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PCI Security Standards Council

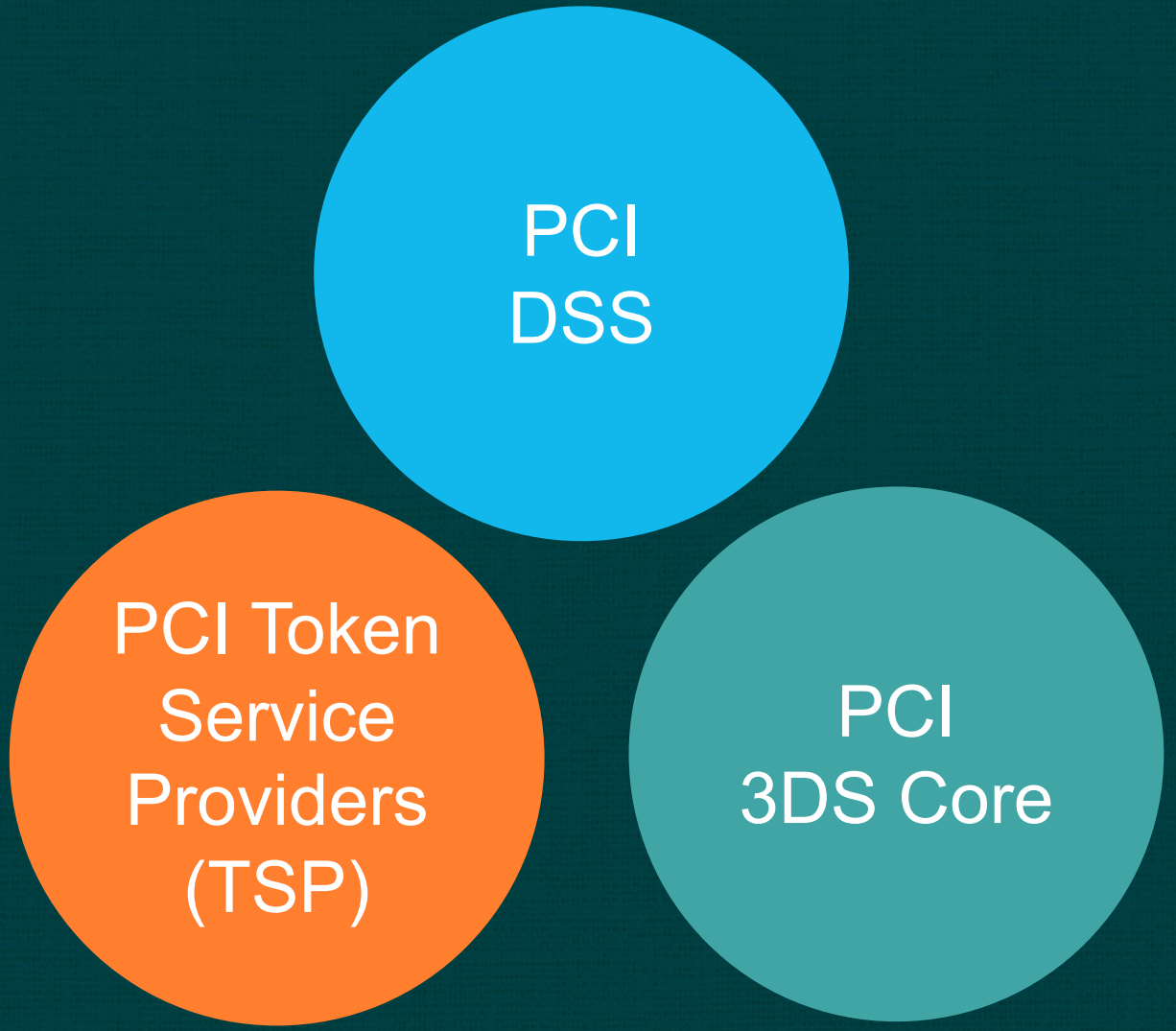
2025
ASIA-PACIFIC
COMMUNITY
MEETING

Securing Data, Strengthening Environments:

The Past, Present, and Future

PCI Security Standards Council

Data and Environment Security




PCI DSSv1.1
The Past

2006:
Threat Landscape

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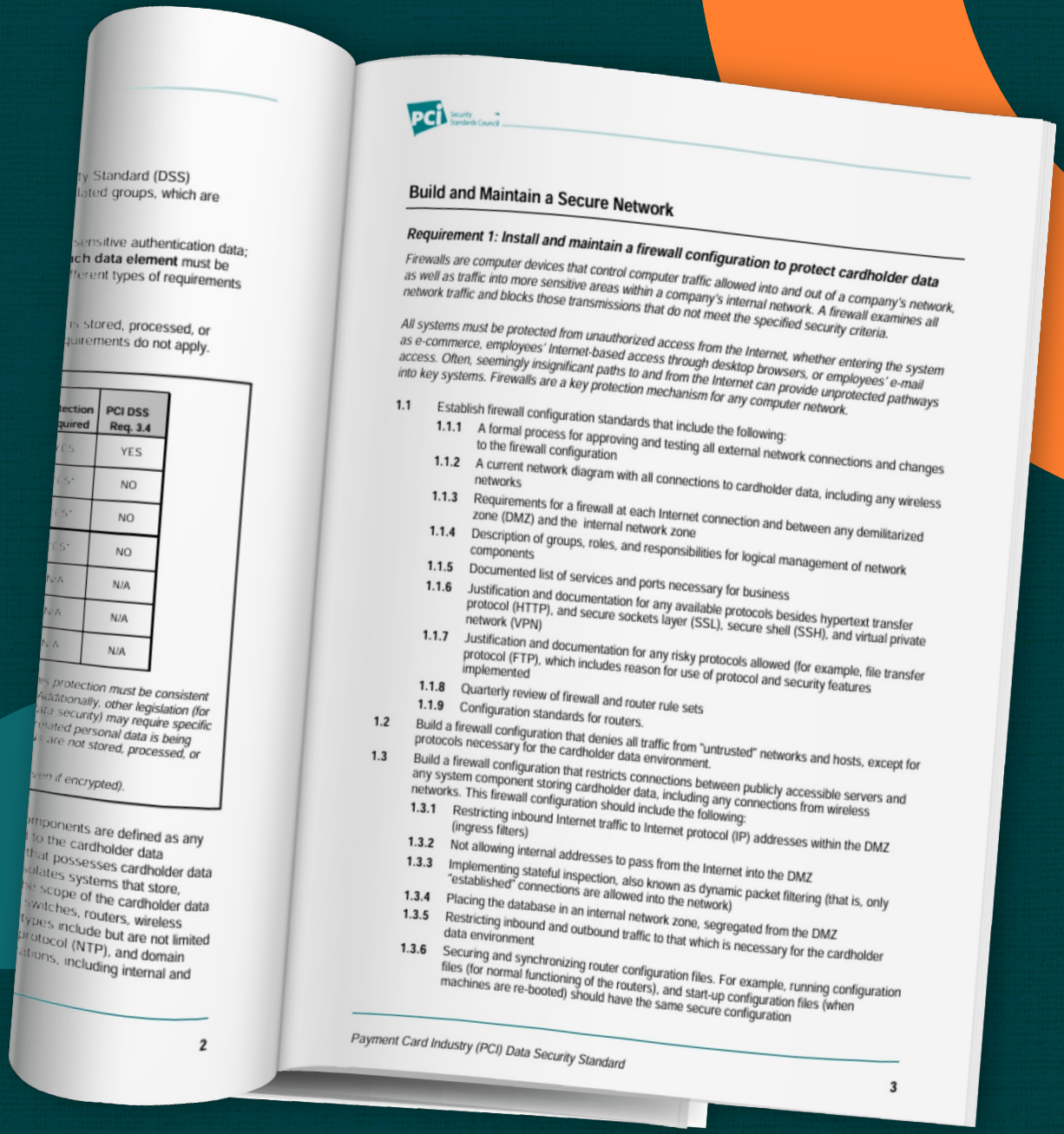
Threat Landscape

PCI DSS v1.1

Published in Sept 2006

PCI DSS v1.1 Requirements



y Standard (DSS)
lated groups, which are

sensitive authentication data;
ch data element must be
ferent types of requirements

is stored, processed, or
uirements do not apply.

tection quired	PCI DSS Req. 3.4
YES	YES
YES*	NO
YES*	NO
YES*	NO
N/A	N/A
N/A	N/A
N/A	N/A

*s protection must be consistent
Additionally, other legislation (for
data security) may require specific
reated personal data is being
S are not stored, processed, or

ven if encrypted).

mponents are defined as any
to the cardholder data
that possesses cardholder data
solates systems that store,
e scope of the cardholder data
switches, routers, wireless
types include but are not limited
protocol (NTP), and domain
ations, including internal and

2

PCI Security Standards Council

Build and Maintain a Secure Network

Requirement 1: Install and maintain a firewall configuration to protect cardholder data

Firewalls are computer devices that control computer traffic allowed into and out of a company's network, as well as traffic into more sensitive areas within a company's internal network. A firewall examines all network traffic and blocks those transmissions that do not meet the specified security criteria.

All systems must be protected from unauthorized access from the Internet, whether entering the system as e-commerce, employees' Internet-based access through desktop browsers, or employees' e-mail access. Often, seemingly insignificant paths to and from the Internet can provide unprotected pathways into key systems. Firewalls are a key protection mechanism for any computer network.

1.1 Establish firewall configuration standards that include the following:

- **1.1.1** A formal process for approving and testing all external network connections and changes to the firewall configuration
- **1.1.2** A current network diagram with all connections to cardholder data, including any wireless networks
- **1.1.3** Requirements for a firewall at each Internet connection and between any demilitarized zone (DMZ) and the internal network zone
- **1.1.4** Description of groups, roles, and responsibilities for logical management of network components
- **1.1.5** Documented list of services and ports necessary for business
- **1.1.6** Justification and documentation for any available protocols besides hypertext transfer protocol (HTTP), and secure sockets layer (SSL), secure shell (SSH), and virtual private network (VPN)
- **1.1.7** Justification and documentation for any risky protocols allowed (for example, file transfer protocol (FTP), which includes reason for use of protocol and security features implemented
- **1.1.8** Quarterly review of firewall and router rule sets
- **1.1.9** Configuration standards for routers.

1.2 Build a firewall configuration that denies all traffic from "untrusted" networks and hosts, except for protocols necessary for the cardholder data environment.

1.3 Build a firewall configuration that restricts connections between publicly accessible servers and any system component storing cardholder data, including any connections from wireless networks. This firewall configuration should include the following:

- **1.3.1** Restricting inbound Internet traffic to Internet protocol (IP) addresses within the DMZ (ingress filters)
- **1.3.2** Not allowing internal addresses to pass from the Internet into the DMZ
- **1.3.3** Implementing stateful inspection, also known as dynamic packet filtering (that is, only "established" connections are allowed into the network)
- **1.3.4** Placing the database in an internal network zone, segregated from the DMZ
- **1.3.5** Restricting inbound and outbound traffic to that which is necessary for the cardholder data environment
- **1.3.6** Securing and synchronizing router configuration files. For example, running configuration files (for normal functioning of the routers), and start-up configuration files (when machines are re-booted) should have the same secure configuration

PCI DSS v4.0.1

The Present

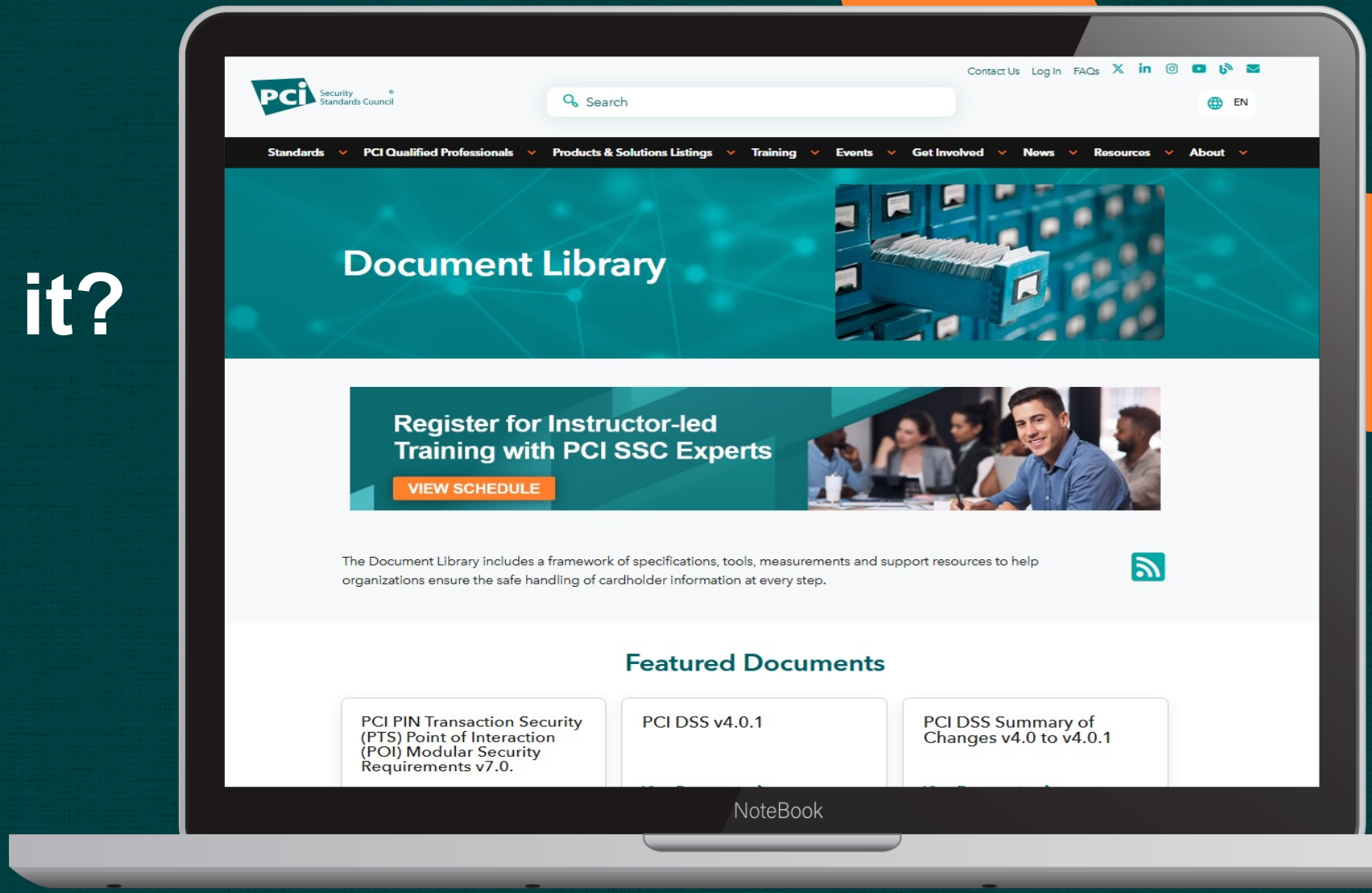
Current Threat Landscape

Current Threat Landscape

Recent Publications

- E-commerce Requirements Guidance
- Cryptography Guidance
- Integrating AI in PCI Assessments
- FAQs
- Vulnerability Management Infographic
- AI Principles
- Authentication Guidance
- Translations
- Authentication Guidance Summary

Where to find it?




PCI DSS Evolved
The Future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Cloud Tokenization Services ⬆ 20%
32% of all e-com payments are tokenized


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PCI SSC's Mission Isn't Changing:

Our role is to enhance global payment account data security by developing standards and supporting services that drive ***education****,* ***awareness****, and* ***effective implementation*** *by stakeholders.*

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PCI DSS Evolution: **Why Now?**

- **Security and risk responsibility moving upstream**
- **Opportunity to build in risk management considerations**
- **Maintaining industry baselines remains essential**
- **PCI community uniquely positioned to build future frameworks**

PCI DSS Evolution: **Approach**

1. **Respond to industry demand to address evolving payments landscape**
2. **Evolve to support risk-based security controls for payment environments with no/limited PAN**
3. **Ensure that security implementation costs align to security benefits**

PCI DSS Evolution: **Approach**

1. **Respond to industry demand to address evolving payments landscape**
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PCI DSS Evolution: **Goals**

- Establish environmental security structure not solely based on PAN
- Provide flexibility to apply security rigor based on risk
- Distinguish between complex and simple environments
- Define clear scope impact for use of PCI SSC validated solutions
- Optimize and modernize validation documents

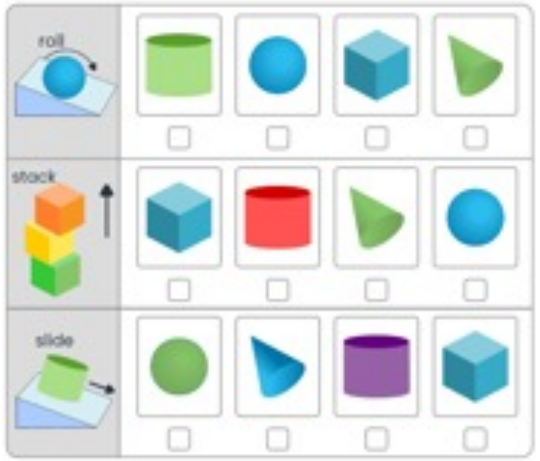
Global Stakeholder Collaboration Opportunities

1. What's the best way to reach these goals?

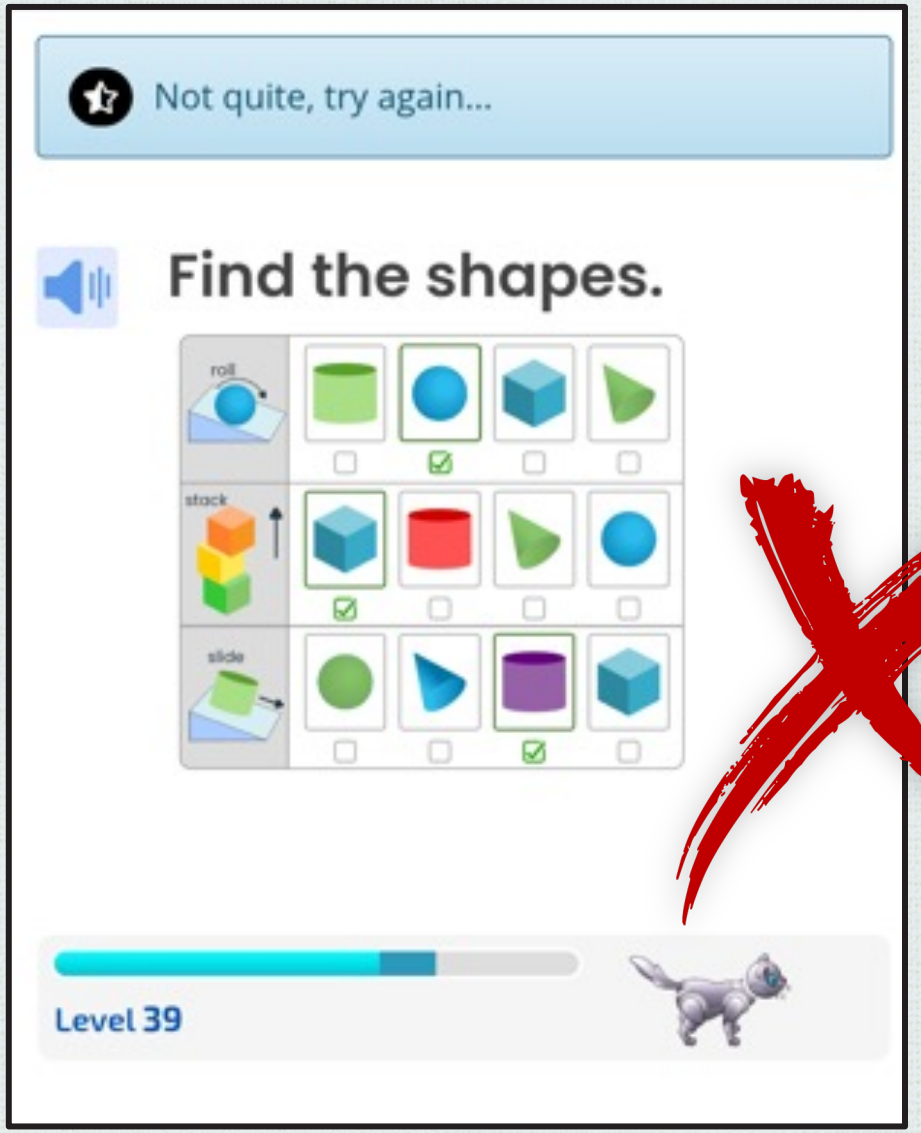
2. What's a realistic timeframe?

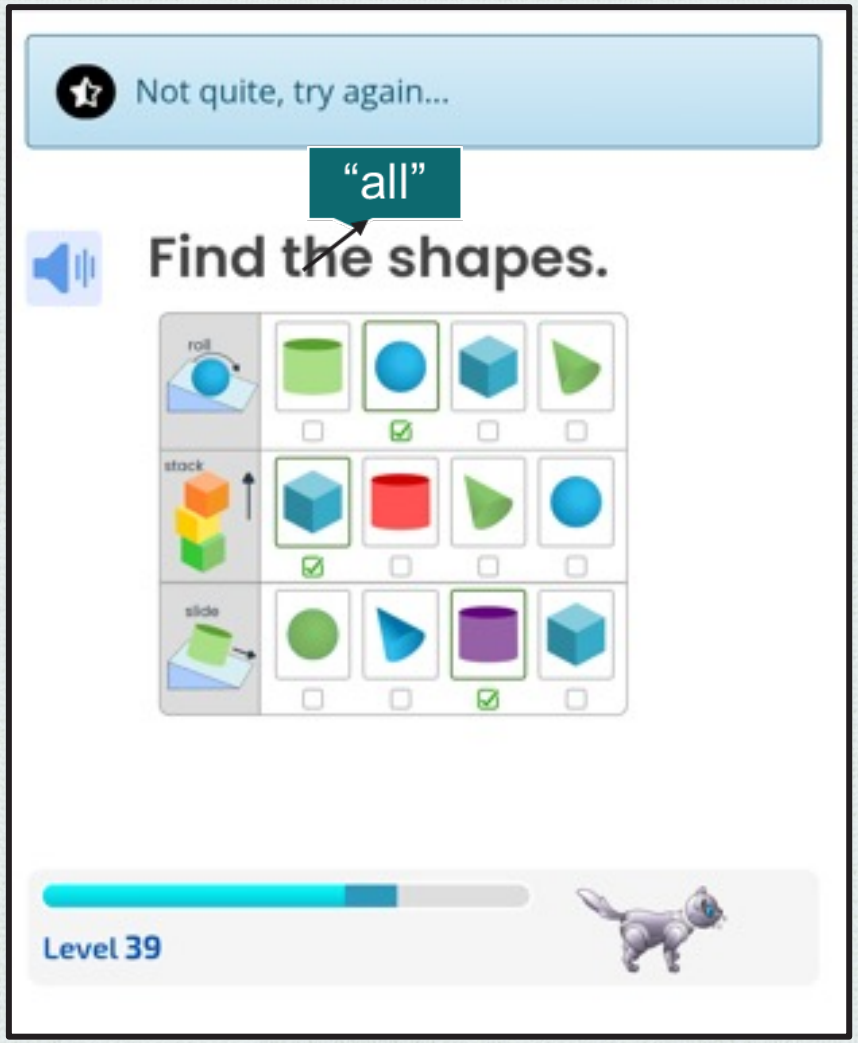
3. What are the industry needs to support preparedness?

Find the shapes.



Level 39


Not quite, try again...
Find the shapes.
roll
stack
slide
Level 39


Not quite, try again...
“all”
Find the shapes.
roll
stack
slide
Level 39


Find the shapes.
roll
stack
slide
Level 39

PCI SSC Stakeholders

PCI SSC Stakeholders

Now What?

- Meet with PCI SSC Staff
- Share Bold Ideas
- Bookmark www.PCISSC.org
- Connect with Others