

# Cybersecurity in Higher Education

# **Shifting to a Virtual Environment**

As higher education institutions shift to virtual learning and workforces, their exposure to cyber-related threats increases. The typical IT infrastructure, including networks, are open to accommodate the needs of the multi-faceted higher education stakeholders including current students, prospective students, administrators, faculty, donors, and, in some cases, the public. Institutions house a plethora of data including, but not limited to, confidential research, medical records, financial information, and valuable intellectual property. Further compounding these risks, colleges and universities were early adopters of tools and technologies that could today be considered legacy systems and may not have kept pace with current cyber security standards. Appropriate protective measures can mitigate the exposure of cyber-attacks and the potential damage to institutional reputation, intellectual property, student safety and well-being, and significant financial losses.

### A Look at the Numbers

**79%**Increase

According to Verizon's data breach investigations report (DBIR), the motivation behind cyber-attacks in higher education is mainly financial. From 2016 to 2018, financially motivated attacks rose from 45% to 79%. <sup>1</sup>

382

Education continues to be a primary target for cyber-attacks. There were 382 data incidents with 99 data breaches within the education industry according to the 2019 DBIR report.<sup>1</sup> It is worth noting that data breaches are not always reported or disclosed.

17th

In a 2018 cybersecurity evaluation report of 17 different U.S. industries, higher education's security posture ranked in last place. This is due to poor application and network security.<sup>2</sup>

## **Solutions**

The best solution is prevention. There are various strategies to mitigate risk and address vulnerability especially with the increase of remote work and virtual instruction. Cybersecurity is a shared responsibility that involves all levels of an organization working together.

- Cybersecurity strategy
- Training and awareness
- Security protocols
- Identity and access management
- Shared-services models
- Cloud security
- ...and more!

### Proven Performance. Forward Thinking.

Based in McLean, Va., Attain is a leading management, technology, and strategy consulting firm comprised of innovative problem solvers who disrupt the status quo to change the world and improve the lives of those they serve. Powered by extreme automation, Attain leverages a holistic, agile, secure, and customer-centered approach to digital transformation, advancing our clients' missions across the education, nonprofit, healthcare, and government landscapes.

Retrieved 1 April 2020 from https://enterprise.verizon.com/resources/reports/dbir/2019/educational-services/

<sup>&</sup>lt;sup>2</sup> Retrieved 1 April 2020 from https://securityscorecard.com/resources/2018-education-report