NATIONAL ASSOCIATION OF STATE TREASURERS

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Honorable Josh Haeder, South Dakota State Treasurer
Jim Edman Chief Information Security Officer
Bureau of Information & Telecommunications

10/2/2019

STATE OF SOUTH DAKOTA

- ~890,000 population, 5th smallest
  - 187,000 Sioux Falls; 74,000 Rapid City; 28,388 Aberdeen
- 77,000 square miles, 17th largest
- #1 Industry Retail + Finance + Health Care
- #2 Industry Government
- State Budget: $4.9B ($1.7B General Funds)
- 14K FTE (including Higher Education)
- No State Income Tax
- Lake Oahe – 231 miles (Missouri River)

- Centralized I/T / statewide
- ~9,000 computers

SouthDakota

NASCIO
Representing Chief Information Officers of the States

Since 2014

STATE CIO TOP 10 PRIORITIES

2019 Strategies, Management & Process Solutions

1. **Security and Risk Management**
governance; budget and resource requirements; security frameworks; data protection; training and awareness; insider threats; third party security practices as outsourcing increases

Critical Cyber Security Recommendations

Backup Your Data

- Decouple Backup
- Test Restoring It

Apply Automatic Updates & Patches

- Windows, Adobe, Java, etc.

Education & Training

- Cybersecurity
- Business Email Compromise

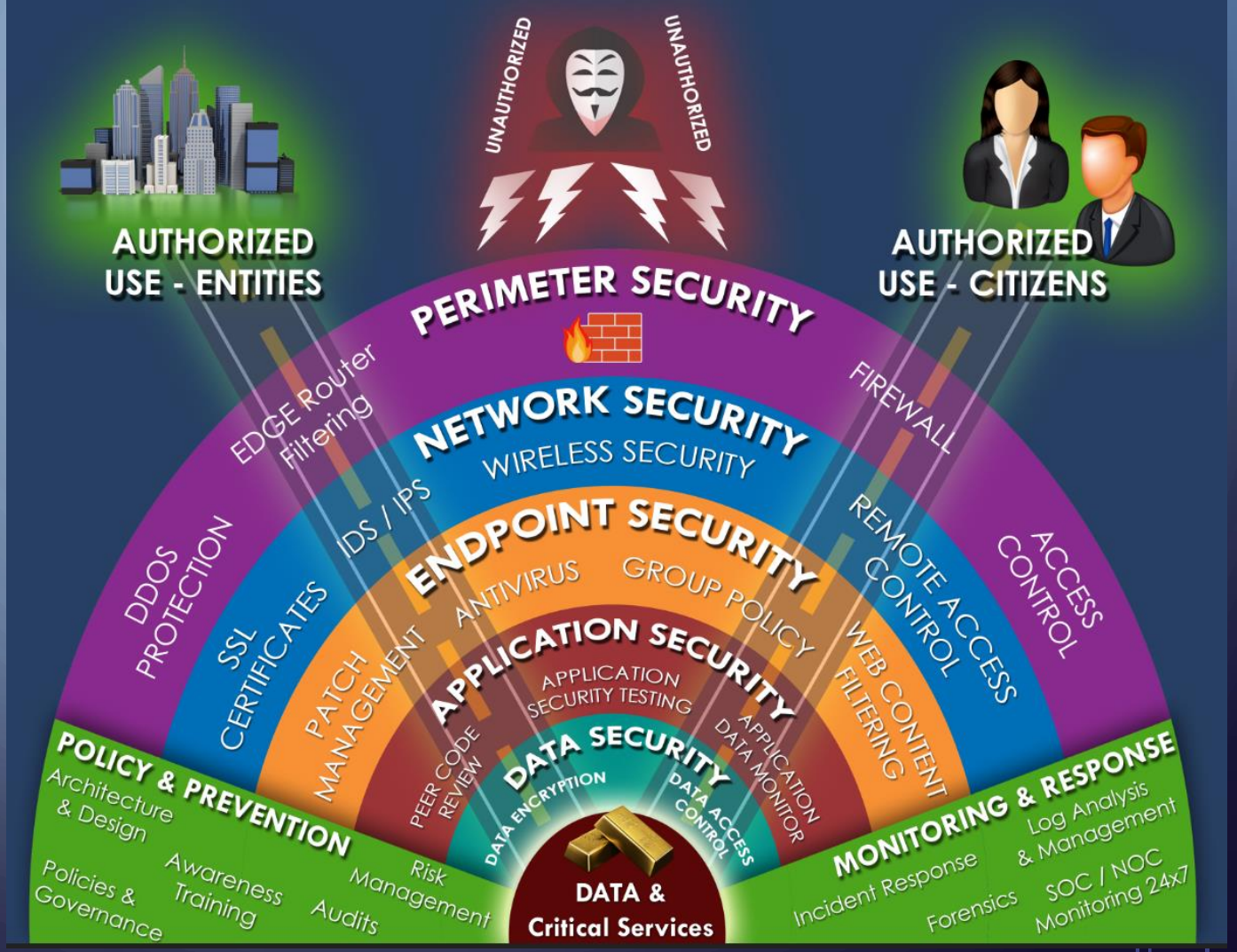
Assess & Update Business Applications

Evaluate Cyber Insurance

Threat Actors

Advanced Persistence Threat	• Nation State funded threat actors
Cybercriminals	• Groups and individuals that either target or utilize opportunistic methods based on system vulnerabilities
Criminal Hackers	• Hackers for hire; typically motivated by financial gain • Identity theft and healthcare fraud are their main targets
Terrorists	• Politically driven groups and individuals • Utilize target or opportunistic methods with system vulnerabilities
Employees	• Malcontents • Spies

Cybersecurity Infrastructure



Financial Data
Titles
Registrations
Parking Permits
Personally Identifiable
Information
(PII)
Veteran's
Information
Federal Tax
Information
(FTI)
Why
CYBERSECURITY
is Important
Family & Medical
Leave Act
(FMLA)
Investigation Information
Evidence
Victim Information
Criminal History
Federal Employer
Identification Number
(FEIN)
Protected Health
Information
(PHI)
Federal Parent Locator
Services
Social Security Administration
National Security Agency
FBI

Average amount time hackers are in a network before being discovered:

January 2019

Week	Su	Mo	Tu	We	Th	Fr	Sa
1			1	2	3	4	5

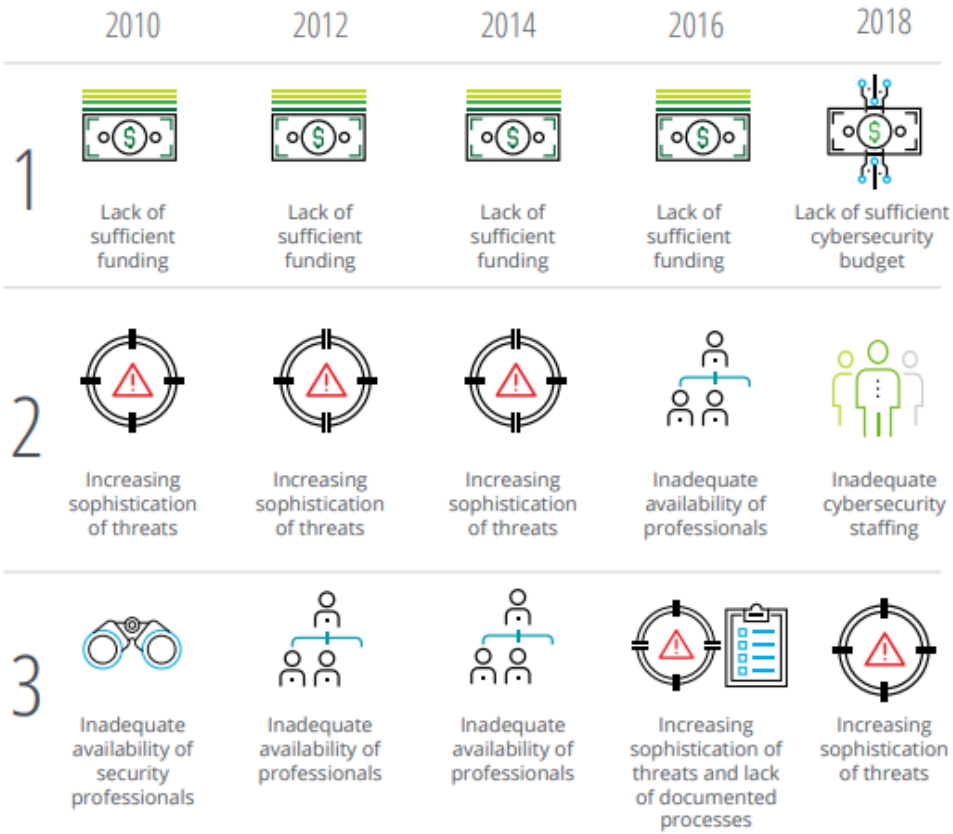
206 Days

July 2019

Week	Su	Mo	Tu	We	Th	Fr	Sa
30	21	22	23	24	25	26	27

Since 2010, CISOs have been challenged by insufficient funding and cyber talent availability

Identify the top barriers that your state faces in addressing cybersecurity challenges (top three per study).



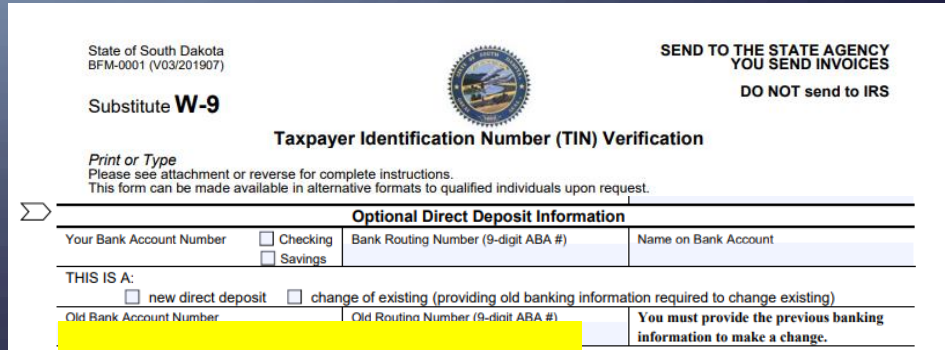
Source: 2010 through 2018 Deloitte-NASCIO Cybersecurity Studies.

Business Email Compromise Scams

Vendor & Payroll Direct Deposit / W9	Payroll Direct Deposit	Account Credentials (Username & password)	Wire Transfer Request
Vendor Purchase Order request	Real Estate/Escrow Fund Transfer	Malware Delivery	Gift Cards

Date:
FROM: Vendor
TO: Purchasing@<state>.gov
SUBJECT: Account Change

Good morning. We are in the process of changing our accounts. Please remit payment to <new account>.



State of South Dakota
BFM-0001 (V03/201907)

Substitute **W-9**

SEND TO THE STATE AGENCY YOU SEND INVOICES

DO NOT send to IRS

Taxpayer Identification Number (TIN) Verification

Print or Type
Please see attachment or reverse for complete instructions.
This form can be made available in alternative formats to qualified individuals upon request.

Optional Direct Deposit Information

Your Bank Account Number	☐ Checking ☐ Savings	Bank Routing Number (9-digit ABA #)	Name on Bank Account

THIS IS A:
☐ new direct deposit ☐ change of existing (providing old banking information required to change existing)

Old Bank Account Number	Old Routing Number (9-digit ABA #)	**You must provide the previous banking information to make a change.**

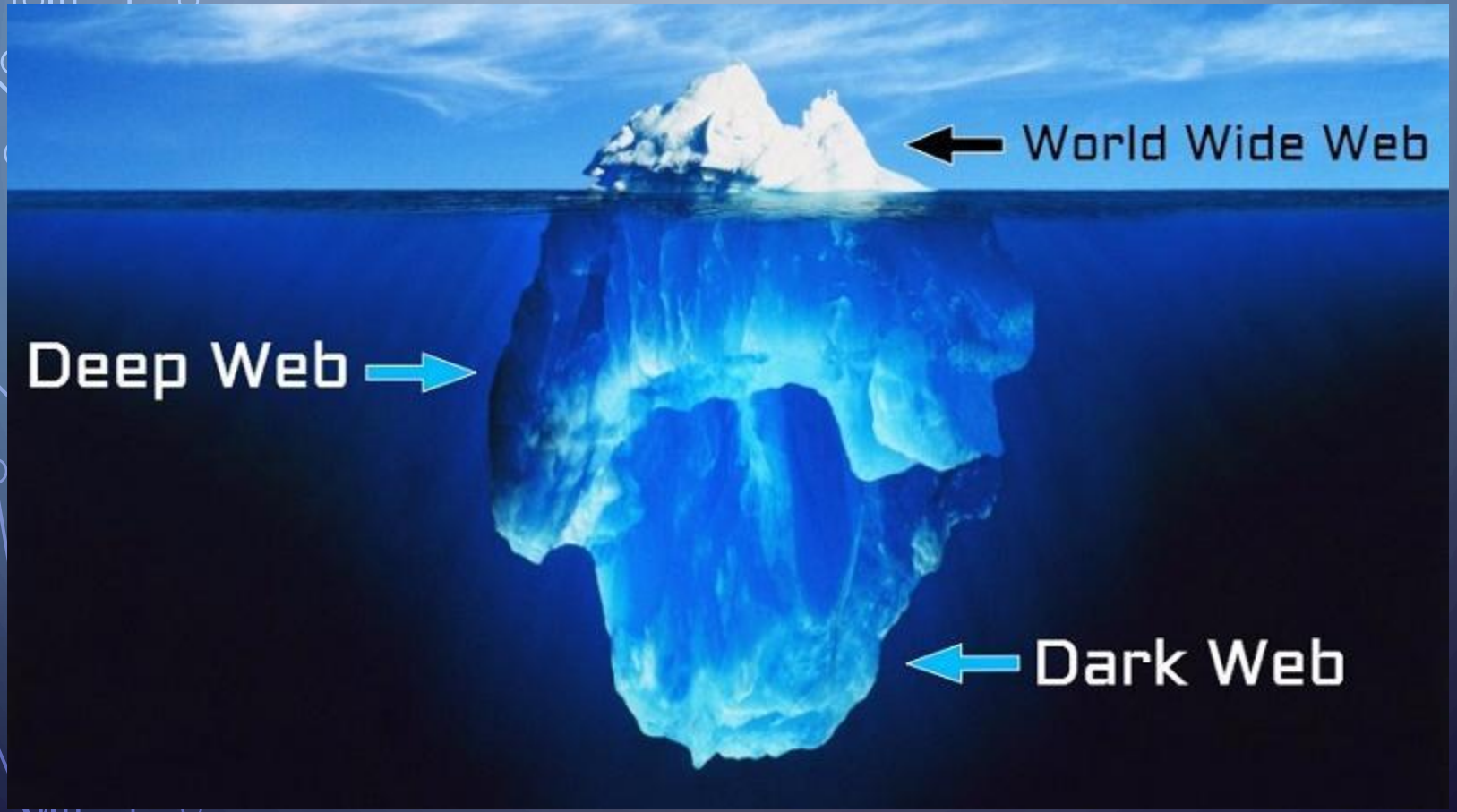
HR Cybersecurity Policy

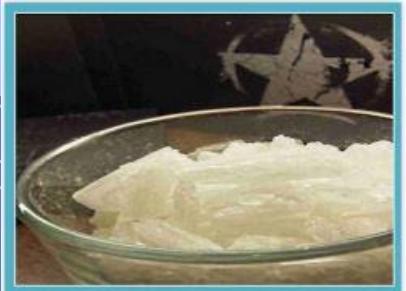
- BHR Policy authorizes monthly assessments
- Repercussions for failing (accumulative in a 12 month rolling period)

1	2	3	4	5	6
Web Site Tutorial	CISO Notification & Video (Cc: Dept leader)	Mandatory In-Person Class	Letter of Reprimand	Suspended 3 days without pay	Up to & including termination

http://bhr.sd.gov/policies-forms/BHRCyberSecurityAwarenessFINAL04092019.pdf

Slowing down isn't just for children
When reading through your email, **STOP** and **THINK** before you click
south dakota
bit
bureau of information & telecommunications


World Wide Web
Deep Web
Dark Web



CRYSTAL METH 7gram

฿ 1.61 BUY

COKE From PERU 93%, 7 gram, FINALIZE EARLY

฿ 2.37 BUY

COKE From PERU 93%, 3 gram

฿ 1.27 BUY

Crystal Meth - 2g

฿ 0.85 BUY

SHOW STIMULANTS CATEGORY

LSD Anonymous 140µg, 50 blotters

฿ 1.1 BUY

1 OZ Super Stong Mushrooms

฿ 0.59 BUY

1oz Cubensis Mushrooms

฿ 0.61 BUY

!! SPECIAL OFFER 1oz DRY PSILOCYBIN CUBENSIS SHROOMS!!

฿ 0.42 BUY

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