



OWASP CISO Survey Report 2015 –  
Tactical Insights for Managers



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- *The views and opinions expressed in this presentation are those of the author and not of any organisation.*
- *“Everything I say is my own personal opinion. Especially the wrong ones....”*



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## OWASP

Open Web & Application Security Project, [www.owasp.org](http://www.owasp.org)  
global non-profit open source security community

## Tobias Gondrom

Global Board, OWASP  
CTO Security, Huawei

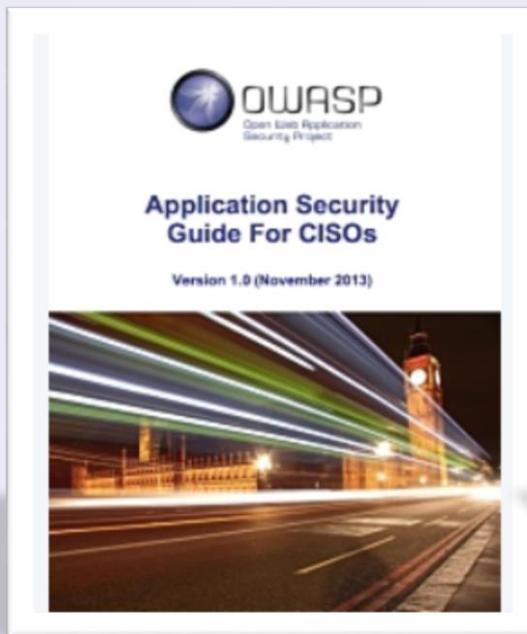
- 20 years information security and development experience (Global Head of Security, CISO, CTO), CISSP, CSSLP, CCISO
- Project Leader OWASP CISO Survey Report
- Author of Internet Standards on Secure Archiving, CISO training and co-author of the OWASP CISO survey report and CISO guide
- Sloan Fellow M.Sc. London Business School
- Chair of IAOC (IETF Administrative Oversight Committee), Chair of IETF Security WGs, Member of the IETF Security Directorate, Cloud Security Alliance HK chapter board member



# Based on findings of the OWASP CISO Survey Report & CISO Guide



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**OWASP CISO Guide:**

<https://www.owasp.org/images/d/d6/Owasp-ciso-guide.pdf>



**OWASP CISO Survey:**

[https://www.owasp.org/index.php/OWASP\\_CISO\\_Survey](https://www.owasp.org/index.php/OWASP_CISO_Survey)



- Methodology
  - Phase 1: Online Survey sent to 1000s of CISOs and Information Security Managers, with comprehensive question sets
    - Dataset received of about 500 replies from various industries...
  - Phase 2: Followed by selective personal interviews
  - *Release of 2015 version in June 2016*



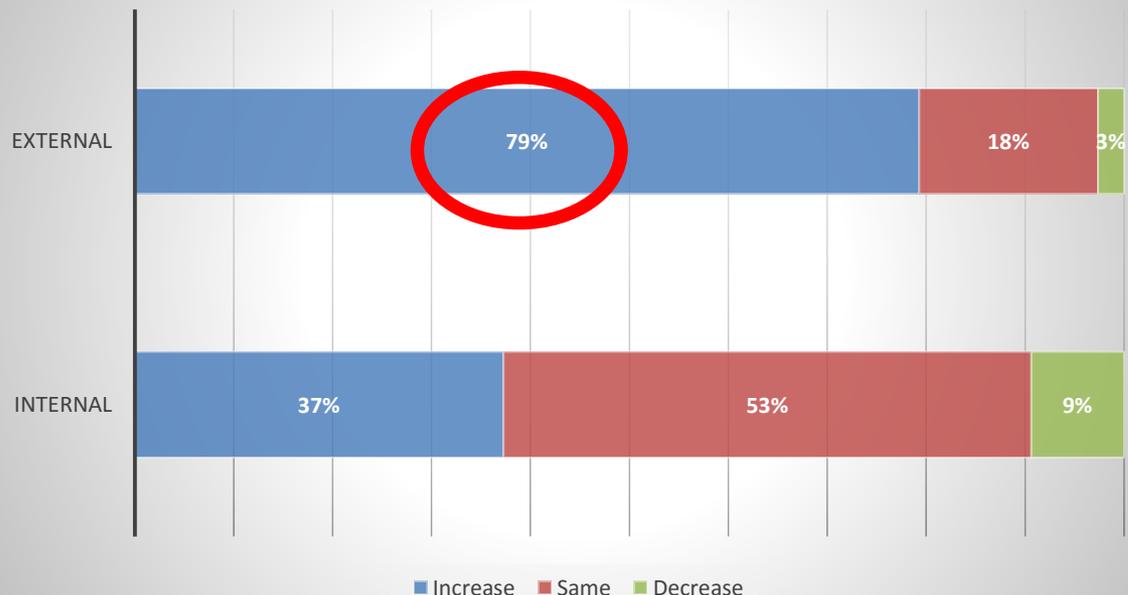
**CYBER  
ATTACKS  
AHEAD**

# CISO Survey: External Threats are on the Rise!



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External vs. Internal Threats - changes



» External attacks or fraud (e.g., phishing, website attacks)

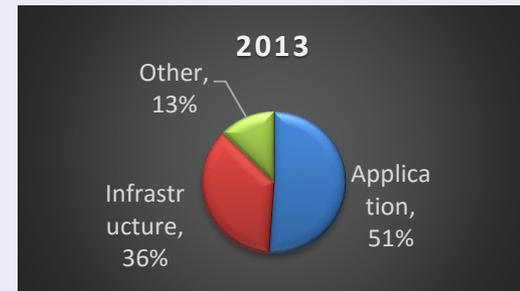
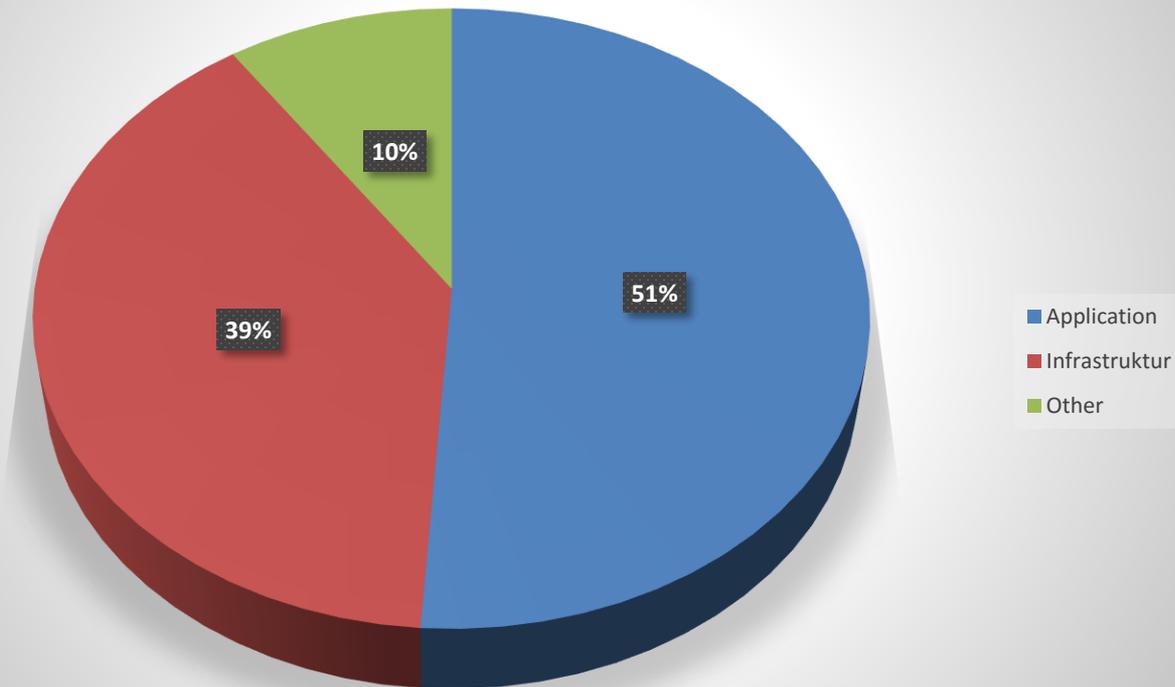
» Internal attacks or fraud (e.g., abuse of privileges, theft of information)

# CISO Survey: Threats towards your organization



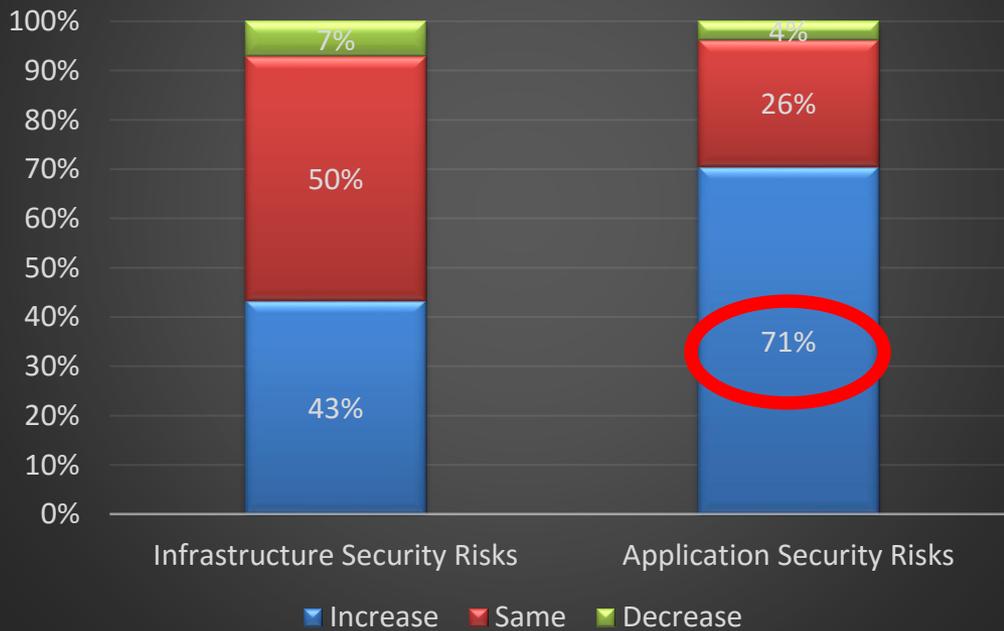
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Main areas of risk for your organisation  
(in % out of 100% in total)

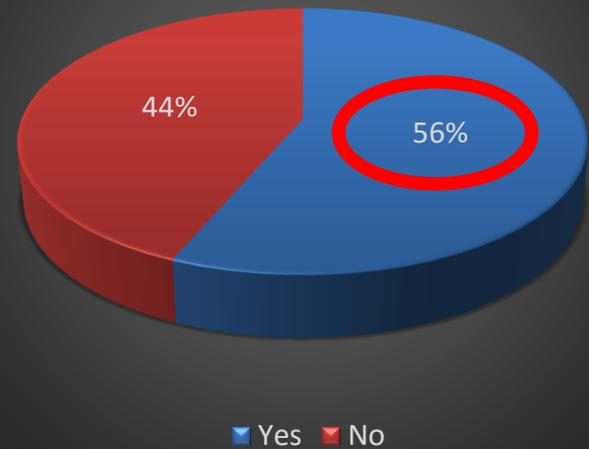




Compared to 12 months ago,  
do you see a change in these  
areas



New Threats to web  
applications negatively  
impacting your organization



# Top-5 Sources of application security risk



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**1. Lack of awareness of application security issues within the organization**

**2. Insecure source code development**

**3. Staffing (e.g. lack of security skills within team)**

**4. Third-party suppliers and outsourcing (e.g. lack of security, lack of assurance)**

**5. Poor/inadequate testing methodologies**

you think are the most likely  
to target your company in the  
next 12 months



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**1. Criminals**

**2. Insiders/employees**

**3. Hobbyist hackers**

**4. Activists / Anonymous**

**5. Those involved in corporate/industrial espionage**

**6. State sponsored spies**

**7. Competitors**

**8. Suppliers/partners**

# Learning from application security incidents... ...things are easier than you think



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- Reviewing the incidents of the past year(s), many could be traced back to:
  1. Lack of proper basic application security controls during the development phase
  2. Lack of awareness
  3. Did not require a “very high” level of skill from the attacker to exploit (though they may require time and patience to find )

*Projected growth of federal cyber-security spending (in billions)*



# Application Security As Strategic Investment

Source: Deltek, Inc.

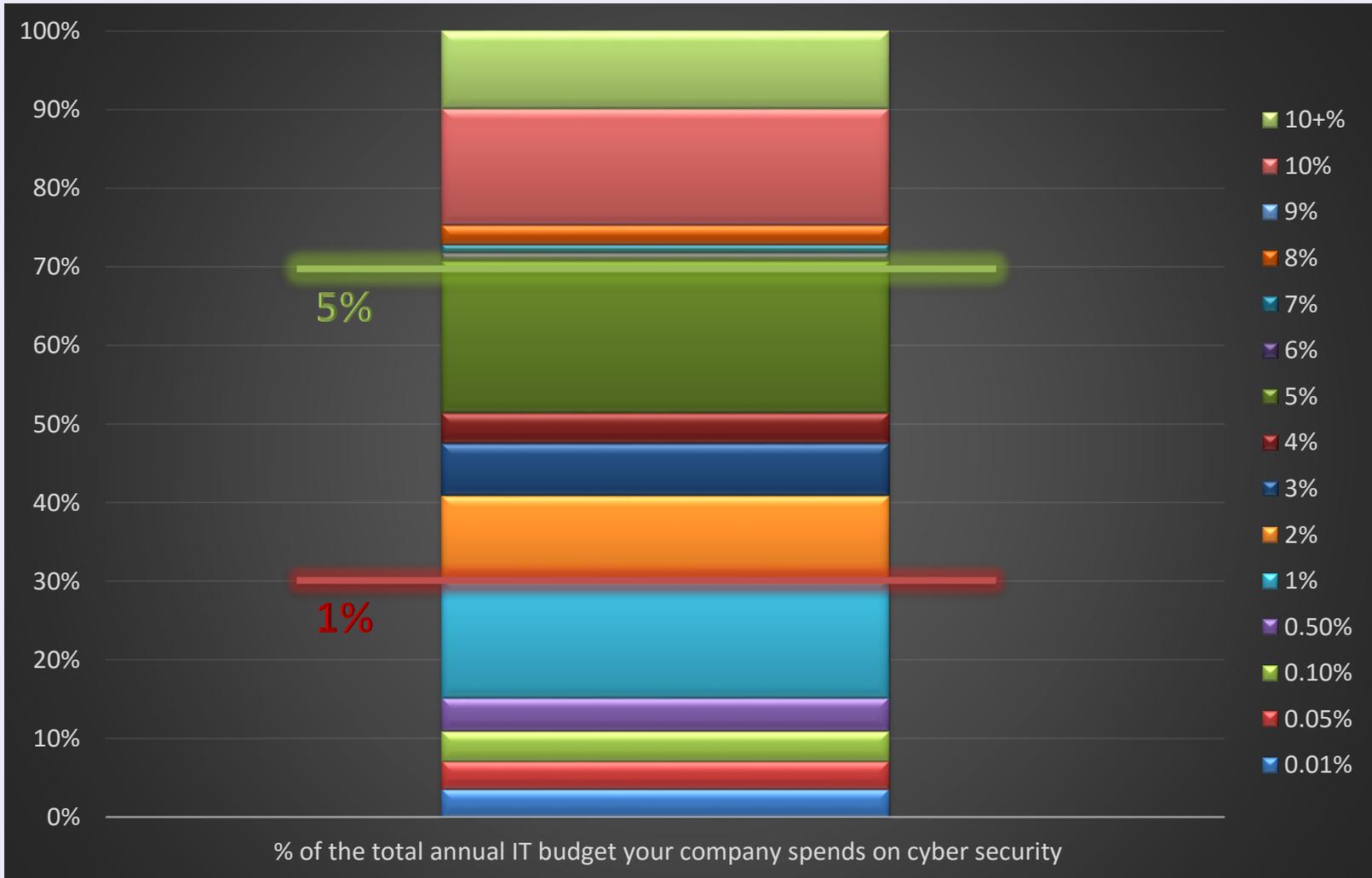
By: CHRIS SPURLUCK/THE HUFFINGTON POST

HUFFPOST TECH

# CISO Survey & Report: Investments in Security - % of IT budget for Security



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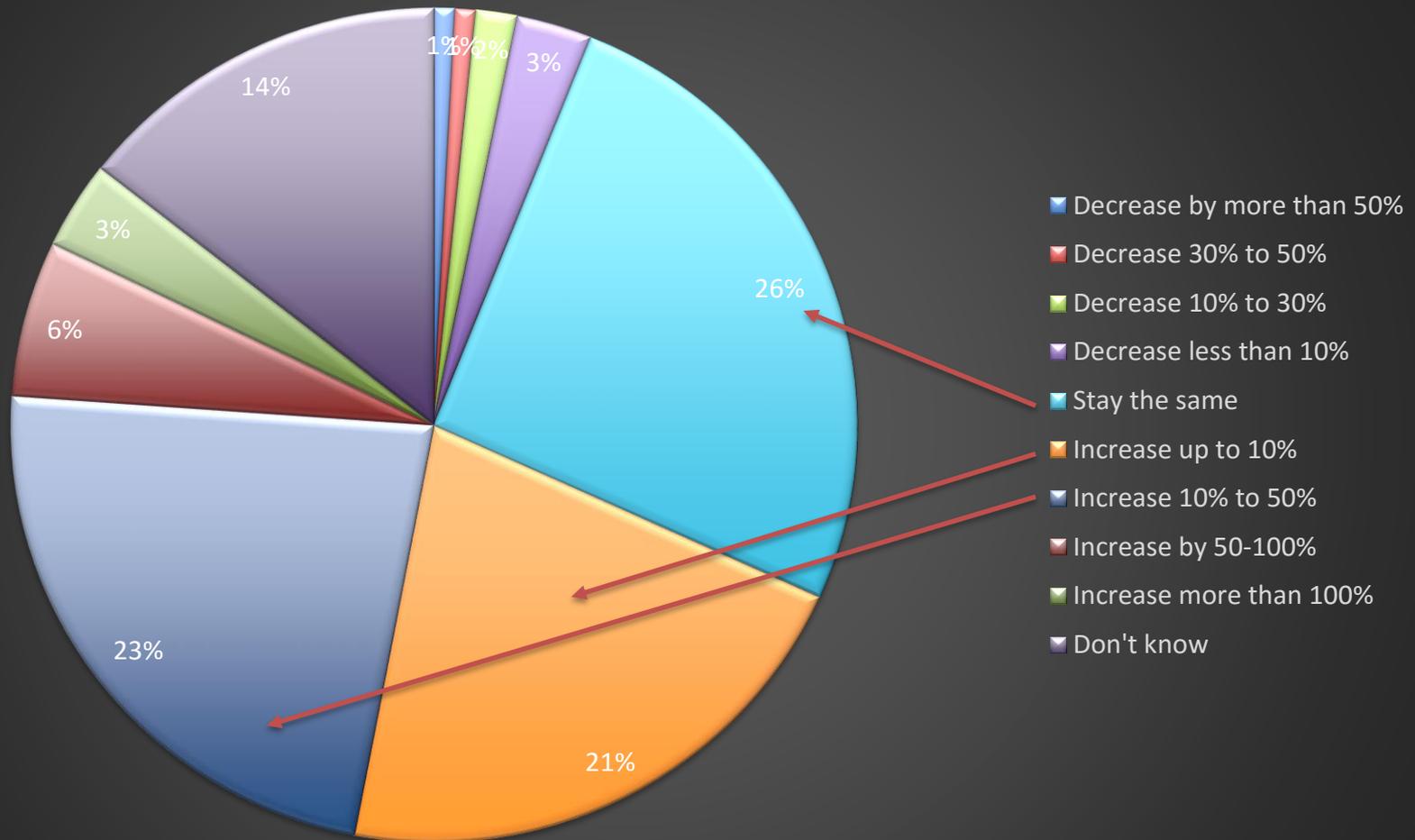


# CISO Survey & Report: Investments in Security

Your total cyber security spending over the next 12 months will...



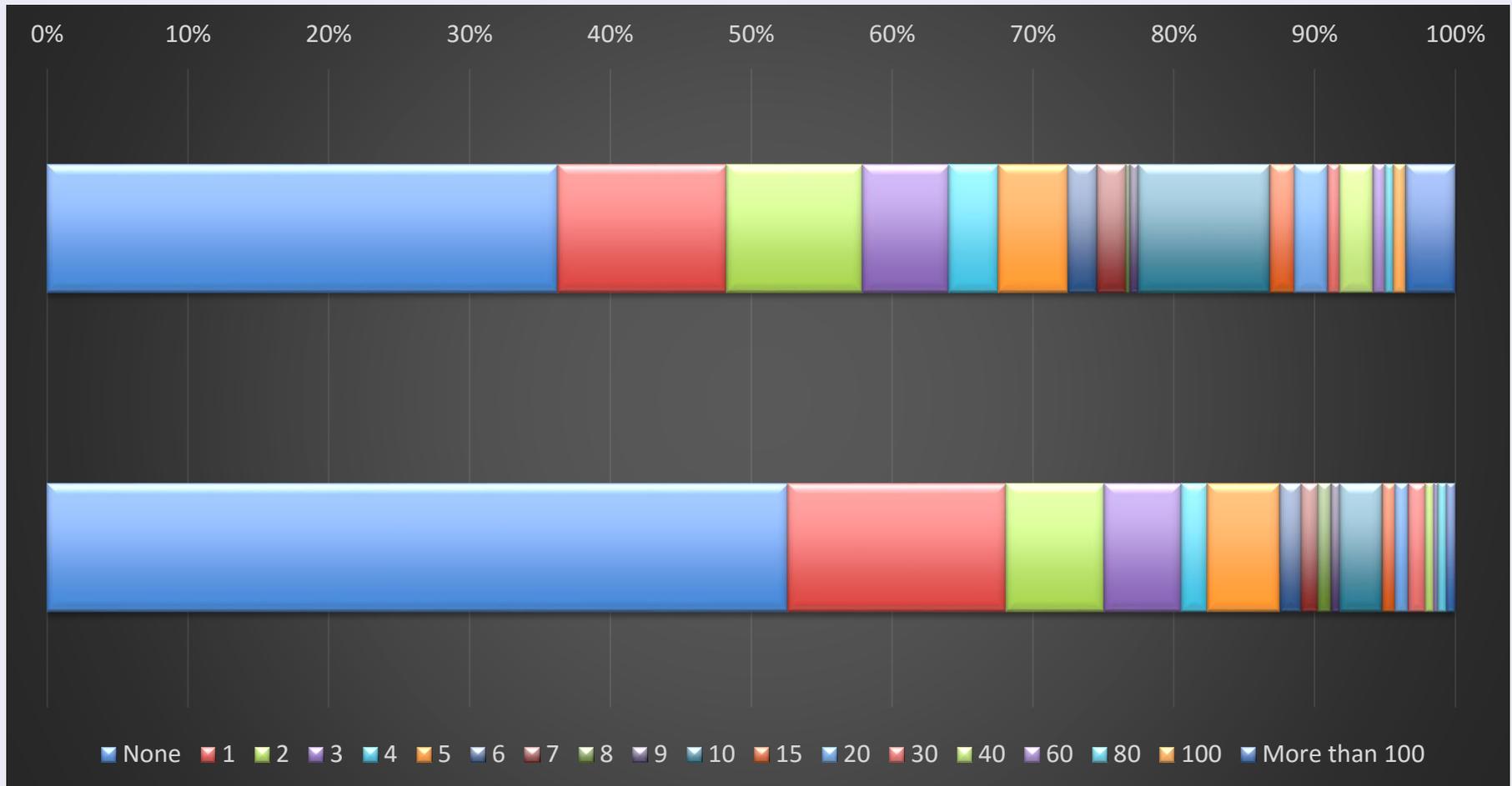
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# How many security breaches did your company experience in the last 12 months? (Cyber security and Application Security breaches)



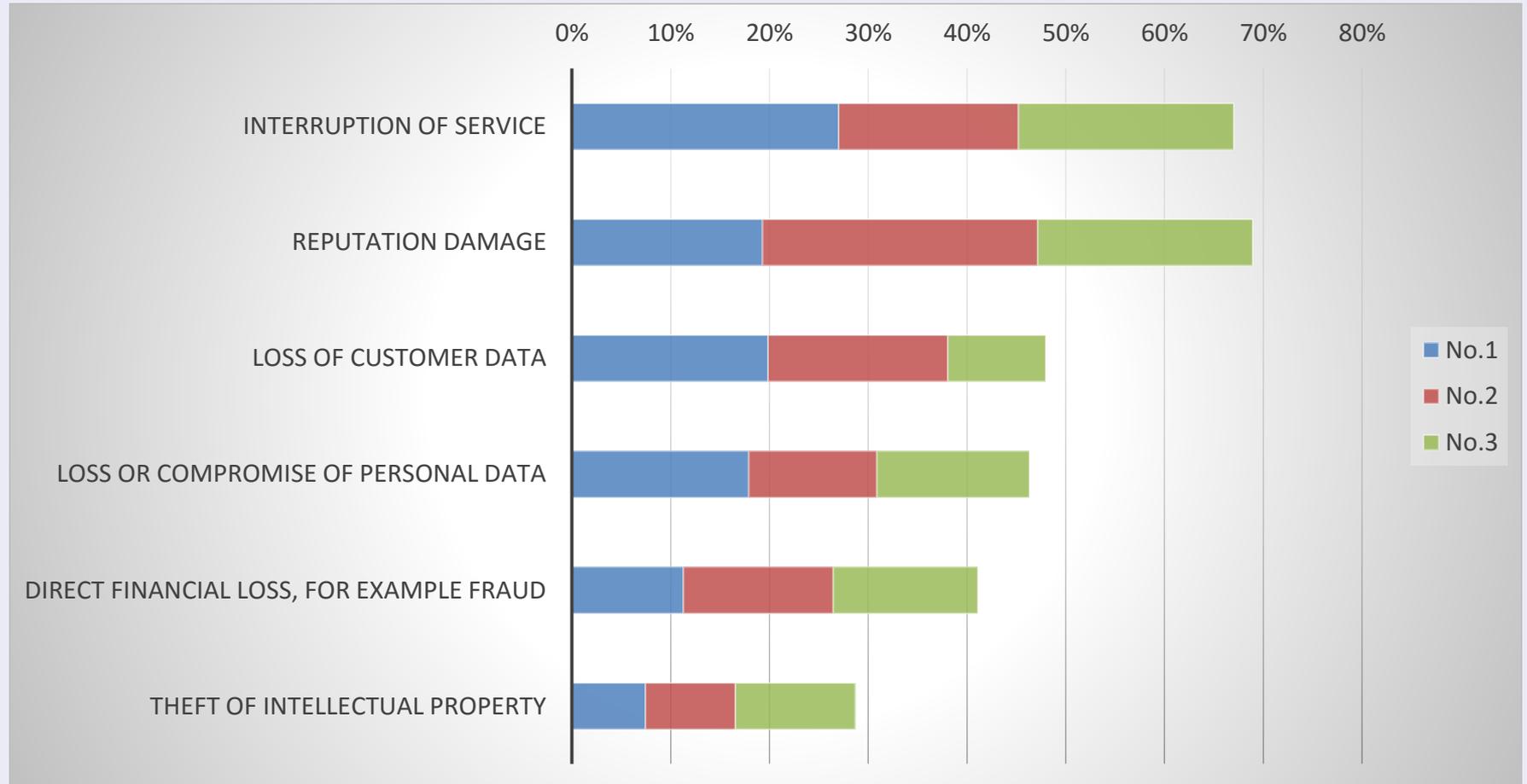
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# Main damage types caused by cyber attacks



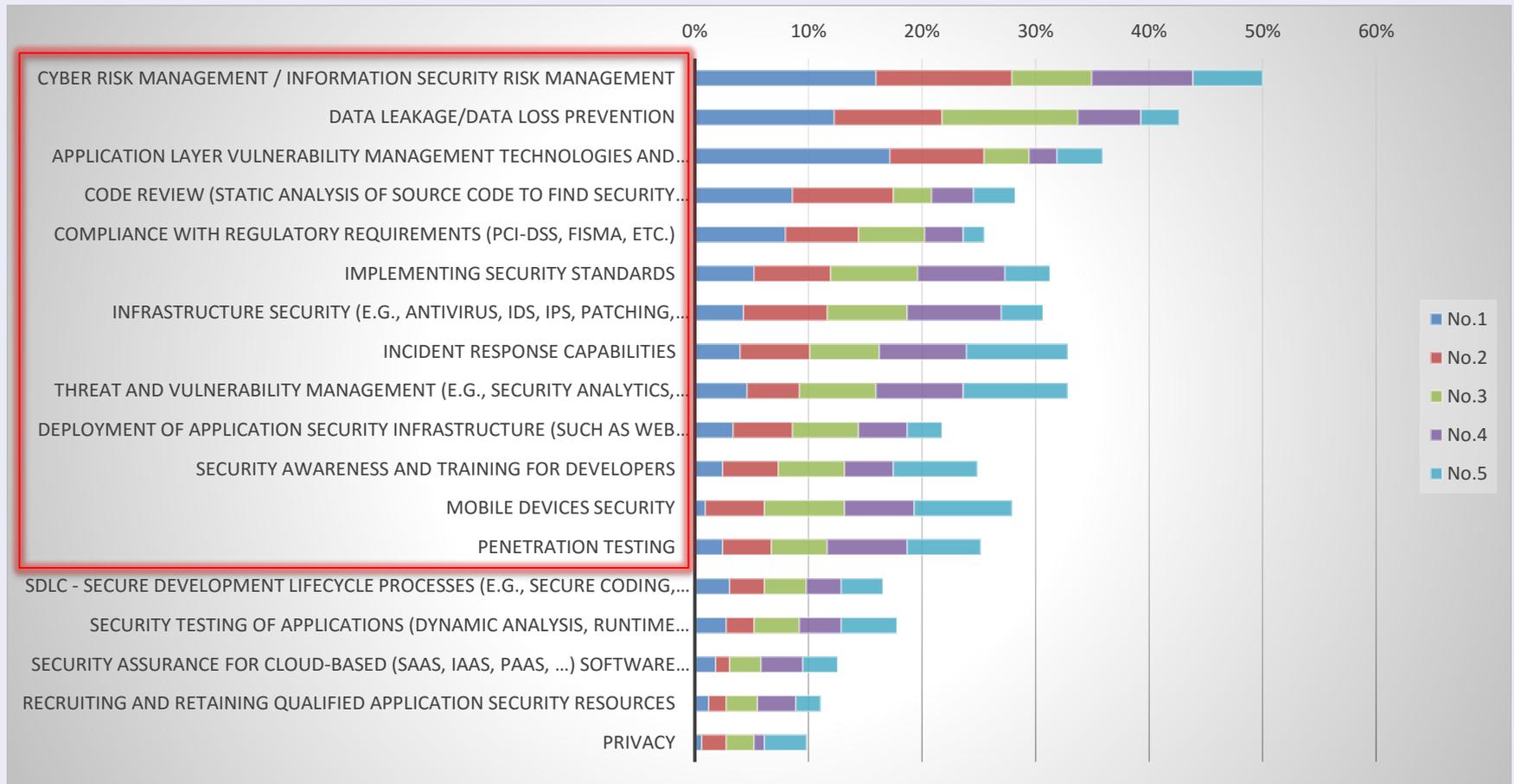
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# Investments in Security: Top security priorities for the coming 12 months



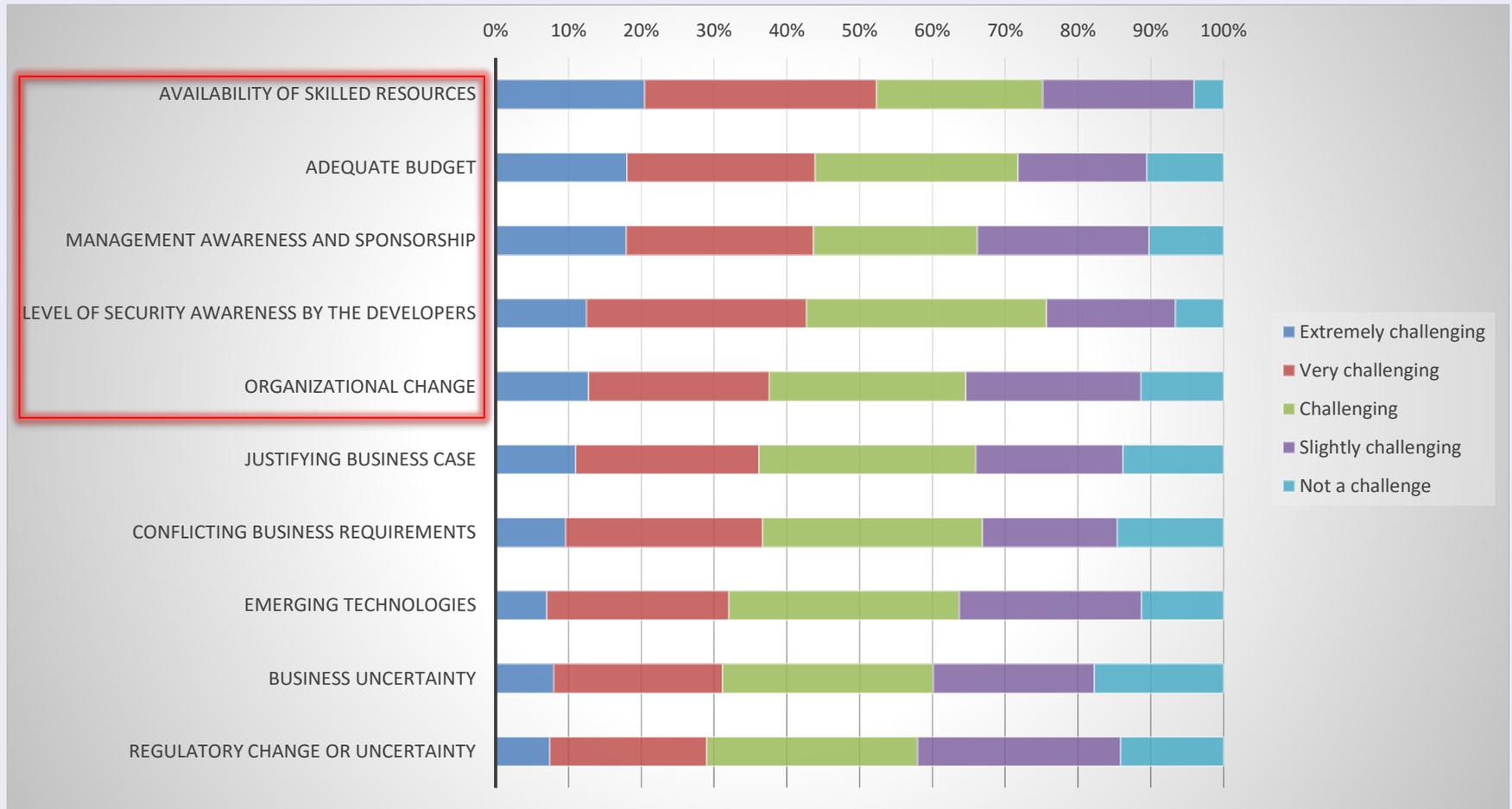
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# Biggest challenges delivering your organization's application security initiatives



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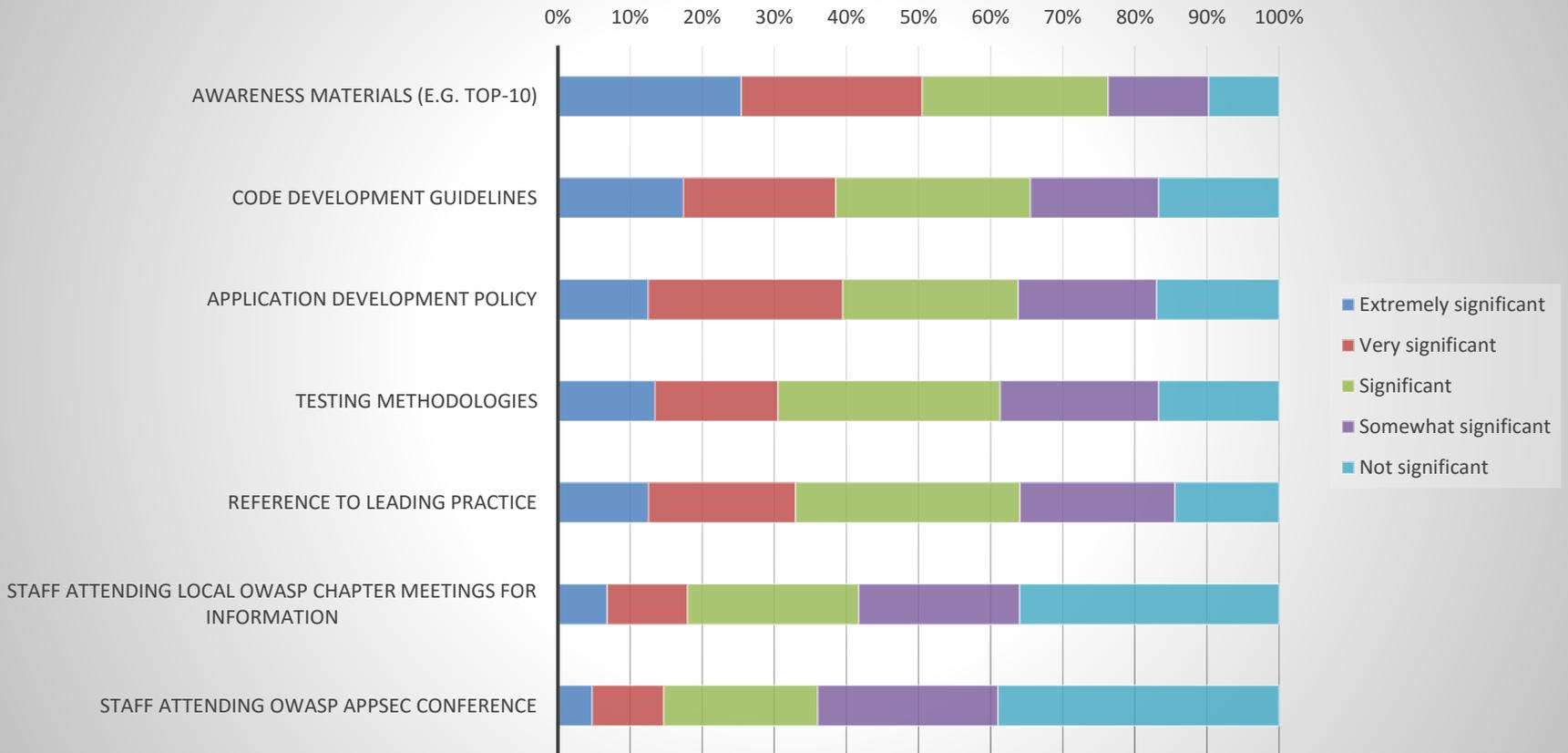


# Where you see OWASP can help you

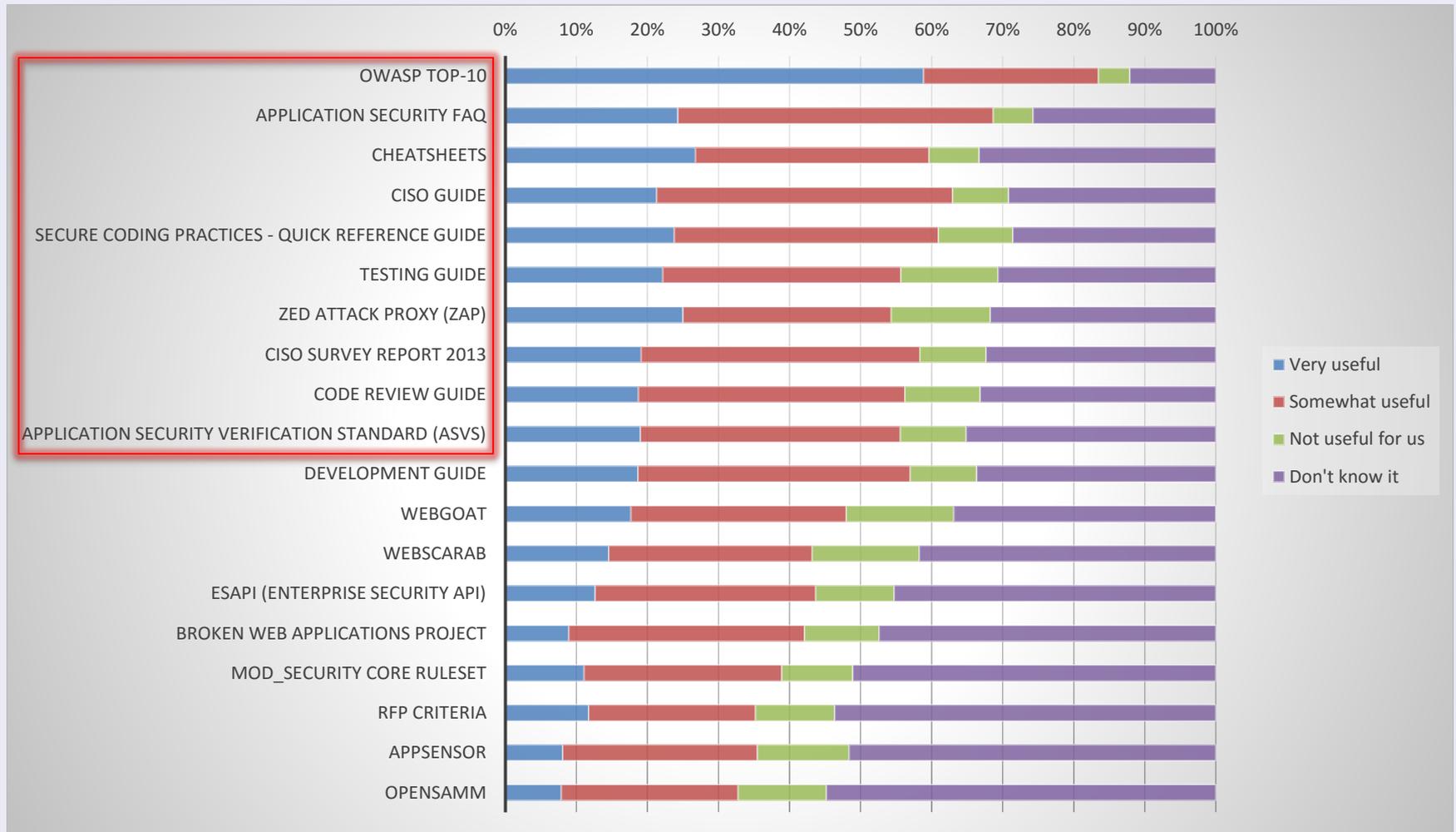


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## Significance of OWASP guidance for your organisation



# Which OWASP projects people found useful (Top-10)

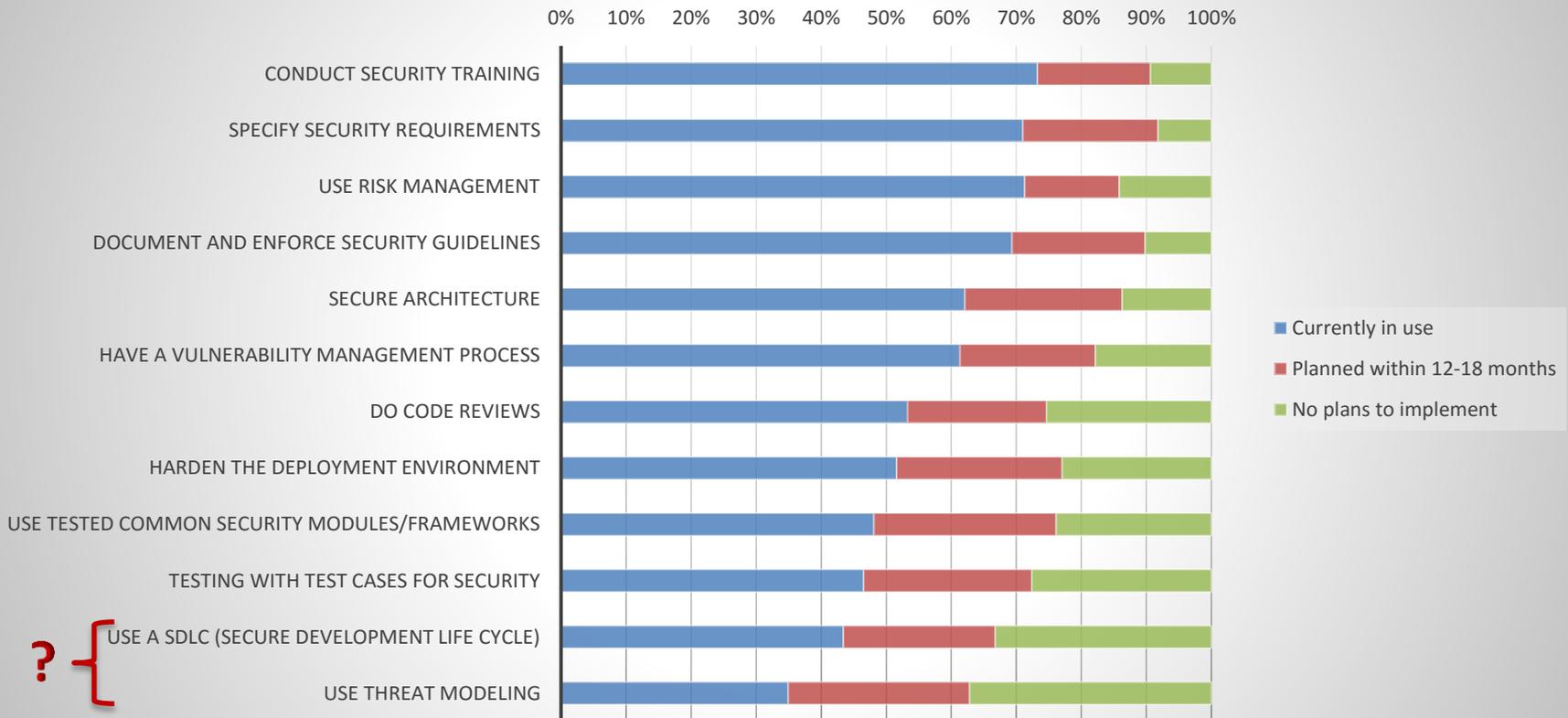


# As part of your information security management program, do you...



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## As part of your information security management program, do you...

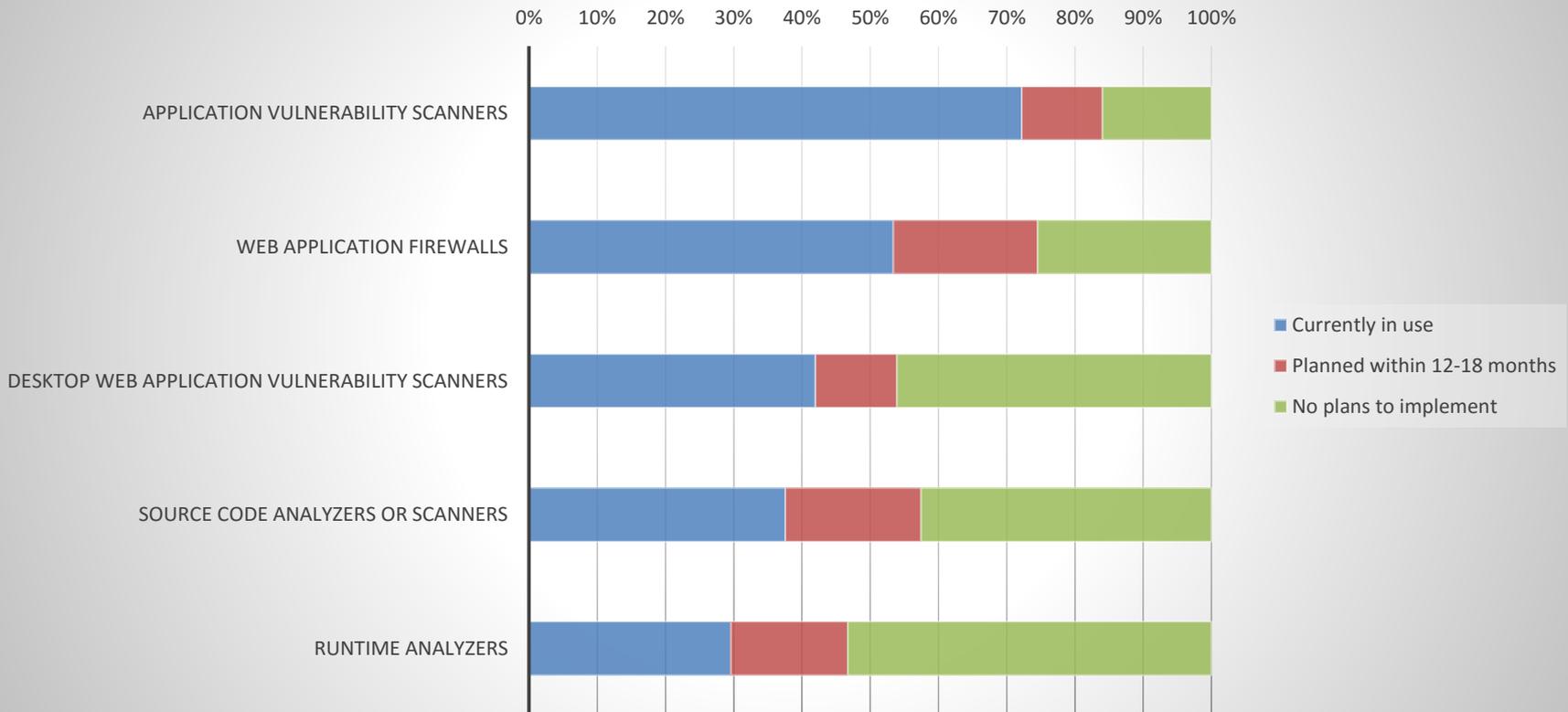


# Which technology tools organizations use or are planning to use...



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## Which technology tools your organization uses or is planning to use



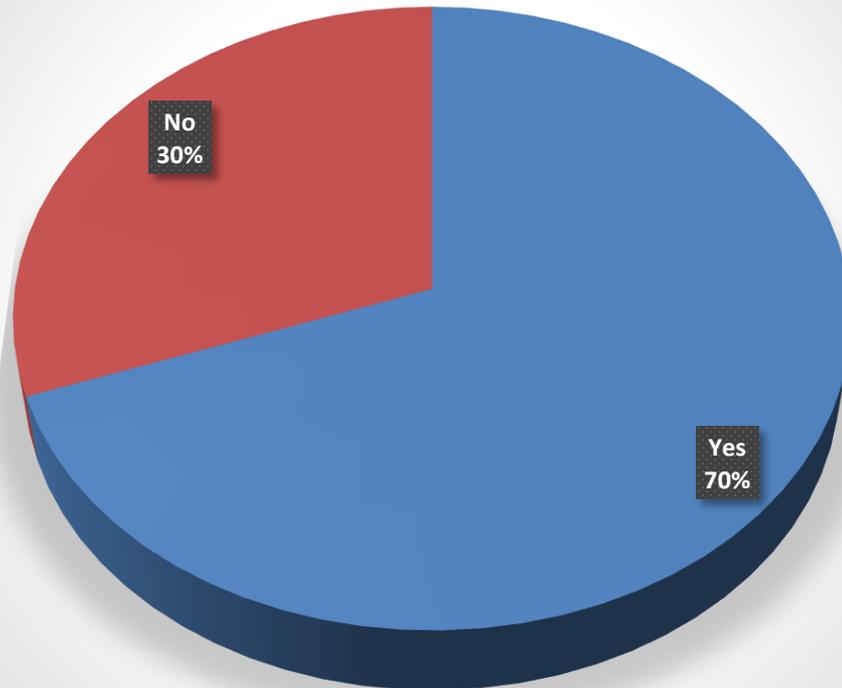


**Build Security In,  
Security Strategy &  
Maturity Models**



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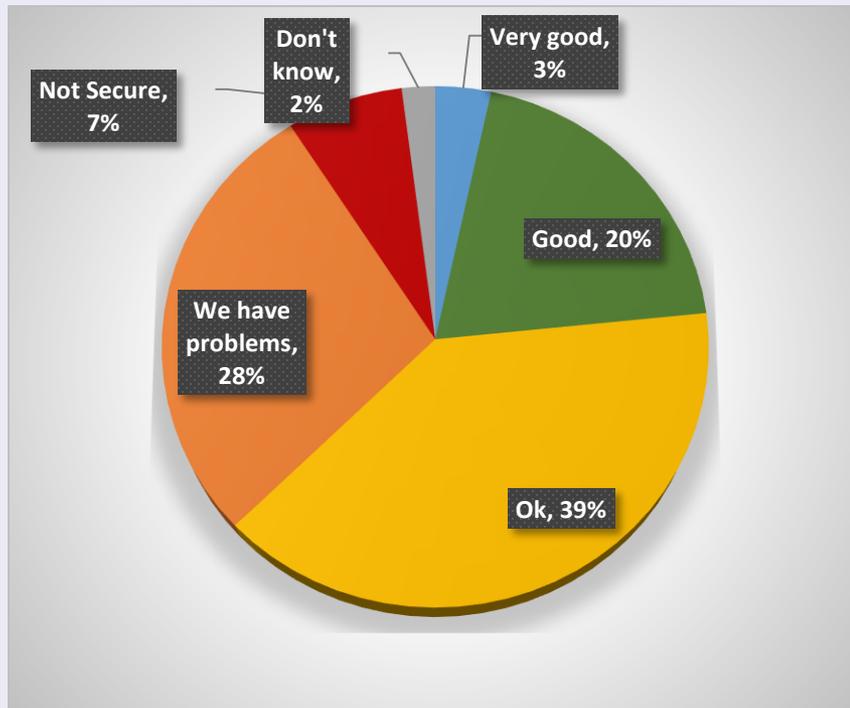
### Board Briefings on Cyber Security



# How confident are you that your organization is protected from cyber security risk?

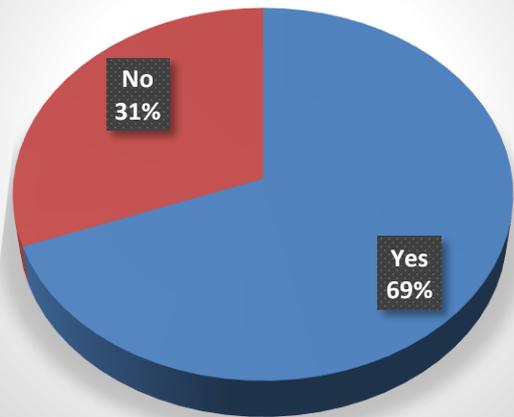


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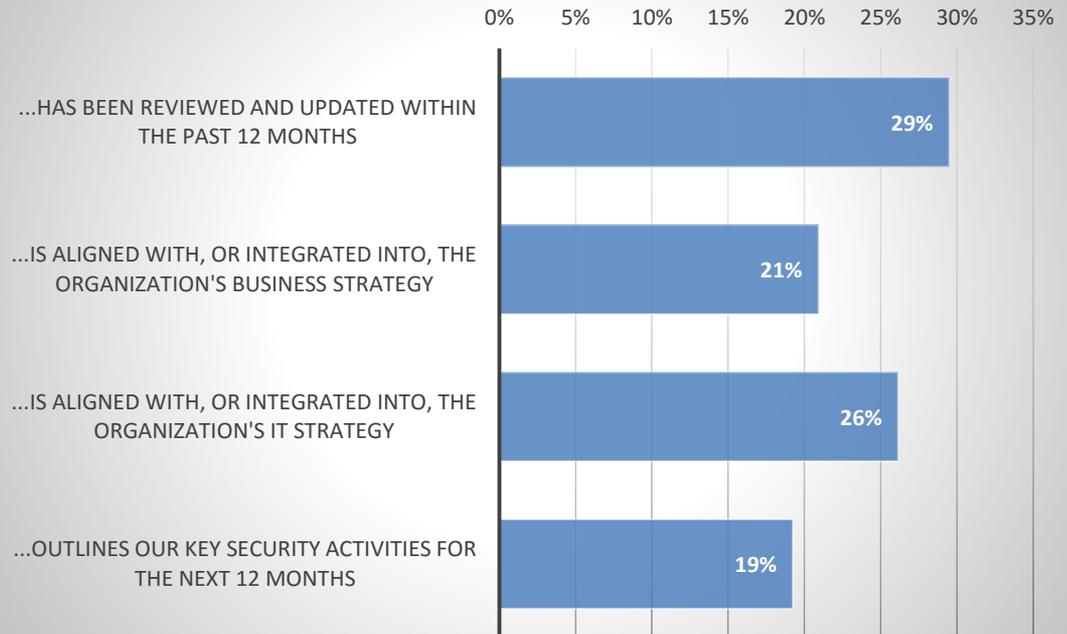




## Documented security strategy



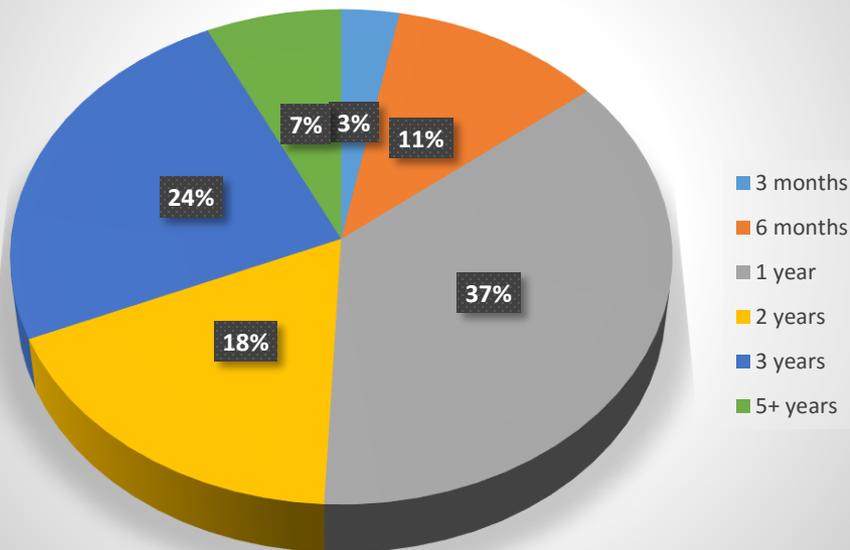
## Your application security strategy...



In case you wonder:  
We found a medium positive correlation  
between board briefings and whether you have  
a security strategy: 0.43



How long time does your security strategy plan ahead



Trends of security strategy planning 2013  
-> 2015: longer time horizons

Time Horizon	2013	2015
3 months	9.3%	3%
6 months	9.3%	11%
1 year	<b>37.0%</b>	<b>37%</b>
<b>2 years</b>	<b>27.8%</b>	18%
3 years	11.1%	<b>24%</b>
5 years+	5.6%	7%

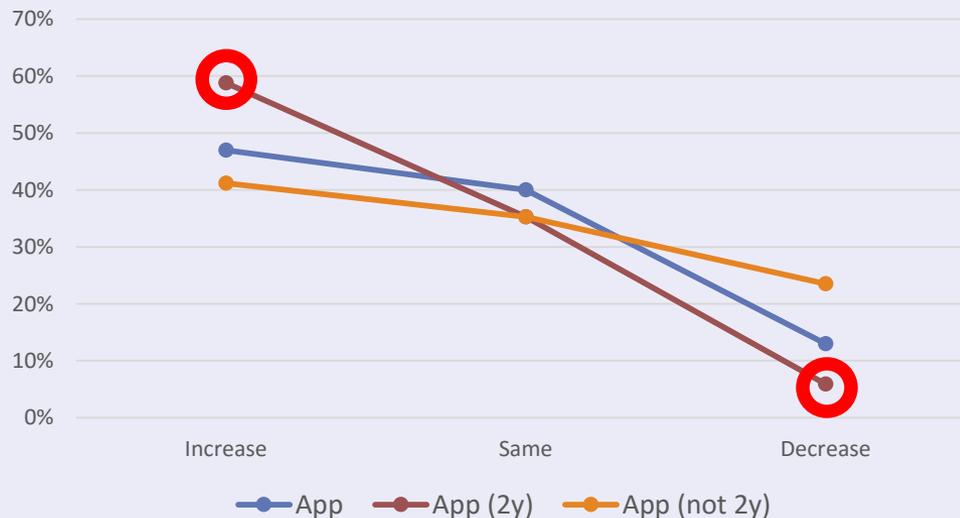
# Security Strategy (findings from 2013): advantages of a 2-year security strategy



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## » Benefits of a security strategy for application security investments:

Correlation between investments in Application Security and a 2year Application Security Strategy



Analysis for correlations with:

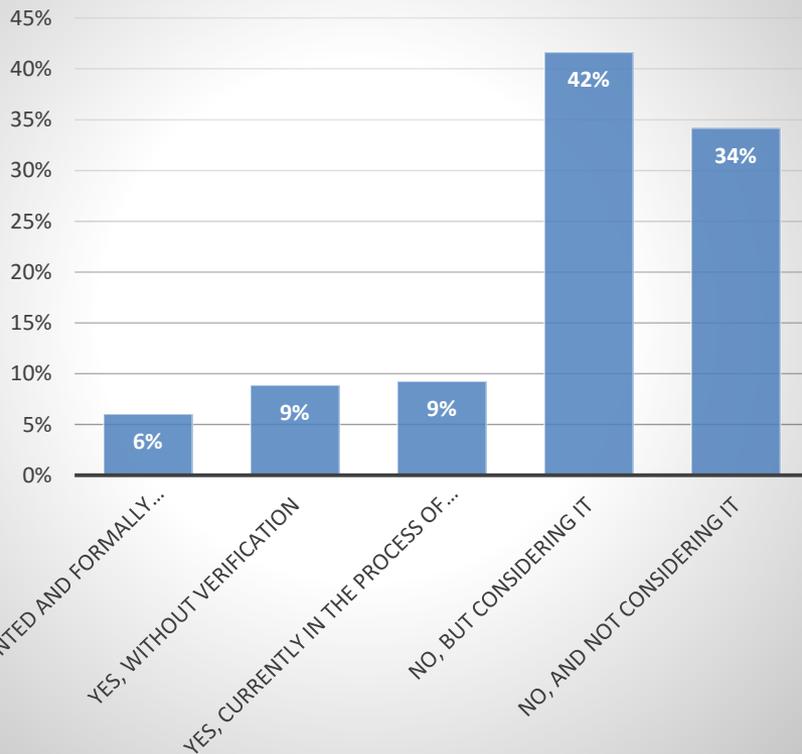
- Recent security breach
- Has a ASMS
- Company size
- Role (i.e. CISO)
- Has a Security Strategy
- **Time horizon of security strategy (2 years)**

# Strategy & Planning: Usage trends for ASMS and Maturity Models (2015 vs. 2013)

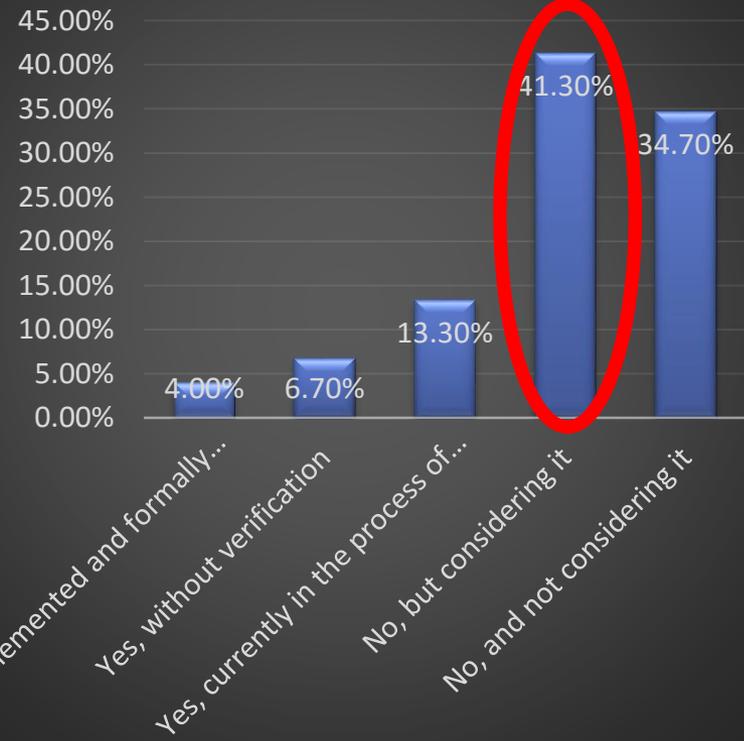


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## Use of Application Security Management System (ASMS) or Maturity model



## 2013 - Application Security Management System (ASMS) or Maturity Model (e.g., OWASP SAMM)

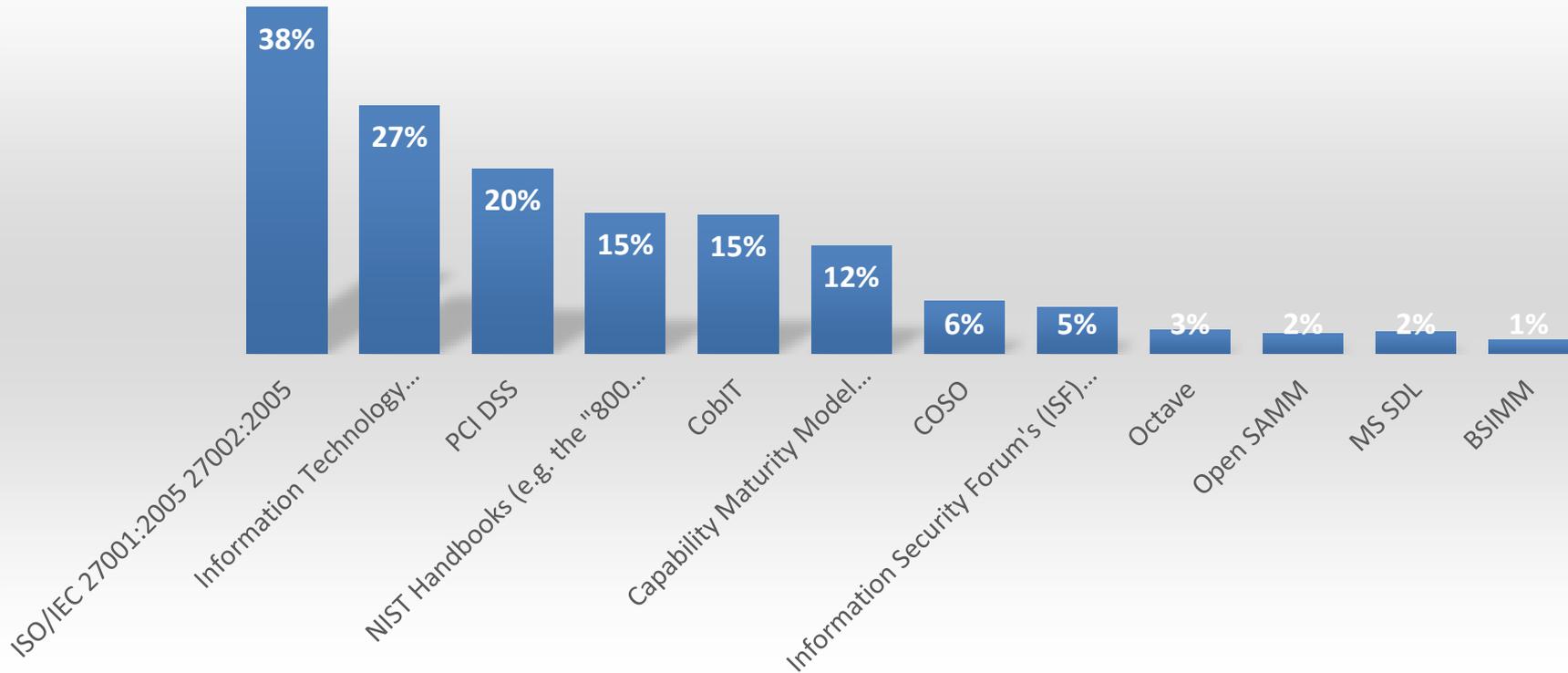


# Strategy & Planning: Maturity Model trends compare with 2013



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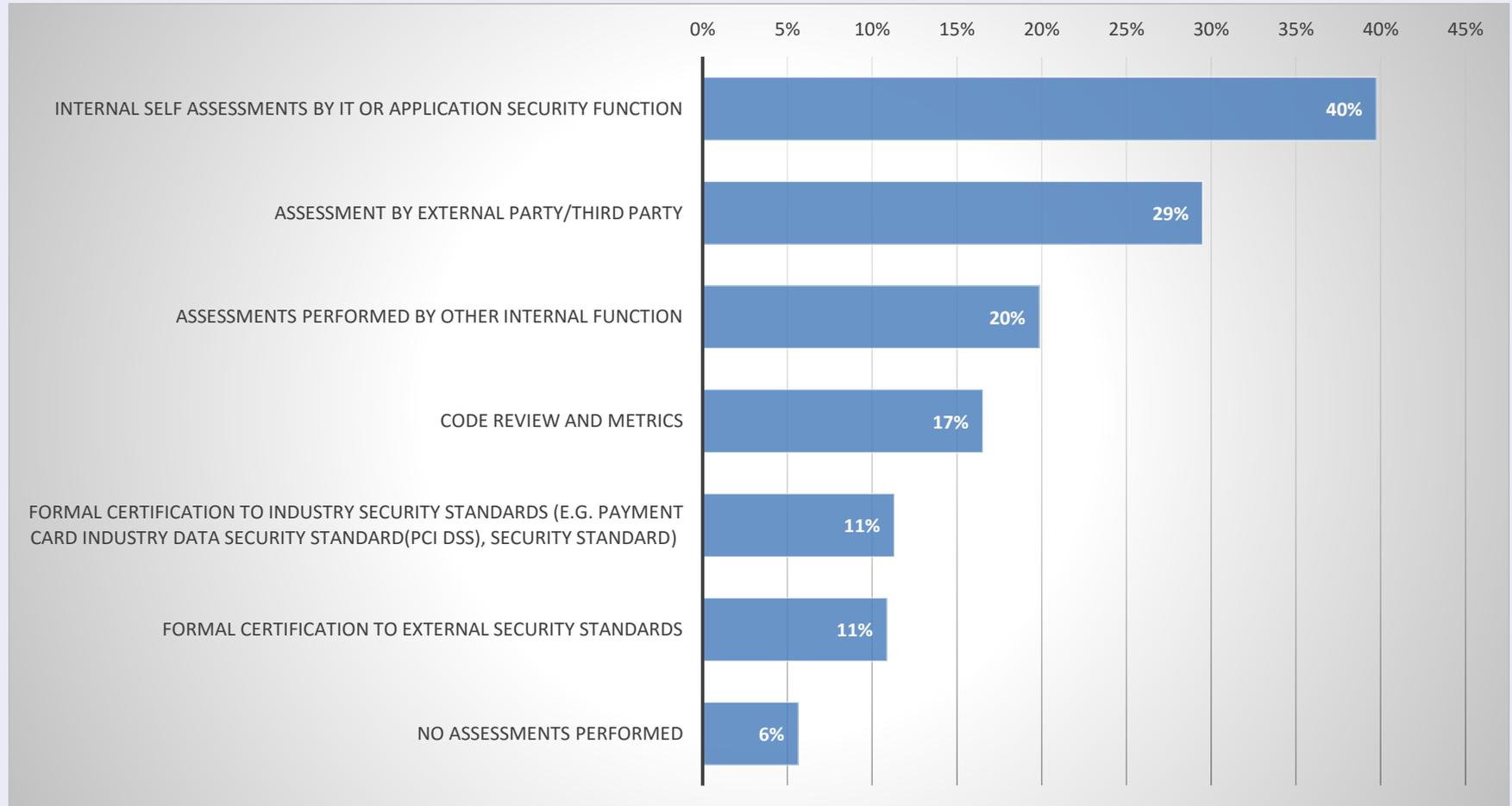
Which Models are in use?



# How does your organization assess the quality and effectiveness of application security?



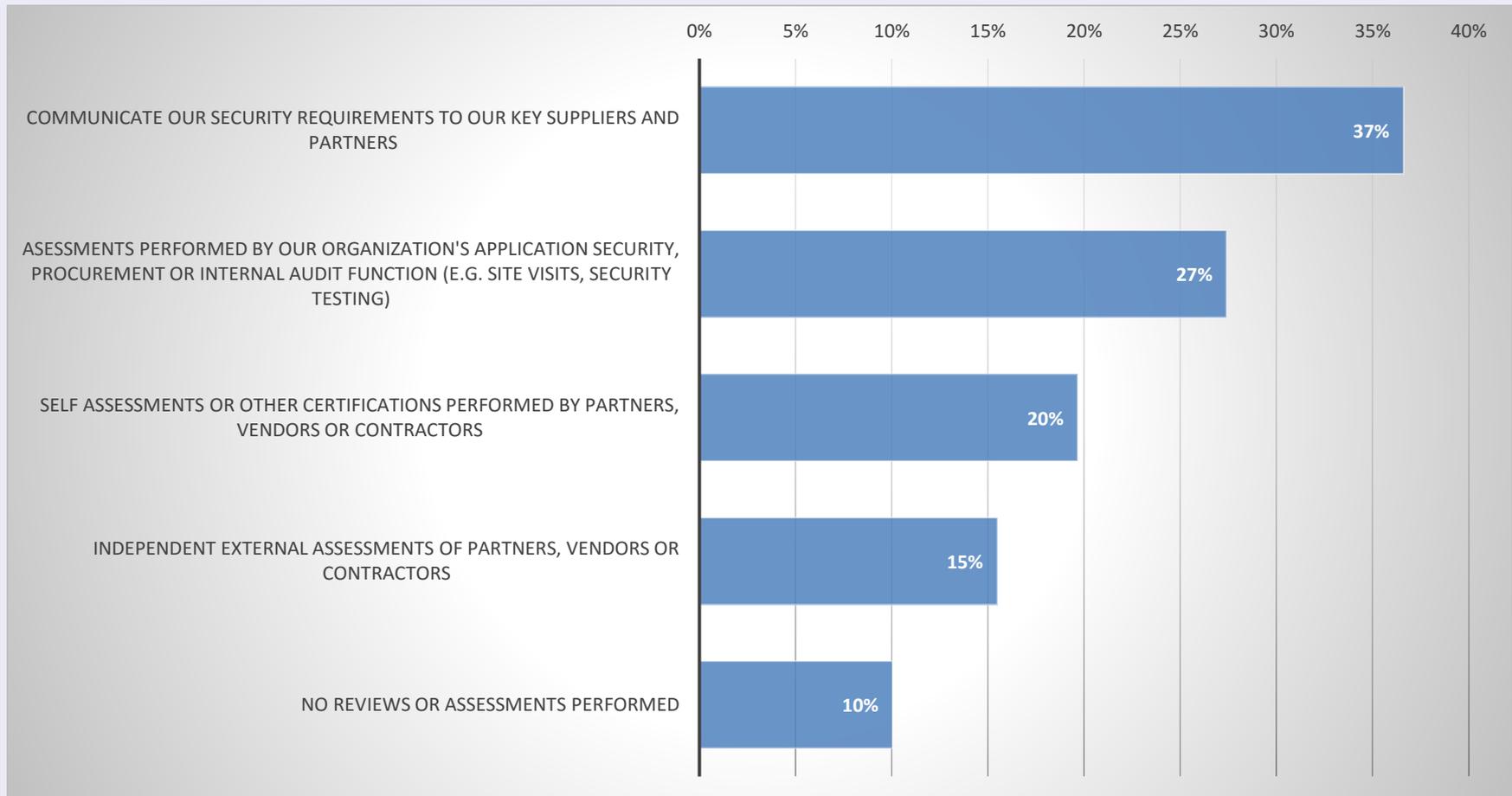
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# Suppliers & External Partners: How do you verify your external partners...

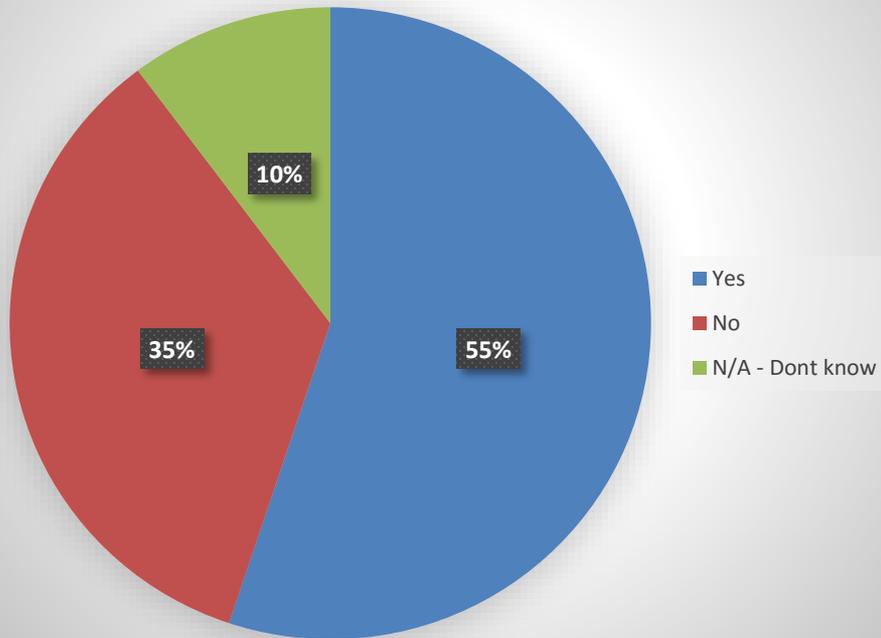


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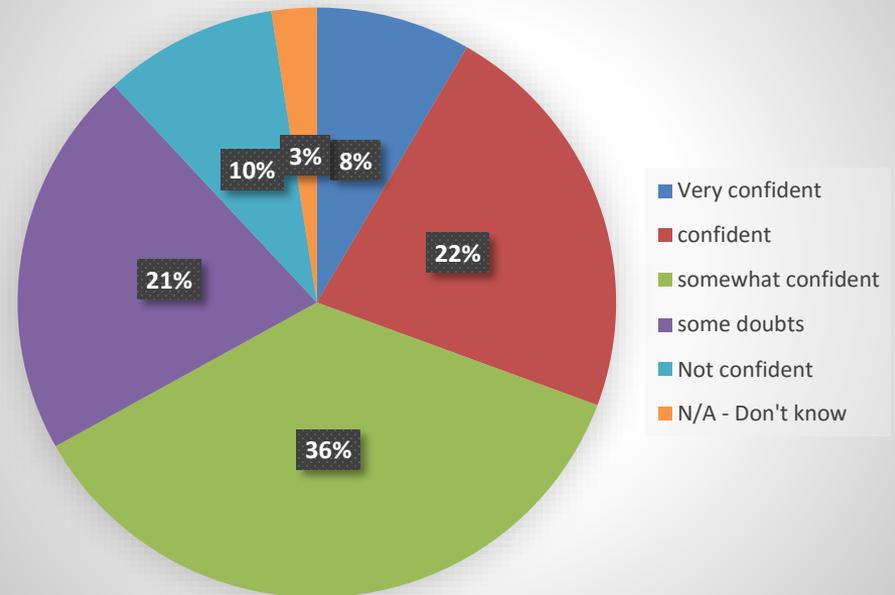




In the last 12 months, have you experienced, exercised or prepared how you will recover from a cyber security incident

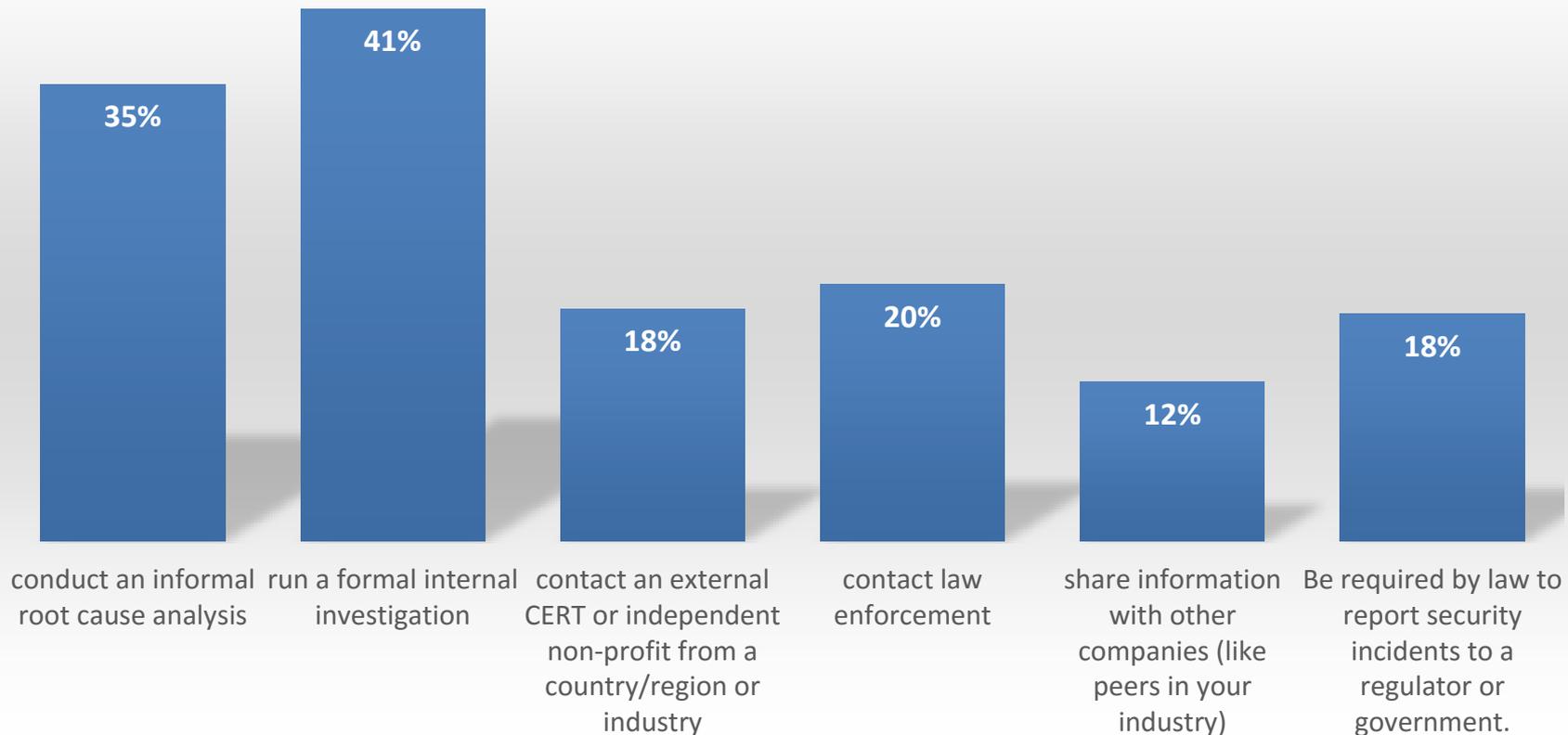


Effectiveness of Incident Response





Incident Response: When an incident or breach occurs...

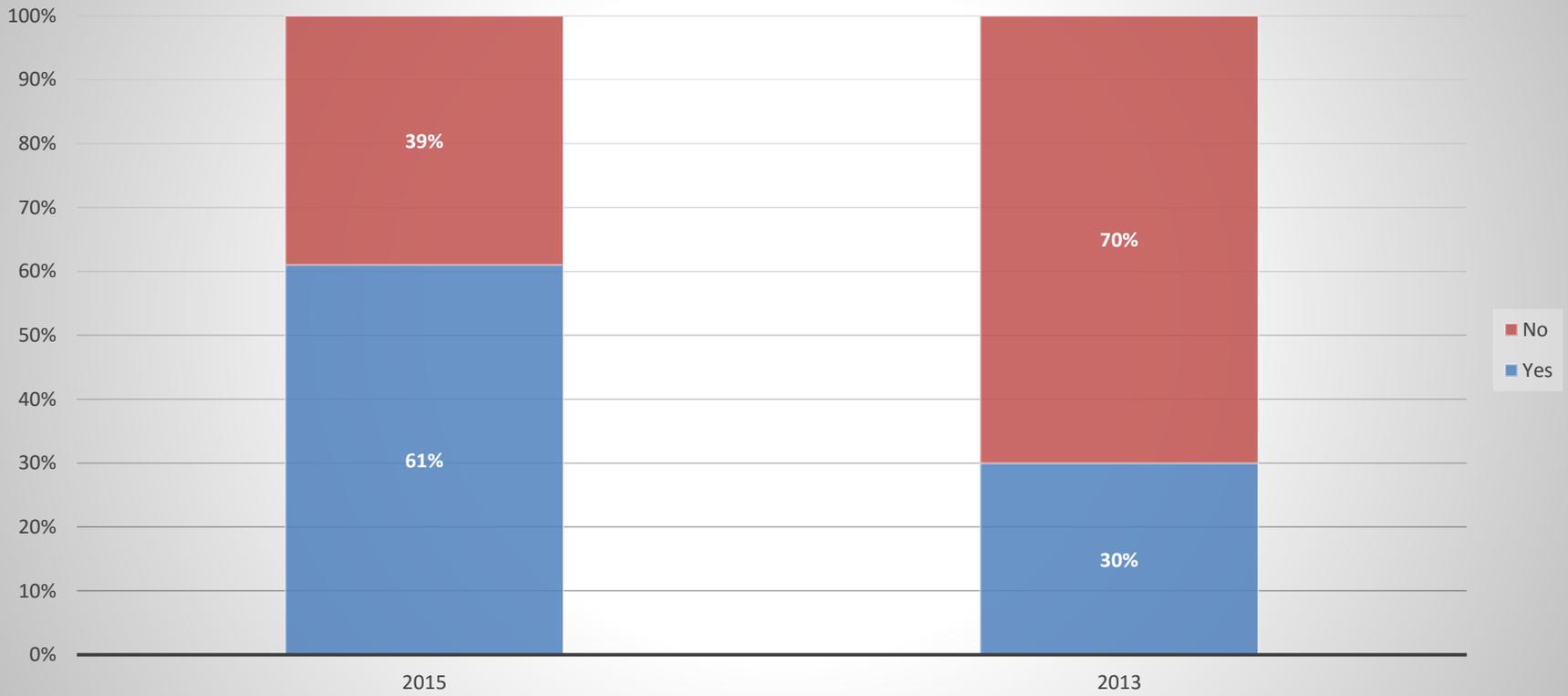


# Incident Response: Increase spending after incident?



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### Spending more after a security incident?

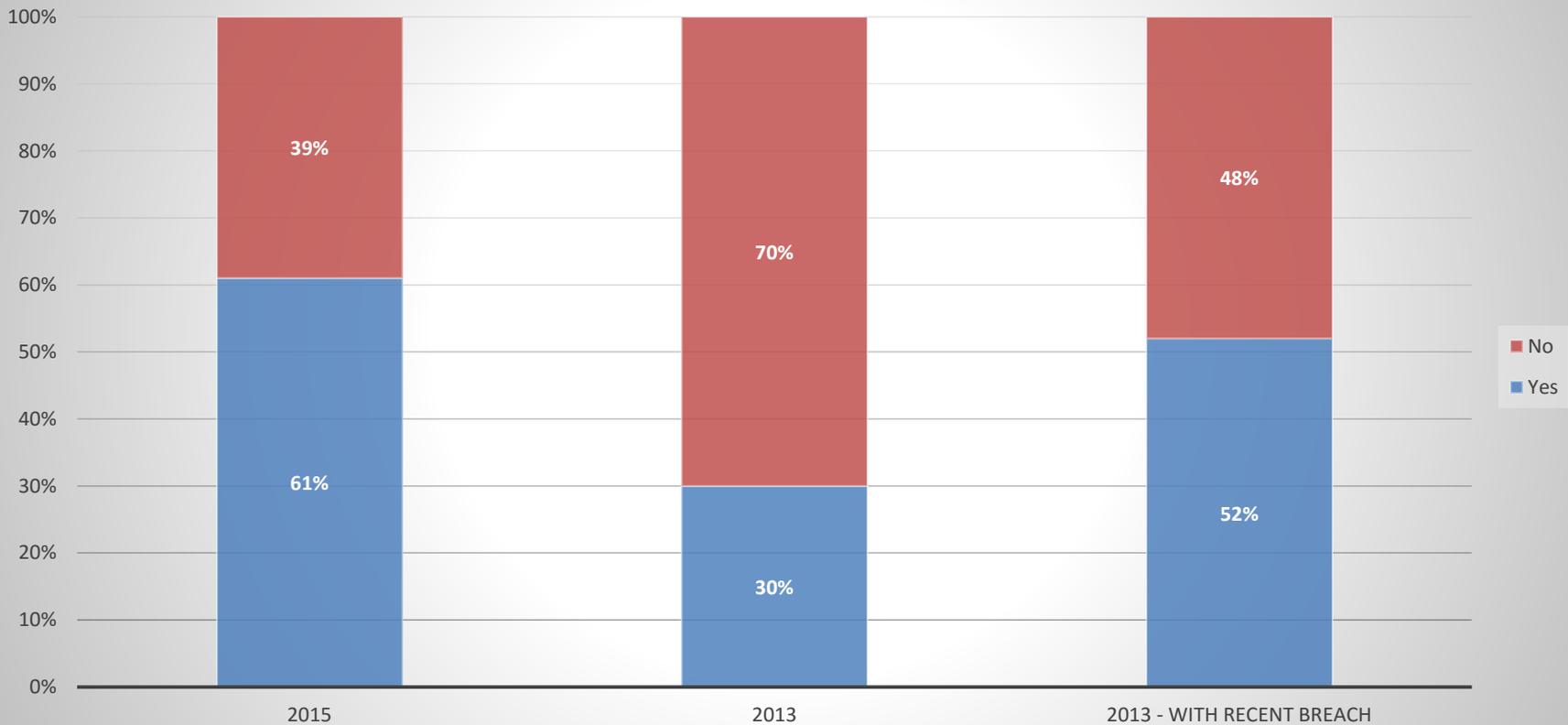


# Incident Response: Increase spending after incident?



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## Spending more after a security incident?



Thank you - Q&A



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# Q U E S T I O N S & A N S W E R S

- » *If you like to be notified when the new OWASP CISO Survey Report will be released, leave your card or send an email.*



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Thank you