

# UNDERSTANDING SECURITY FRAMEWORKS AND THE BENEFITS TO YOUR FIRM

Ty Smith and Jason Broz

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# Agenda

- Introductions
- About the research
- The frameworks
- Why implement
- What to consider when implementing
- How to implement

# About your presenters



**Ty Smith**

**Supervisor – Security, Privacy & Risk Consulting**

- RSM National Law Firm Growth and Strategy Team
- Ohio Army National Guard Captain
- Auburn University MBA Candidate (Fall '19)
- Associate CISSP, Six Sigma Lean, Change Management Specialist



**Jason Broz**

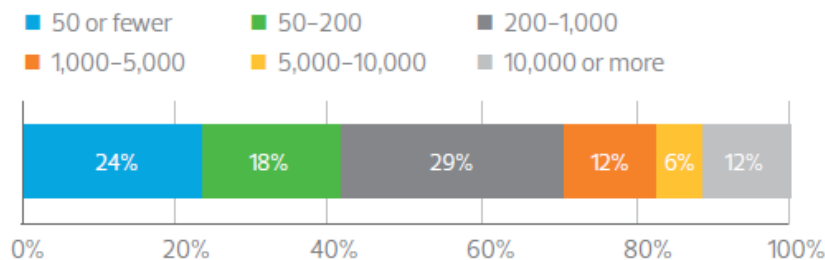
**Manager – Security, Privacy & Risk Consulting**

- Certified Information Systems Security Professional (CISSP)
- Payment Card Industry (PCI) Qualified Security Assessor (QSA)
- Certified Information Systems Auditor (CISA)
- Certified Privacy Professional/USA (CIPP/US)
- SANS/GIAC Security Leadership (GSLC)

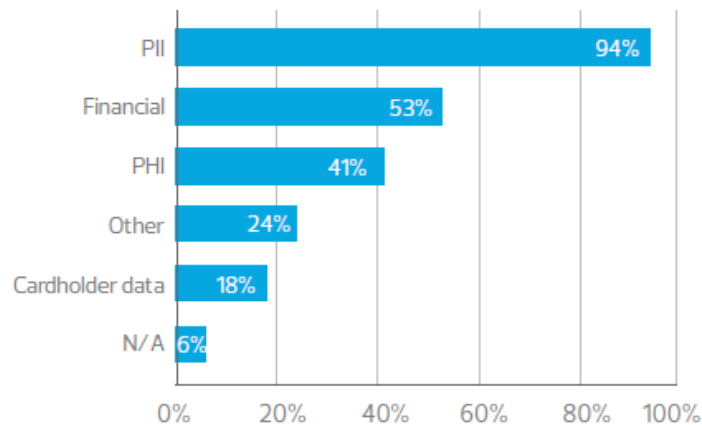
# ABOUT THE RESEARCH

# Research

## Survey participants by number of employees



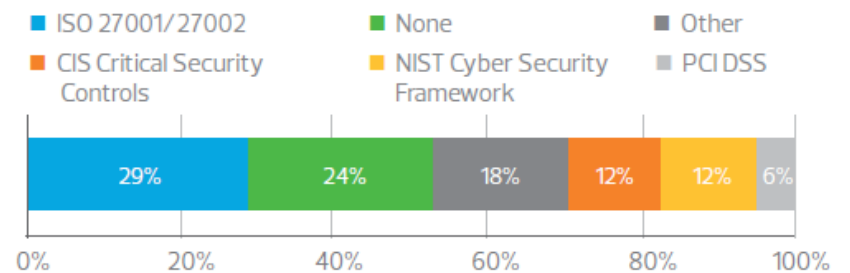
## Types of data stored



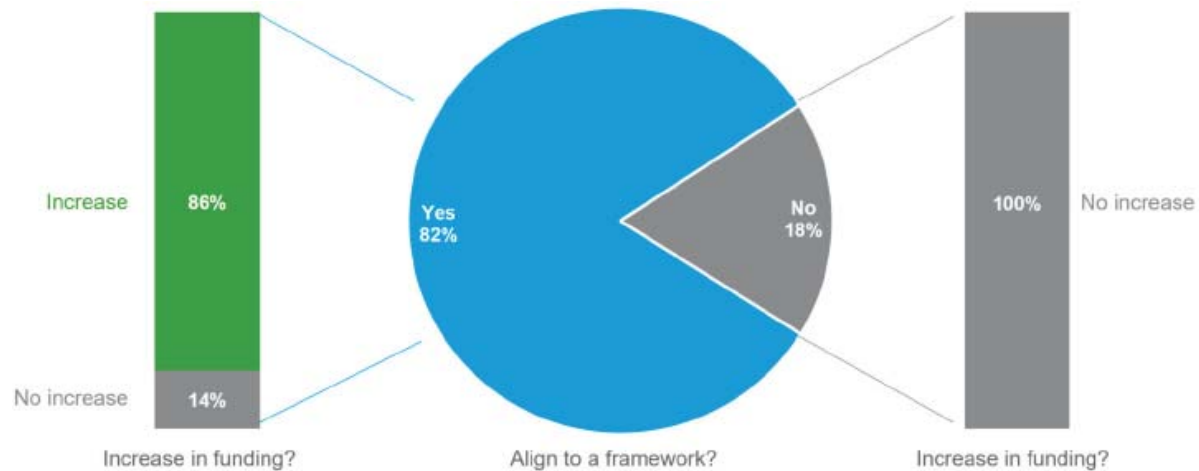
- RSM surveyed firms between January and February of 2018
- A wide variety of firms responded, ranging from under 50 employees to over 10,000
- Nearly all firms store some data, the largest response set being personally identifiable information
- Most firms stored multiple data sets

## Survey findings

- Survey respondents indicated several frameworks being used within the industry
- Large firms trended towards ISO
- Almost a quarter of firms responding indicated they did not map to a framework

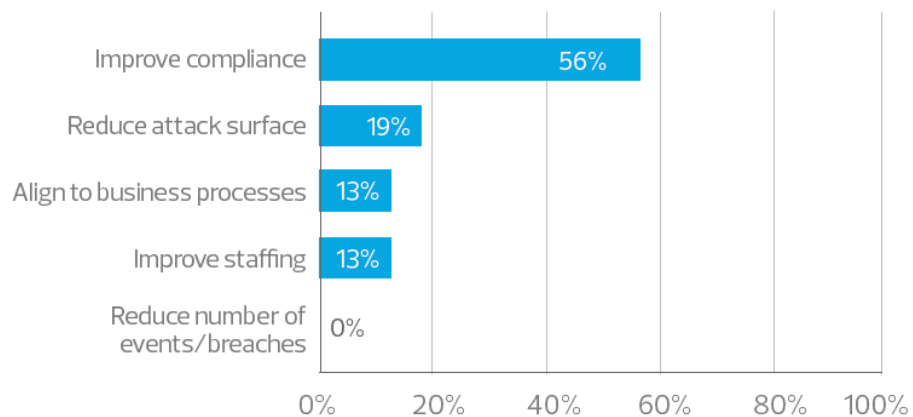


## Follow the money



- Of those responding that they do not follow a framework, 100 percent have not received an increase in their security budget in a three year period
- Eighty six percent of those responding they do map to a framework have received an increase in funding

# Budget justifications



- Improved compliance was the most common justification for firms that saw increases in their budget
  - Aligning your program to a framework can help to make smooth transitions to new compliance objectives
- Frameworks can help reduce the burden on IT staff with standardization

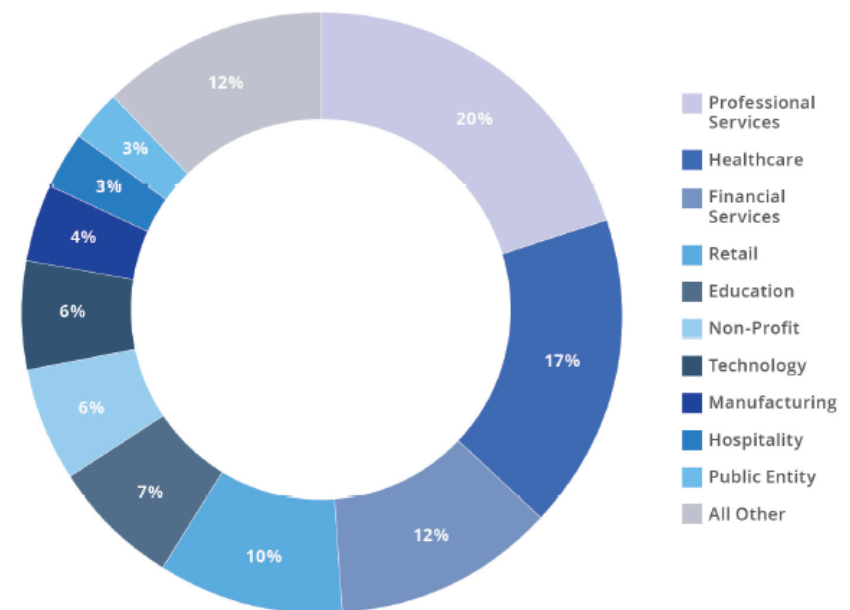


# WHY IMPLEMENT

# 2018 NetDiligence/RSM Cyber Claims study

- 2013-2017 study
- Cyber liability claims
  - Professional services 20% of all claims
  - 263 total claims in professional services
  - Average total cost of a breach in a professional services firm: \$168,000
  - Firms accounted for 3% of total aggregated breach cost

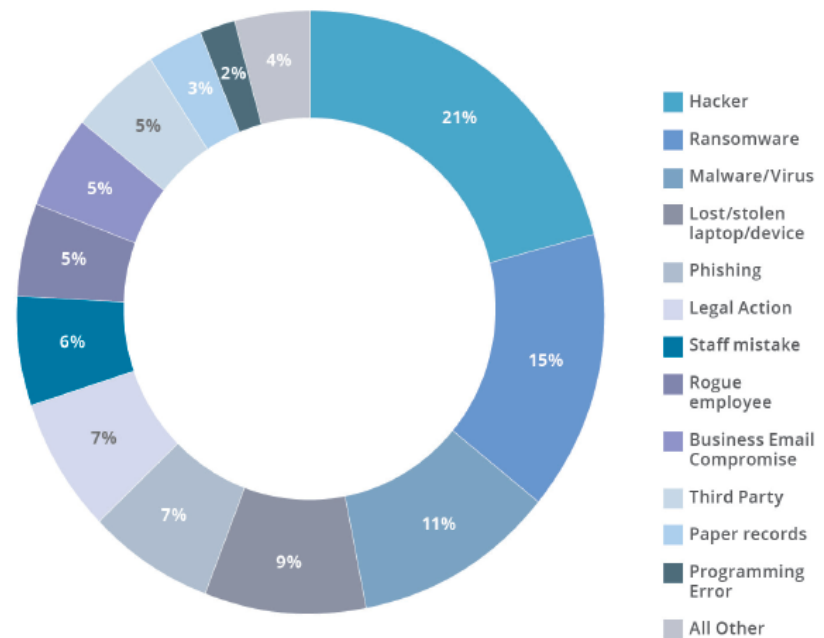
Percentage of Claims by Sector: 2013–2017  
(N=1,201)



# 2018 NetDiligence/RSM Cyber Claims study

- Cause of loss
  - Hackers 21%
  - Malware/virus 11%
  - Phishing 7%
  - Legal action 7%
  - Business email 5%
  - Programming error 2%
- Law firms had the highest compromise rate (60%) during RSM's testing in 2017
- Losses could have been minimized through a managed security program

Percentage of Claims by Cause of Loss: 2013-2017  
(N=1,201)



# THE FRAMEWORKS

# ISO 27001

- The largest percentage (29%) of respondents align to ISO 27001
  - Best for large firms
  - 80% of ISO 27001 respondents have over 1000 employees
  - All firms who align to ISO 27001 saw an increase in their security budget
  - 2/5 of ISO 27001 respondents saw an average increase in security budget between 11% and 20%
- The cost
  - Only 1500 organizations have gone through the certifications process
  - Most firms aligning to the framework allocate over \$100k to the process

## ISO AT A GLANCE

- Aligned with GDPR
- Focused on process and documentation
- Lack of technical detail
- Higher cost to implement
- Best fit for large or international firms

# NIST Cybersecurity Framework (CSF)

- Developed and released by the US Government in 2014
- Only 12% of respondents align to the CSF
  - Saw the largest increase in funding on average (20%)
- Guidelines provided are flexible
  - The flexibility allows for implementation across a wide variety of industries
  - Should be used by established programs
- Best choice for US middle-market firms

## NIST CSF AT A GLANCE

- Increasing in popularity
- Required for government agencies and some private partners
- More ambiguous and harder to implement
- Fewer resources available
- Best fit for established cybersecurity programs that work with federal organizations or government contractors

## Center for Internet Security (CIS)

- 18% of middle market firms responded that they map to CIS
  - Largest increase in overall funding over three years
- Technical focus with limited documentation
  - Firms can supplement small IT teams with technology
  - Governance support is needed from CISO
- Best for small to middle market firms without established programs

### CIS AT A GLANCE

- Correlates with increased funding
- Strong technical focus
- Lack of guidance on process and program level
- Difficult to implement without support
- Best fit for firms with limited budgets

# Payment Card Industry Data Security Standard

- Developed by credit card brands in 2004
  - Significant guidance and documentation available
- Only 9% of firms respondents follow the PCI DSS
- Clear and concise guidance provided by the framework
  - Technical control implementation
  - Governance structure
- PCI does not have to apply only to credit card information; framework can be modified for all sensitive data

## PCI DSS AT A GLANCE

- Globally recognized, trusted, well-established
- Comprehensive and easy to implement
- Aligns with other frameworks (NIST CSF)
- Adaptable to different sensitive data sets besides cardholder data
- Best fit for most firms



# WHAT TO CONSIDER

When implementing a framework

## Selecting a framework

- Even if your firm is already using a framework, may not mean it is the right one
  - You can use a hammer to dig a hole, but a shovel is a lot more efficient
  - The wrong framework can drain internal resources, frustrate overworked employees, and possibly make your organization less secure
- Each framework has a particular purpose and function
  - Use frameworks to your advantage
  - Understand how to make frameworks flexible to work with business process

## Identifying key data

- 94% of firms store some type of sensitive or confidential data
- Different types of data have regulatory requirements that may help to define a framework (HIPAA, PCI, etc.)
- If your data is not regulated, there may still be client requirements that are placed on your firm through contracts or agreements



## Assessing client needs

- Most law firms RSM advises are dealing with client requirements from one or multiple clients
- Requirements range from conducting penetration test and vulnerability scanning to naming a CISO and quarterly reports to the Board or Partner team
- Firms must holistically look at the requirements placed on them from all of their clients to see which framework best fits their situation
- The right framework can help efficiently cover requirements and provide a return on investment to partner teams



## Evaluate effectiveness

- A successful framework is not just a set of guidelines that meets client requirements and “Checks the box”
- Frameworks should be judged on their ability to secure data efficiently and effectively
- Firms should determine metrics to ensure their framework is implemented properly
  - Events stopped, patching timeframes, strengthened baselines, etc.
- Frameworks should work with firm leadership to determine effectiveness and efficiency



## Plan towards future goals

- As your firm continues to expand and grow, business leaders should be involved with the choice of framework to incorporate future plans
  - For example, if the firm is looking to work internationally in the coming years, then ISO 27001 might be the best framework
- With so many choices out there, it is important to invest in a framework that not only works today, but can be scalable enough to grow with your firm



# HOW TO IMPLEMENT

## Frameworks

- As law firms become a bigger target for cyber criminals, properly securing data will become even more important
- Implementing a framework will help to secure your clients' data
- No matter what framework your firm chooses, these steps will help to ensure that it is implemented properly



# Roadmap

## 1. Establish a governance structure

- Select a program owner to oversee implementation and data owners to help with security decisions

## 2. Perform data discovery

- Determine where data is stored, processed, accessed, and who it is transmitted to within the firm's environment
- Document data flow diagrams

## 3. Classify Assets

- Determine which assets are critical to the firm based on how data flows throughout the environment

# Roadmap

## 4. Conduct a risk assessment

- Identify, analyze, and document organizational risks
- Prioritize plans for remediation towards an acceptable level of risk for the firm

## 5. Apply controls

- Use the risk analysis and framework to identify missing controls and apply them within the environment

## 6. Develop security processes

- Create consistent, repeatable processes around patch and vulnerability management, device hardening, etc.

## 7. Review program regularly

- Continually improve your program by reassessing yearly during your risk assessment process

THANK YOU FOR  
YOUR TIME AND  
ATTENTION

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