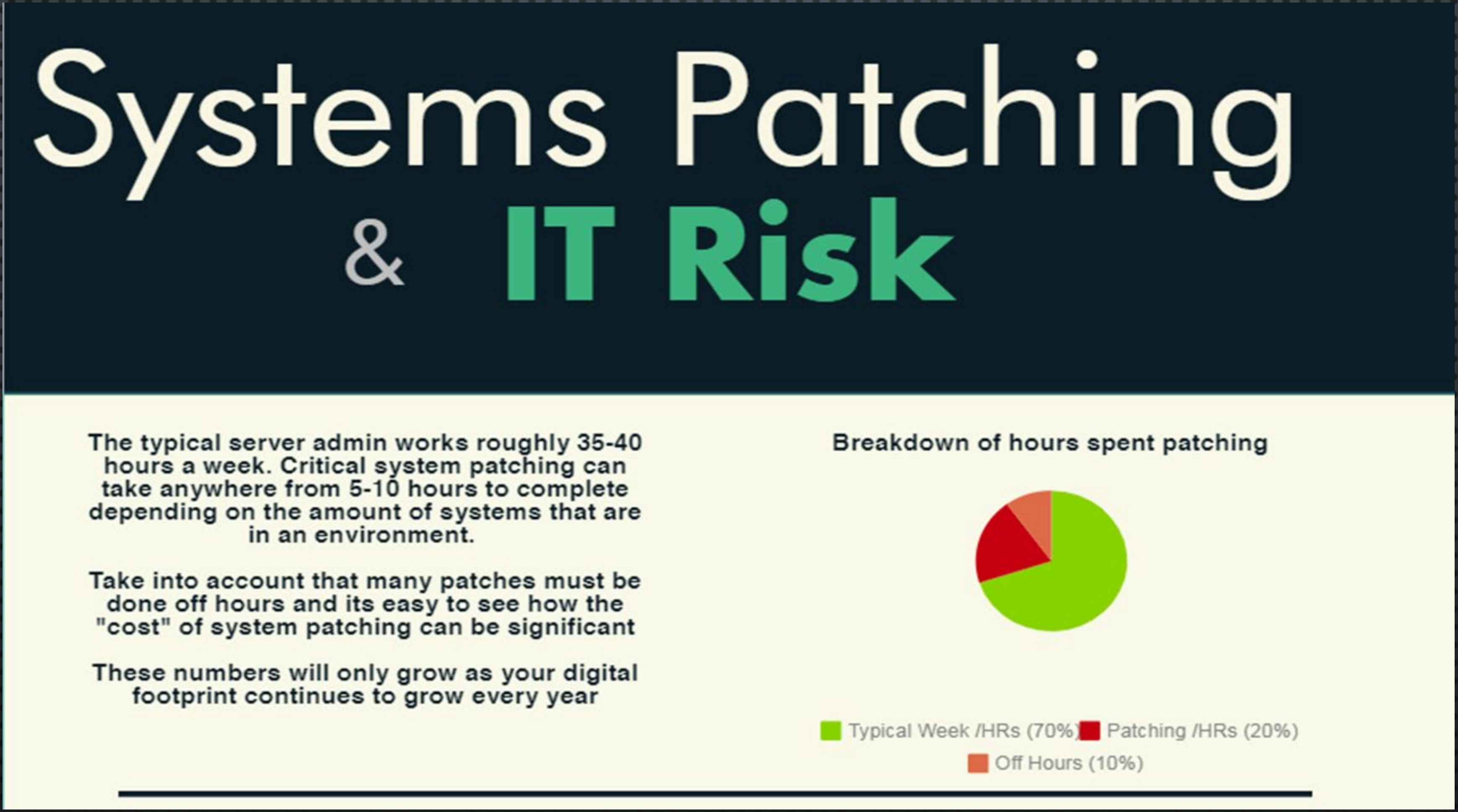
- Definition
  - Risk: A Situation involving exposure to danger.
  - IT Risk: the potential that a given threat will exploit vulnerabilities of an asset or group of assets and thereby cause harm to the organization
- Analysis
  - Simply put, what is the "expected pain and does it outweigh the potential reward?"?
    - Risk and Service availability
    - What are the possible bad outcomes?
    - How likely are they?

IT RISKS

- What is it we should be thinking about?
  - Threats
  - Vulnerabilities
  - Exposure
  - Asset values

NO GOLDEN BULLET

- It is impossible to completely mitigate risk as related to technology short of disconnecting from the internet. Even with limitless financial resources we cannot be completely safe. The best we can do is protect and defend against threats to the best of our abilities, by providing reasonable resources hopping our defenses will protect us, and prepare for disaster.



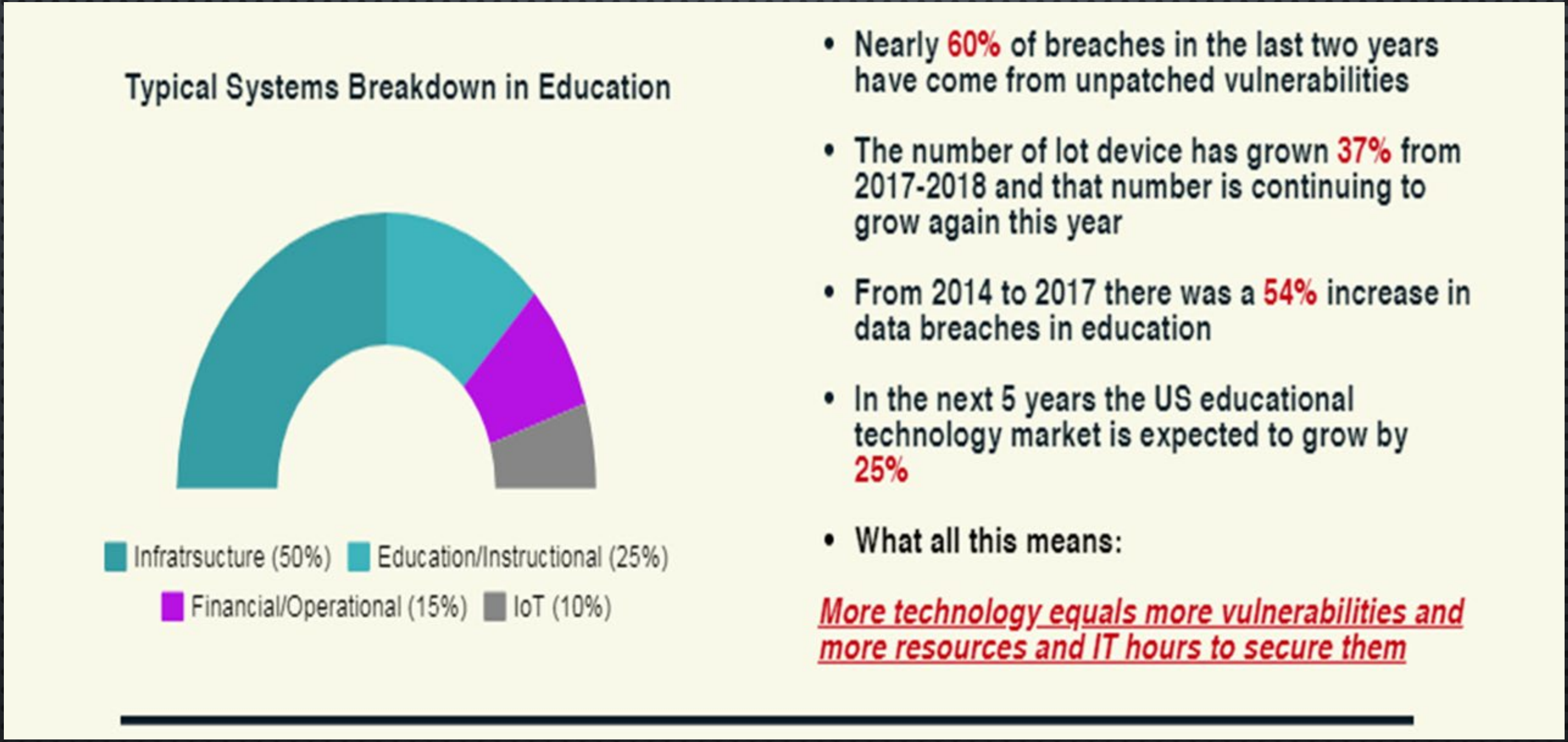
Systems Patching & IT Risk

The typical server admin works roughly 35-40 hours a week. Critical system patching can take anywhere from 5-10 hours to complete depending on the amount of systems that are in an environment.

Take into account that many patches must be done off hours and its easy to see how the "cost" of system patching can be significant

These numbers will only grow as your digital footprint continues to grow every year

Breakdown of hours spent patching

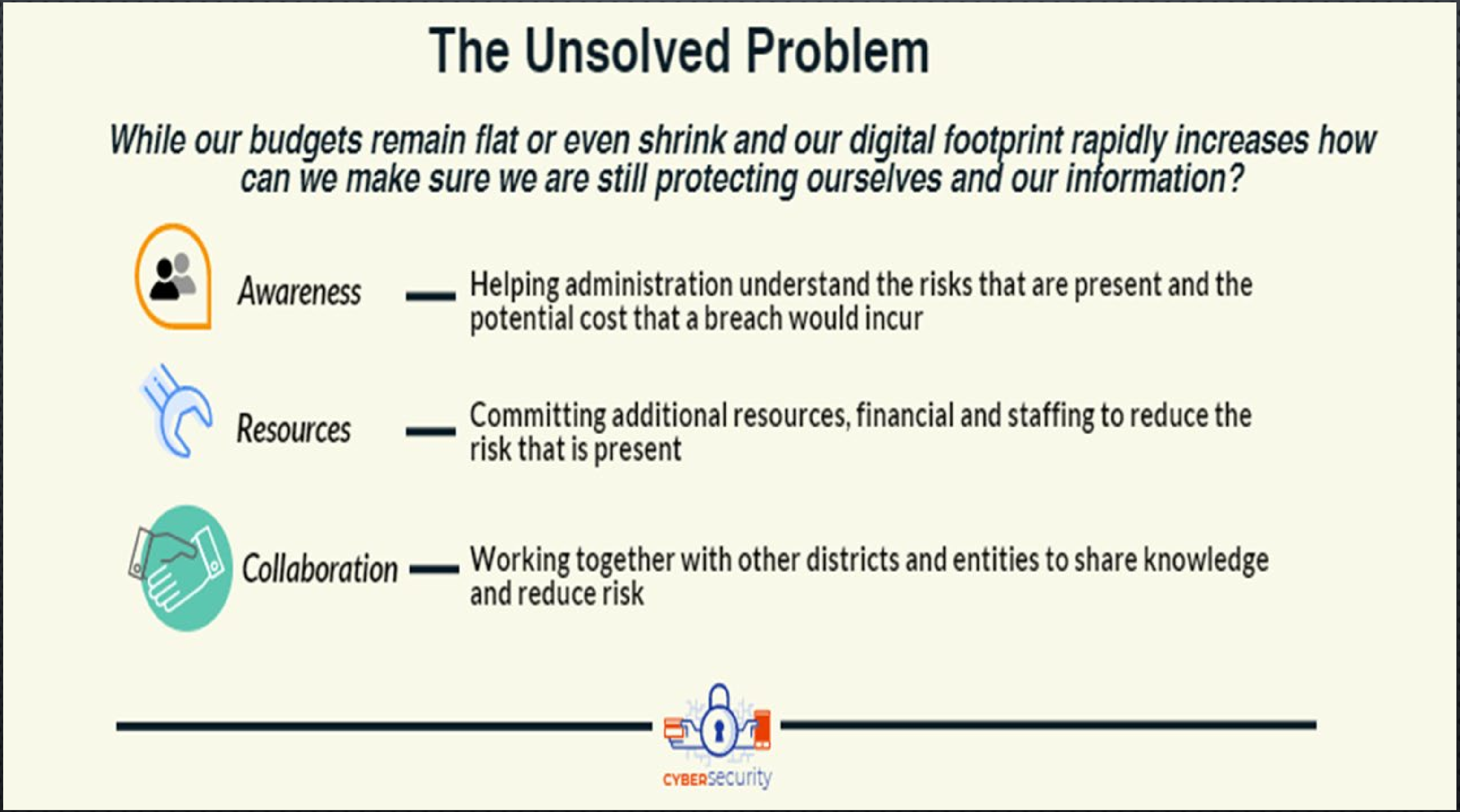


Typical Systems Breakdown in Education

- Nearly **60%** of breaches in the last two years have come from unpatched vulnerabilities
- The number of Iot device has grown **37%** from 2017-2018 and that number is continuing to grow again this year
- From 2014 to 2017 there was a **54%** increase in data breaches in education
- In the next 5 years the US educational technology market is expected to grow by **25%**
- What all this means:

More technology equals more vulnerabilities and more resources and IT hours to secure them

Sources: www.Darkreading.com, www.Iot-analytics.com, www.varonois.com



The Unsolved Problem

While our budgets remain flat or even shrink and our digital footprint rapidly increases how can we make sure we are still protecting ourselves and our information?

Awareness — Helping administration understand the risks that are present and the potential cost that a breach would incur

Resources — Committing additional resources, financial and staffing to reduce the risk that is present

Collaboration — Working together with other districts and entities to share knowledge and reduce risk

CYBERsecurity

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