



Help! We're Drowning in Lake Assurance: Supply Chain Security Challenges and a New Frontier

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Risky Business



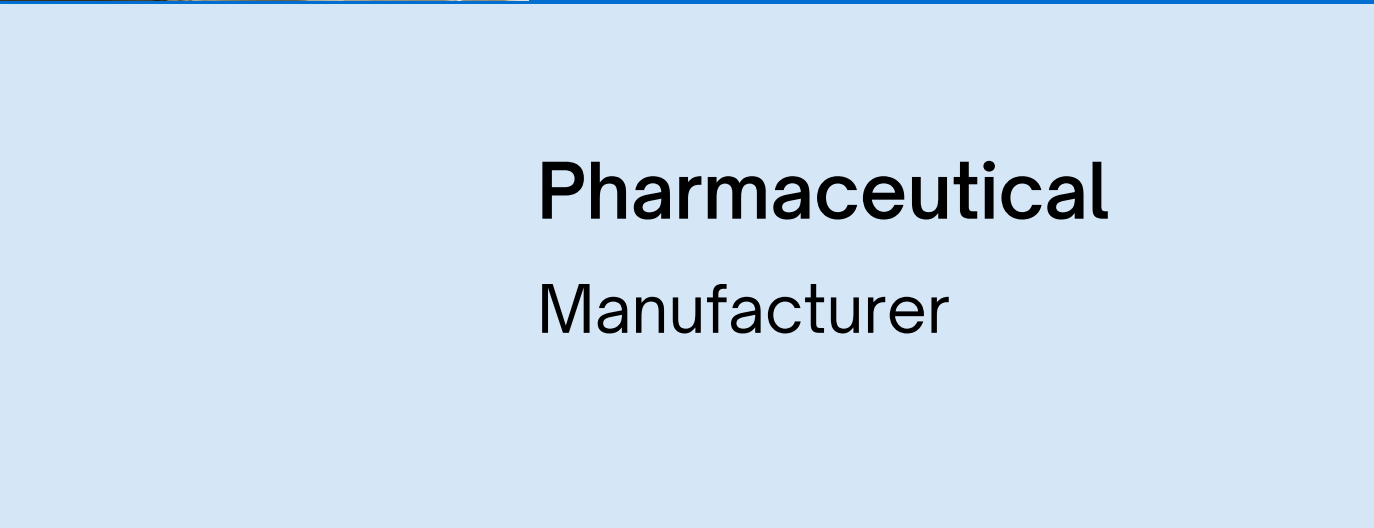
Homewares and Domestic Goods

Heating, ventilation, and air conditioning (HVAC) supplier



Autonomous Vehicles

Software developer



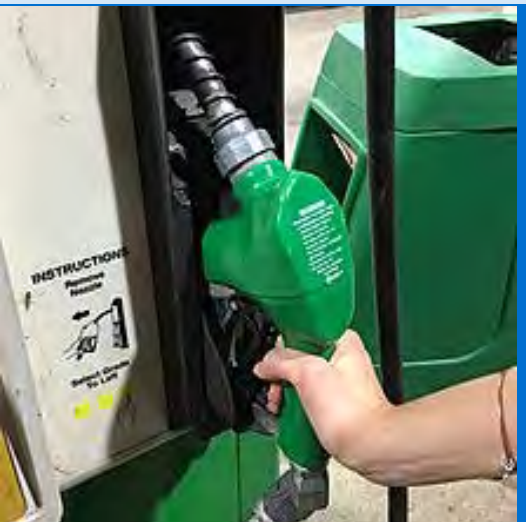
Pharmaceutical

Manufacturer



Banking

Website builders



Petrol / Gas

Gas Supplier



Laptops

Computer manufacturer

Supplier Lifecycle and Risk



Engage / Buy



Design / Implement



Governance



End



Supply Chain
Risk

vs

Cyber Supply
Chain Risk
Management
(C-SCRM)

Know Your Suppliers



- Business context
- Users
- Data Classification
- Technology context
- Location of service
- Stakeholders

Potential Impact if a cyber security event caused loss of:

- Confidentiality and/or Integrity of data assets
- Availability of system

TYPE

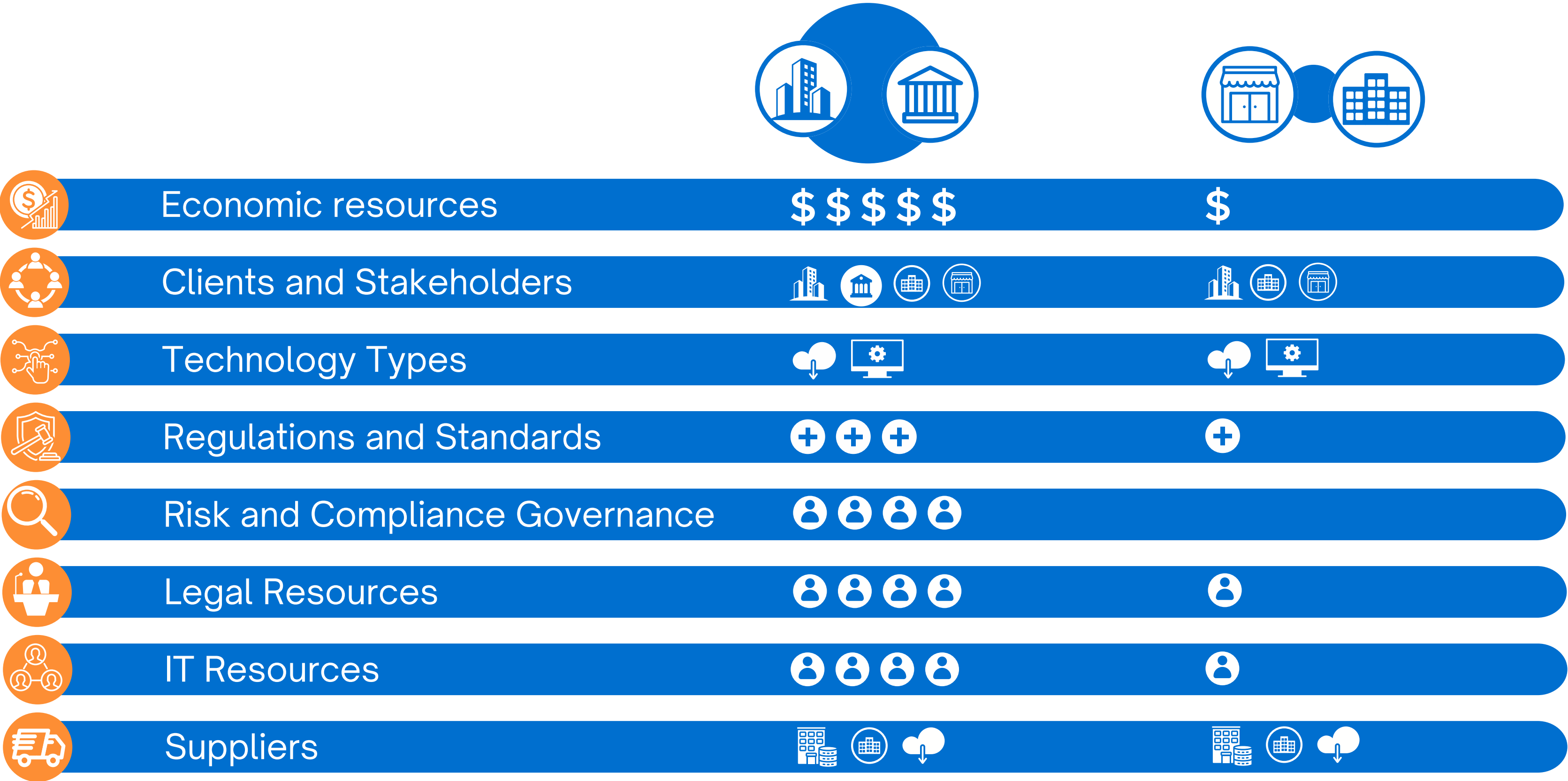
RISK



Supplier profiles drive requirements

TYPE RISK	Managed Service Provider	Software Provider	Temp Service Provider
Security Policy and Framework	✓	✓	✓
Harmful Code	✓	✓	
Personnel	✓		✓
Fourth parties	✓		
Data Sovereignty	✓		
Incident Detection / Reporting	✓		✓
Periodic Reporting	✓		
DR/BCP	✓		
Assurance and Testing	✓	✓	✓

Buyer vs Supplier power





Security Questionnaire Origin Story

Industry and Business Standards, Regulations and Frameworks



Companies

Corporations Act 2001
SOC 1
ASIC Report 429
Consumer Data Right Act 2019.



Government

ISM
Essential Eight
PSPF / DSPF (CISC) - Hosting Cert
Framework (DTA)
T4



Health

Health Records and Information Privacy Act
HIPAA



Security

ISO 27001...
ASVS
SCO 2



Personal Information

Privacy Act
EU GDPR
CCPA
PIPEDA



Banking

IAPRA CPS 234
APRA CPS 231
PCI DSS

Questionnaire Focus Differs per Industry

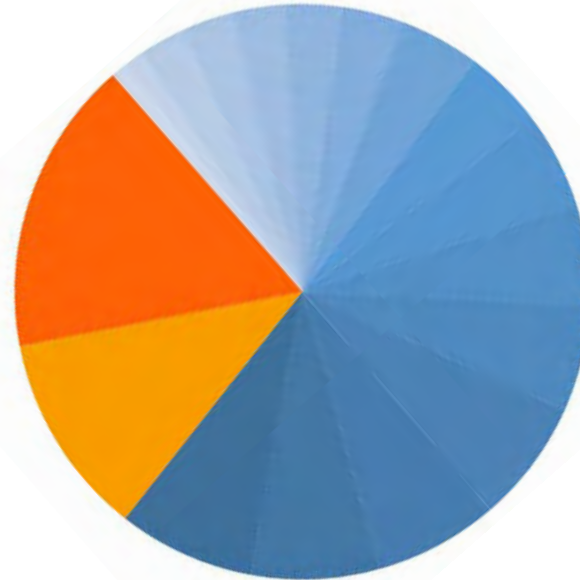
InfoSecAssure research study of 6,660 unique cyber security questions asked.

Government



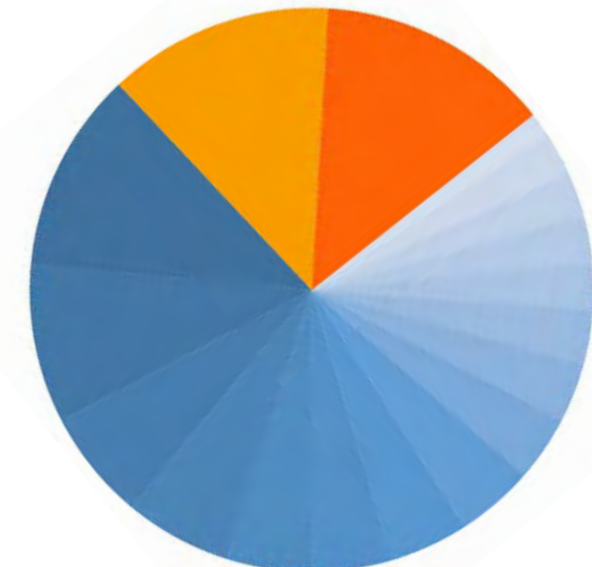
n = 824 questions

Finance



n = 2,822 questions

Law Firms



n = 3,014 questions

Top 2 Practice Areas

- **Physical and Environmental Security (18%)**
- Network Security and Content Filtering (12%)

- **Identity and Access Management (17%)**
- Network Security and Content Filtering (11%)

- **Corporate Governance (14%)**
- Network Security and Content Filtering (13%)

The Good, the Bad the Ugly

Stolen

How will you encrypt Bank A 's data?
(received from bank B)

Intrusive

Please send over a copy of all your vulnerability
scanning reports?

Unreasonable

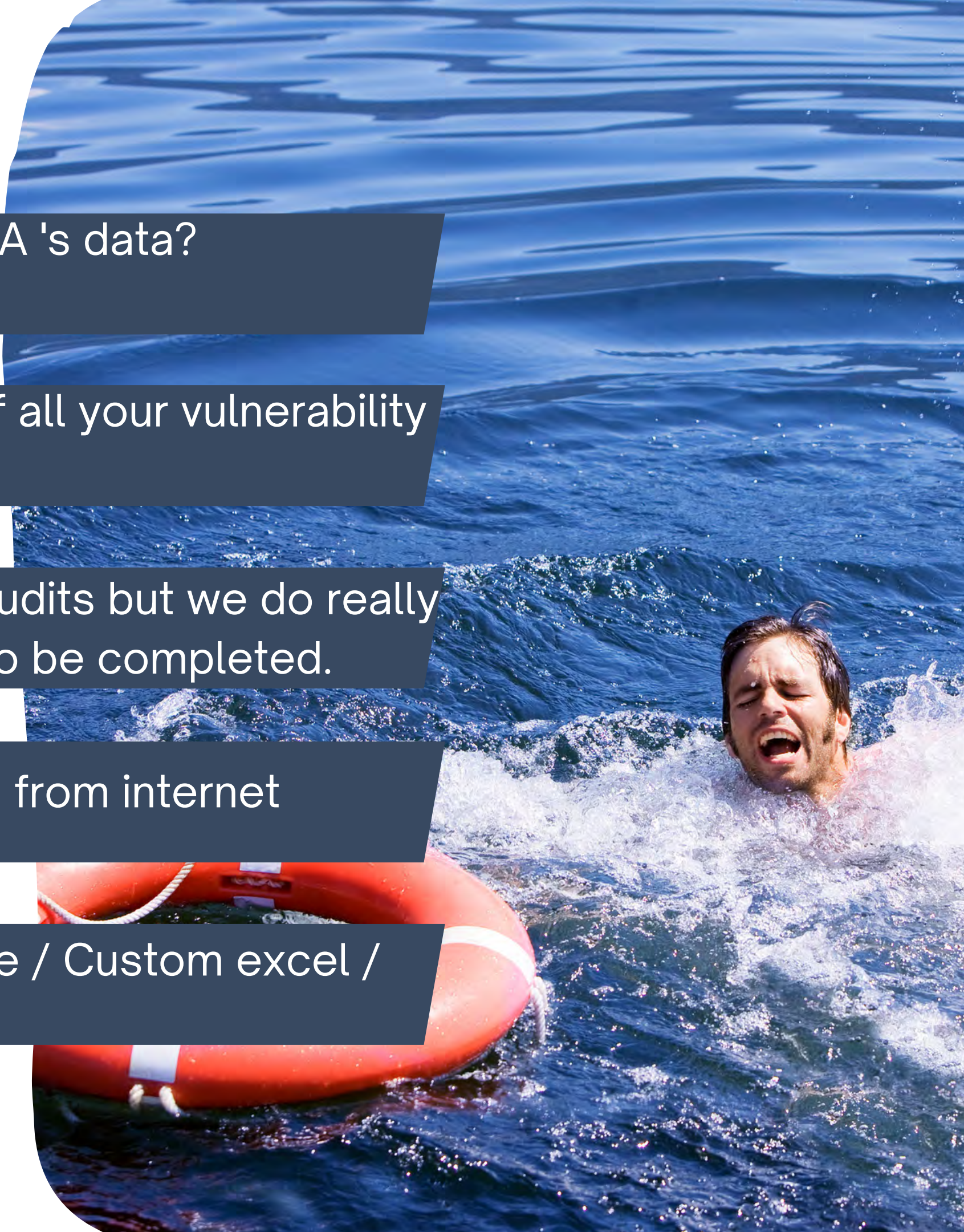
Thanks for the 5 external audits but we do really
require this questionnaire to be completed.

Random

Questionnaire downloaded from internet

Inconsistent

Word / Third party software / Custom excel /
Emails



100 Ways to Ask the Same Question

How do you manage User Access Reviews?



Frequency



Standard vs Privileged



























Change in Roles



Audit Trail

- How often are accounts reviewed (including admin accounts)?
- How often do you review the validity of locally authenticated accounts?
- How quickly are accesses revoked when an employee is offboarded due to termination?
- Is there a periodic access review of all account types conducted to ensure that all accounts are used for a legitimate business purpose with minimal access rights for each role? If any accounts are not used for a legitimate business purpose, how are they identified and removed?
- Is there a process for reviewing the access rights of employees, contractors and vendors?
- Is this system part of company X's User Access Revalidation process that occurs quarterly?
- Is timely deprovisioning, revocation, or modification of user access to the organization's systems performed for employees, contractors, customers, business partners, or involved third parties?
- Please describe what frequency the vendor undertakes user access reviews of the system.
- Please indicate the frequency of access review for active user accounts, and describe the review process.
- What is the frequency of access review for administrative accounts, and describe the review process.
- Please indicate the frequency of remote access entitlements review. (Select all that apply.)
- Are regular reviews of user access privileges performed to verify that privileges are appropriate?
- Is there proactive monitoring of redundant and inactive user accounts at least quarterly?
- Are access rights and activity logged and reviewed on a periodic basis? This should include all accounts.
- Are inactive Constituent user IDs disabled and deleted after defined periods of inactivity?
- Are user access reviews performed at least twice annually for high risk systems and annually for all other systems?
- Do you have a process in place to review the validity of locally authenticated accounts?
- Do you have a process to update user permissions in the environment used to produce reports? If yes, please describe the SLA to have a user's permissions updated or revoked from the production environment.
- Do you have controls in place ensuring timely removal of systems access that is no longer needed?
- Do you have procedures in place for regularly auditing administrative access to your systems?

Impacts to Companies from Security Questionnaires...

		Requestor			
					
Respondent					
					
					
					

Do you encrypt all data that we provide you?



Sales



IT



Product



IT Security



Legal

Let's Do This...

- How do you secure your building?
- Is your network designed securely?
- Do you conduct user access reviews?
- What physical security controls do you have in place?
- Do you have a support team?
- How is access control managed?
- Do you have adequate surveillance in place?
- How do you manage incidents?

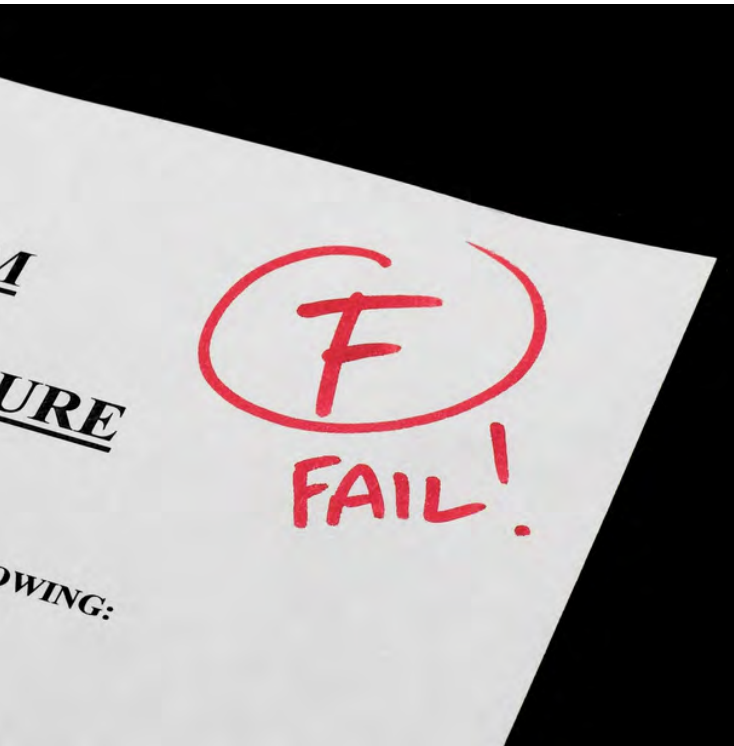
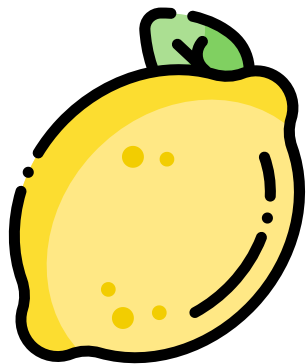




Thank you for asking. Our company has a robust security program some of the features include:

- ✔ User Access Reviews are conducted annually and results documented.
- ✔ 24/7 support team.
- ✔ All equipment is appropriately labelled
- ✔ A well designed padlock and key function for additional security in highly secure working areas.
- ✔ Electronic keypads control every access point.
- ✔ Surveillance cameras are in place in every physical room.

Upon Inspection.... 5 Years Later



How to respond

Clarify scope if required such as naming the application or system that the response relates to.

Use plain and complete language (no acronyms)

Be clear even if the question doesn't ask for specific details.

Be fair and accurate, if a control gap consult with control owner to identify compensating control

Collect information needed for traceability

Provide documents or extract from documents where documents are protected, provide read-room access

What to look for

Is the response specific to the services you use?
Do they use shared security model? For which controls?

Do you understand the acronyms used?

If the answer is Yes or No, does this satisfy your question?

If response indicates a missing control are compensating controls described?

Which controls should form part of regular reviews?

If names of documents provided have you reviewed the actual documents?



**Information Security
Program Governance
and Resourcing**



**Corporate
Governance**



**Asset
Management**



**Information
Classification and
Handling**



**Identity and Access
Management**



**BCP, DR and
Back-Ups**



**Application
Security**



**Cryptography and
Key Management**



**Network Security and
Content Filtering**



**Threat and
Vulnerability
Management**



**Logging and
Monitoring**



**Incident
Management**



**Physical and
Environmental
Security**



**Change
Management**



**Human Resource
Security**



**Supply Chain
Management**

Get it Right One Way - Let's Focus on Practice Areas

- Every control fits into this model
- Considers interactions with most business structures and team skills/functions
- Enables better management reporting
- Helps educate all

Many Frameworks, Many Controls, Many "Languages"



- PCI DSS
- OAIC Privacy Act
- Cloud Security Alliance
- APRA 234
- OWASP ASVS
- Aus Gov ISM
- Essential Eight Maturity Model
- 27001/17
- NIST CSF
- SOC 2

Wrap-Up

Know Your Supplier

Split the contract - Master and by Product/Service

Get Appropriate Agreements in Place

Reasonable and Regular Assurance

Manage Supplier Risks

Know Your Own Business

Standardise How You Assess Your Controls and Report to All

Build Assurance Preparation into your SDLC/PDLC

Take Aways

The background of the slide is a composite image. The top half shows a beach with waves crashing onto the shore under a clear sky. The bottom half shows a close-up of a person's hand holding an open book, with the text in the book being out of focus.

Sample Security Clauses

www.infosecassure.com.au/download/security-clauses

Practice Area Overview

www.infosecassure.com.au/download/infosecassure-practice-areas

Questionnaire Research Outcomes

www.infosecassure.com.au/download/questionnaire-research