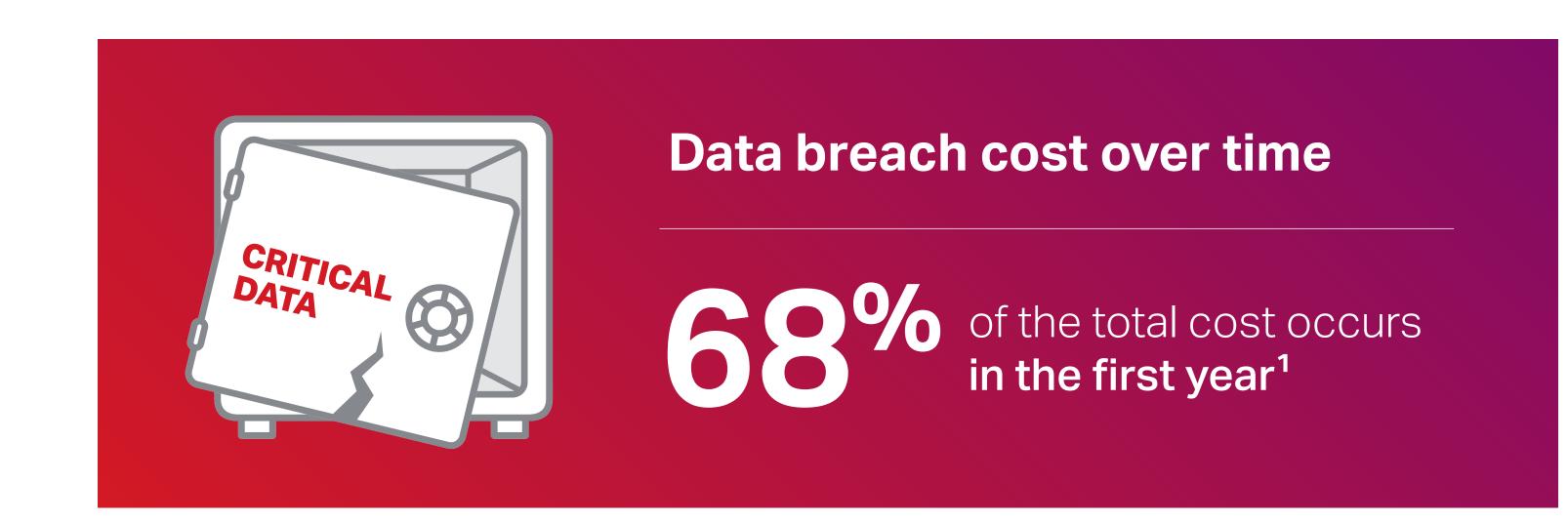
Data Security Risks Lurk Everywhere

In a world where the risks to your data lurk everywhere and the stakes to your future have never been higher, it's

essential to protect the lifeblood of your business.



Data Security is a Growing Concern

Data drives most enterprises today, and securing that data is imperative.

More than 22.7 billion² records exposed in 2021

Per record cost of PII

Per record cost

Customer personally identifiable information (PII) was the most common and most costly type of record lost in 2021¹

Average data breach lifecycle

287 days to identify and contain a data breach¹

Data breach cost: \$4.24 million

average organizational cost



It's easier than ever to infiltrate a fiber optic cable. Hackers are virtually undetectable and their fiber tap can collect critical data for days, weeks, or even months.

Neglecting the risk of fiber optic cable intrusion is a gap in your security strategy. Breach resolution and lost business costs are staggering. Is your in-flight data fully protected?



In-flight Data Security Solutions

Traditional higher layer versus optical layer

What are companies doing to protect their data?



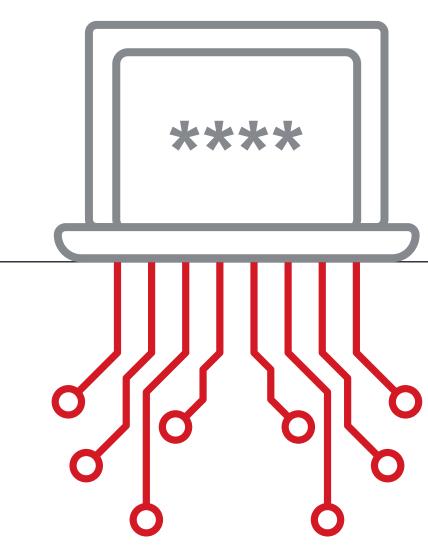
are using encryption for protection of sensitive customer information.³



2% of global companies

have deployed a consistent encryption strategy across their enterprise. More than twice as many as ten years ago.3

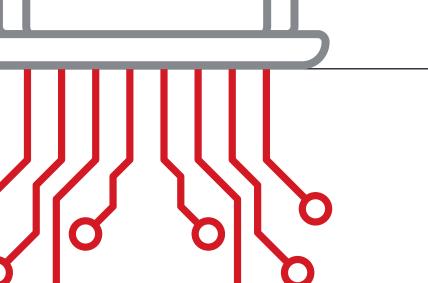
Higher Layer Encryption



Increased latency

- Increased CAPEX/OPEX: requires protocol-specific HW
- Inefficient use of bandwidth Complicated key management

Optical Layer Encryption



Lower latency

- Lower CAPEX/OPEX: integrates directly into the network
- Protocol-agnostic for flexible services
- 100% data throughput
- Simple dedicated end-user key management

Wavelogic[™] Encryption

Secure every bit of your in-flight data all of the time

Minimize your data security risks with in-flight data protection as part of your holistic security policy. Ciena's protocol-agnostic, wire-speed encryption is simple to implement, enabling a highly secure network infrastructure to safeguard all of your critical data, all the time—whether it is traveling across the street, across the city, or across borders.



Always-on encryption



capacity



latency



Third-party certified



Dedicated end-user key management

cuna

Learn more at ciena.com

Sources:

IBM Corporation. Cost of a Data Breach Report 2021. Retrieved from IBM. This year's annual study was conducted in **537 organizations in 17 countries or regional samples:** the

United States, India, the United Kingdom, Germany, Brazil, Japan, France, the Middle East, Canada, Italy,

South Korea, Australia, Turkey, ASEAN, South Africa, Scandinavia and, for the first time, Latin America. Risk Based Security and Flashpoint. 2021 Year End Data Breach QuickView Report. Retrieved from Risk

Based Security. Ponemon Institute. 2022 Global Encryption Trends Study. Retrieved from Entrust.