

# RSA® Conference 2018

San Francisco | April 16–20 | Moscone Center

SESSION ID: MASH-R02

## ABSTRACTIONS OF SECURITY: MINING A DECADE OF RSA

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# Overview

- RSA Conference is huge... enormous potential for introspection
- Over 2,000 Speaking Submissions this year alone.
  - Title
  - Short Description
  - Long Description
- RSA Shared 10 years of anonymized submissions with Cyentia
- Cyentia Institute is a research services firm

# Wade and Jay

CYENTIA INSTITUTE

## VOICE OF THE ANALYST STUDY

An Inside Perspective on Security Operations

Commissioned by **respond**

**FOCAL POINT**  
DATA RISK

## CYBER BALANCE SHEET

THE 2017 REPORT

Sponsored by **FOCAL POINT**  
DATA RISK

CYBRARY

## DECLASSIFIED

UNRAVELING THE CYBER SKILLS GAP & TALENT SHORTAGE  
2018

IN COLLABORATION WITH: CYENTIA INSTITUTE

CYENTIA INSTITUTE

About ▾ Library ▾ Podcast

### Cybersecurity Research Library

At Cyentia Institute, we understand that reliable research is essential for a stronger, more informed professional community. We leverage a unique process to select and curate high quality research for community use.

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## STRIKING SECURITY GOLD

Uncovering hidden insights in a decade's worth of RSA Conference abstracts.

As the premier security conference in the world, RSA Conference offers an excellent lens through which to study the topics and trends within our industry. The Conference's slogan of "Where the World Talks Security" shows that's not just an accident; it's the goal.

But what exactly do we talk about when we talk "security?" That's the question we seek to answer in this report, which has its roots in a similar question asked by an eight-year-old daughter two and a half years ago: ["What's the RSA Conference about, Daddy?"](#) That root sprouted into a [four-part blog series](#) and a [panel discussion](#) a year later where we analyzed 25 years of session titles in honor of the 25th anniversary of RSA Conference.

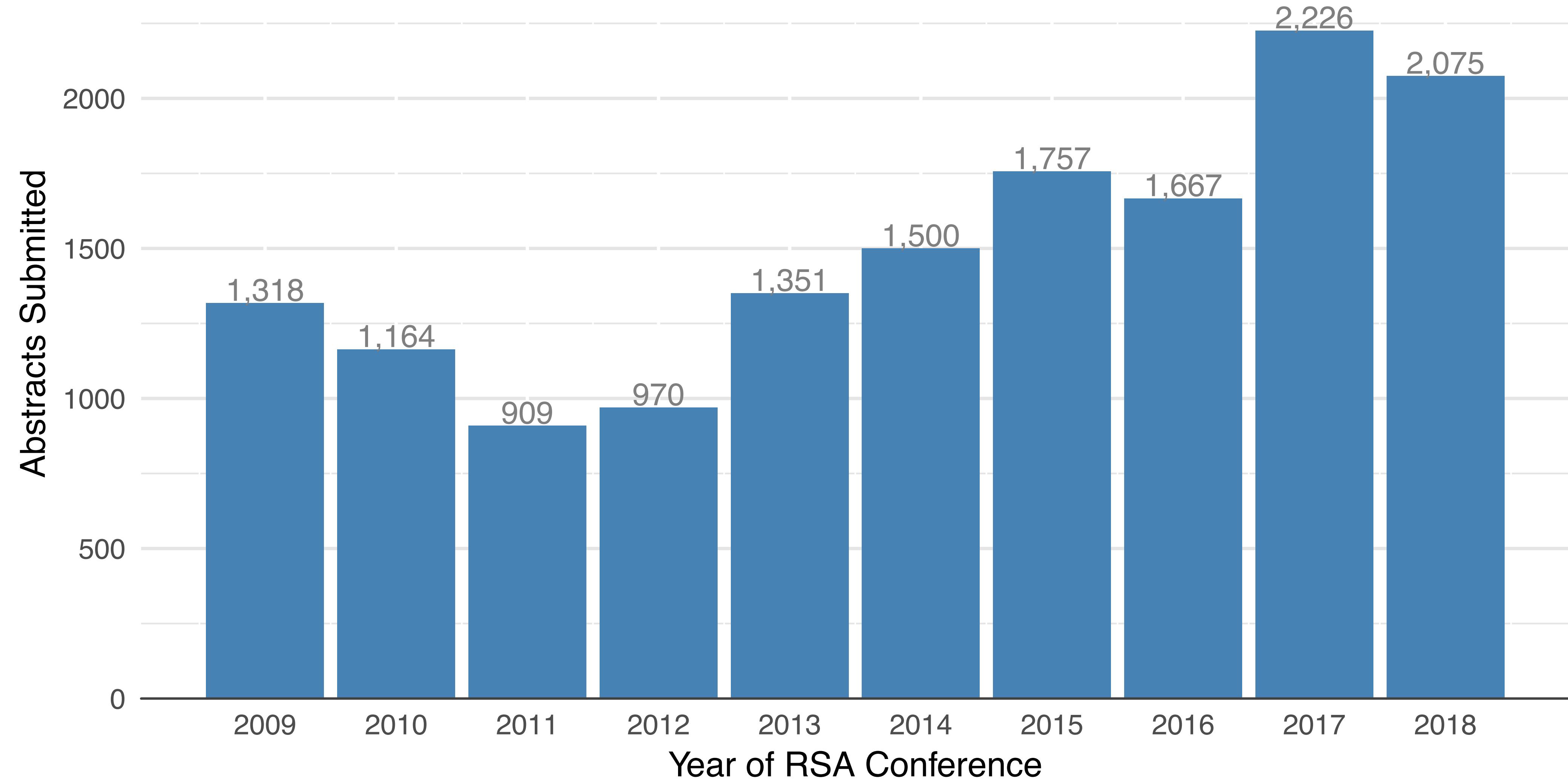
To really study the question, however, titles provide limited value. They're often created to grab attention rather than impart information. Call for Paper (CFP) submissions, by comparison, are a veritable goldmine of details and insight about the sessions just waiting to be mined. Once again, RSA Conference was kind enough to supply the ore for our digital pickaxes. Did we strike gold and unearth valuable nuggets of insight about our industry? You'll have to read on to find out.

CYENTIA INSTITUTE

This report was produced by the Cyentia Institute, a research firm that seeks to advance cybersecurity knowledge and practice through data-driven analysis. We curate knowledge for the community, partner with vendors to create compelling research, and help enterprises gain insight from their data. Find out more: [www.cyentia.com](#).

RSA Conference | Where the world talks security

# 14,937 Total Abstracts



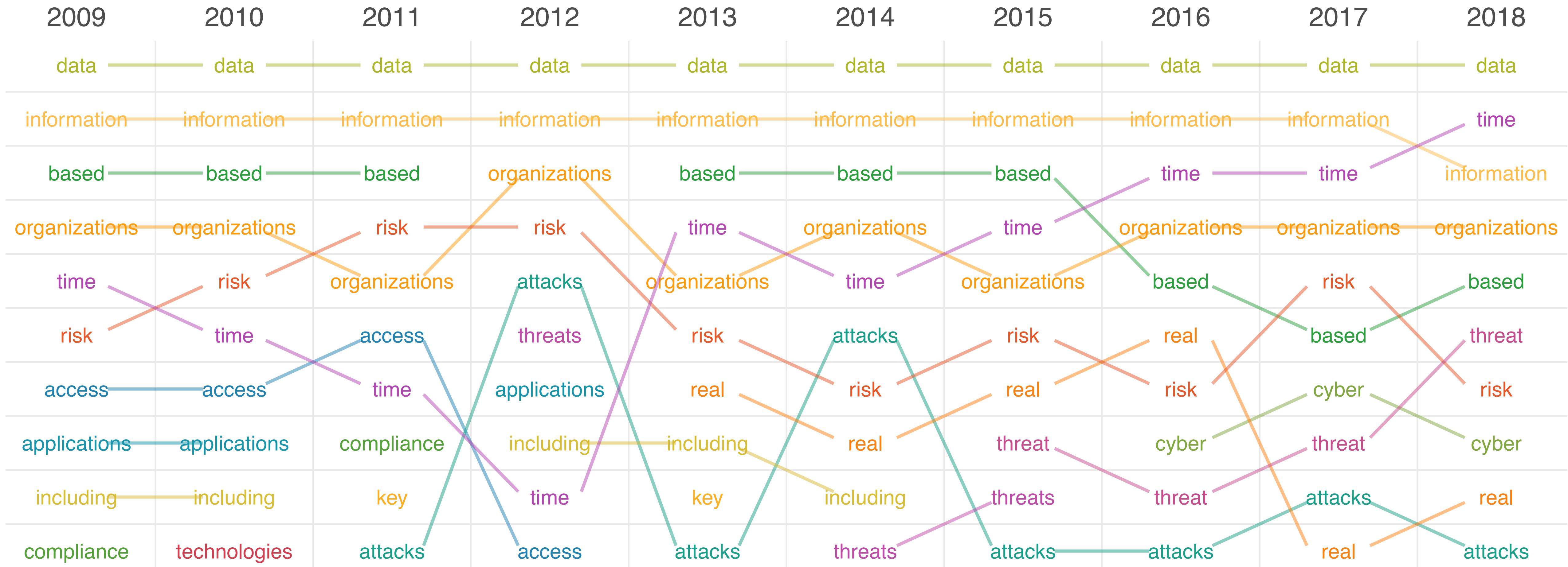
Source: Cyentia Institute with data from RSA Conference

# What are we talking about?



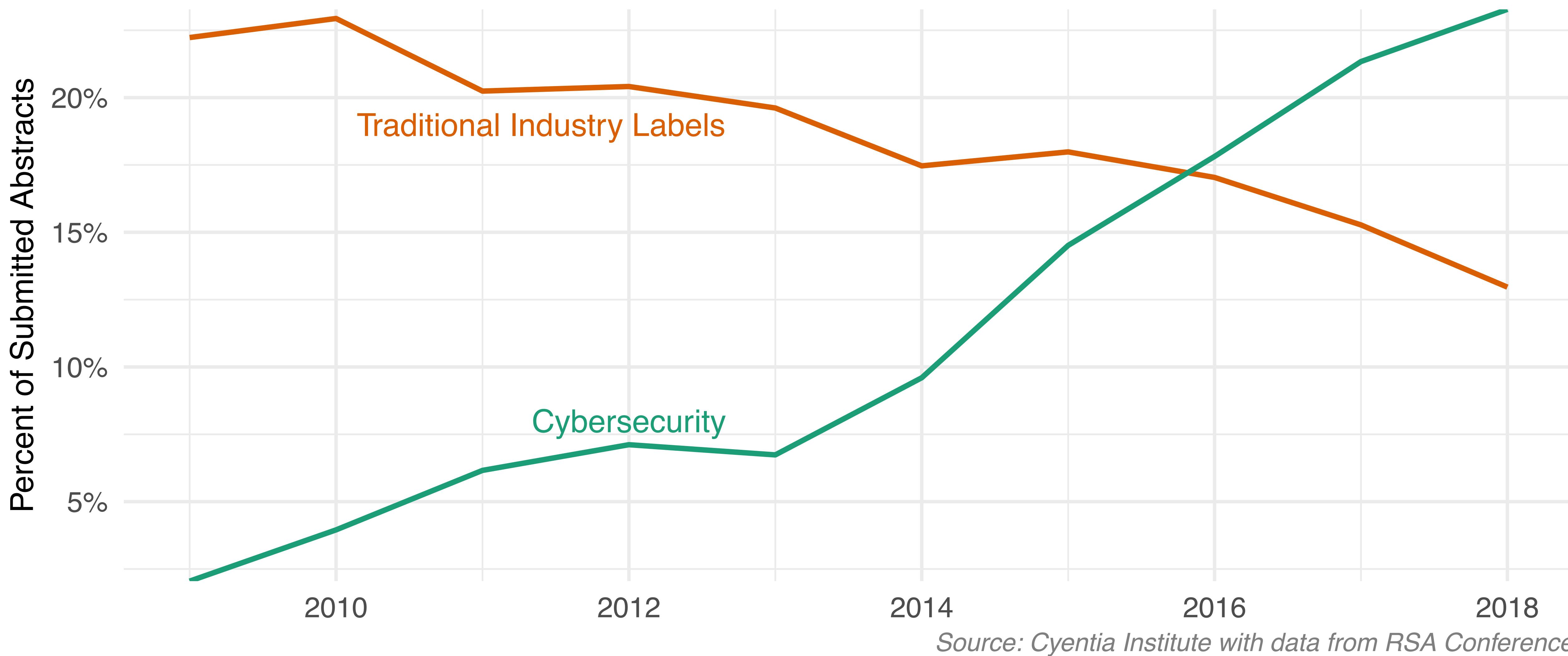
Word clouds are the  
“empty calories” of  
data visualizations.

# Simple Key Words over the years



Source: Cyentia Institute with data from RSA Conference

# To Cyber or not to Cyber?



*Source: Cyentia Institute with data from RSA Conference*

# Same words, but TF-IDF

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
web 2.0	web 2.0	data	real-world	BYOD	APT	BYOD	IoT	IoT	IoT
network access control	anti-virus	risk	real-time	tablet	BYOD	IoT	threat actors	ransomware	ransomware
anti-virus	social networking	organizations	cloud-based	APT	security analytics	security analytics	BYOD	devops	GDPR
cross-site scripting	cross-site scripting	access	third-party	anti-virus	mobile apps	threat actors	security analytics	threat actors	iot devices
PCI-DSS	PCI-DSS	compliance	in-depth	MDM	software-defined	home depot	kill chain	kill chain	devops
sarbanes oxley	myspace	key	high-profile	iOS	MDM	snowden	devops	GDPR	blockchain
service-oriented	conficker	attacks	real-life	stuxnet	iOS	software-defined	OPM	blockchain	equifax
unified communications	VOIP	applications	Epsilon	Flame	stuxnet	data science	software-defined	cyber insurance	wannacry
javascript	payment card	control	end-user	mobile apps	tablets	devops	NIST CSF	security analytics	threat hunting
management strategy	ratio	process	enterprise-wide	advanced malware	prism	heartbleed	iot security	NIST CSF	bitcoin
PDAs	security standard	enterprise	zero-day	kill chain	advanced malware	kill chain	anthem	dark web	deep learning
email security	data security	environment	cost-effective	software-defined	dropbox	ransomware	dark web	bitcoin	devsecops

Source: Cyentia Institute with data from RSA Conference

# Events

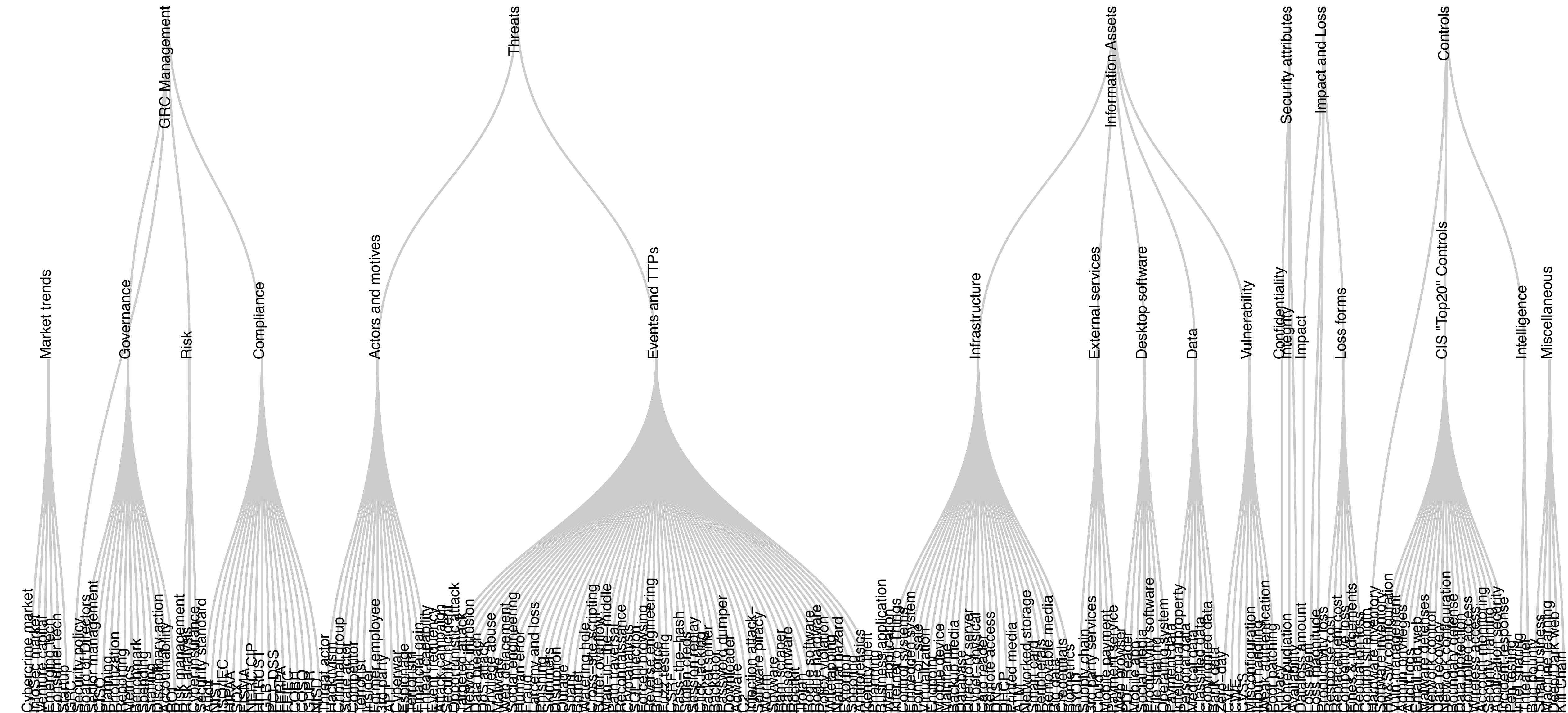
2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
web 2.0	web 2.0	data	real-world	BYOD	APT	BYOD	IoT	IoT	IoT
network access control	anti-virus	risk	real-time	tablet	BYOD	IoT	threat actors	ransomware	ransomware
anti-virus	social networking	organizations	cloud-based	APT	security analytics	security analytics	BYOD	devops	GDPR
cross-site scripting	cross-site scripting	access	third-party	anti-virus	mobile apps	threat actors	security analytics	threat actors	iot devices
PCI-DSS	PCI-DSS	compliance	in-depth	MDM	software-defined	home depot	kill chain	kill chain	devops
sarbanes oxley	myspace	key	high-profile	iOS	MDM	snowden	devops	GDPR	blockchain
service-oriented	conficker	attacks	real-life	stuxnet	iOS	OPM	blockchain	equifax	
unified communications	VOIP	applications	Epsilon	Flame	stuxnet	data science	software-defined	cyber insurance	wannacry
javascript	payment card	control	end-user	mobile apps	tablets	devops	NIST CSF	security analytics	threat hunting
management strategy	ratio	process	enterprise-wide	advanced malware	prism	heartbleed	iot security	NIST CSF	bitcoin
PDAs	security standard	enterprise	zero-day	kill chain	advanced malware	kill chain	anthem	dark web	deep learning
email security	data security	environment	cost-effective	software-defined	dropbox	ransomware	dark web	bitcoin	devsecops

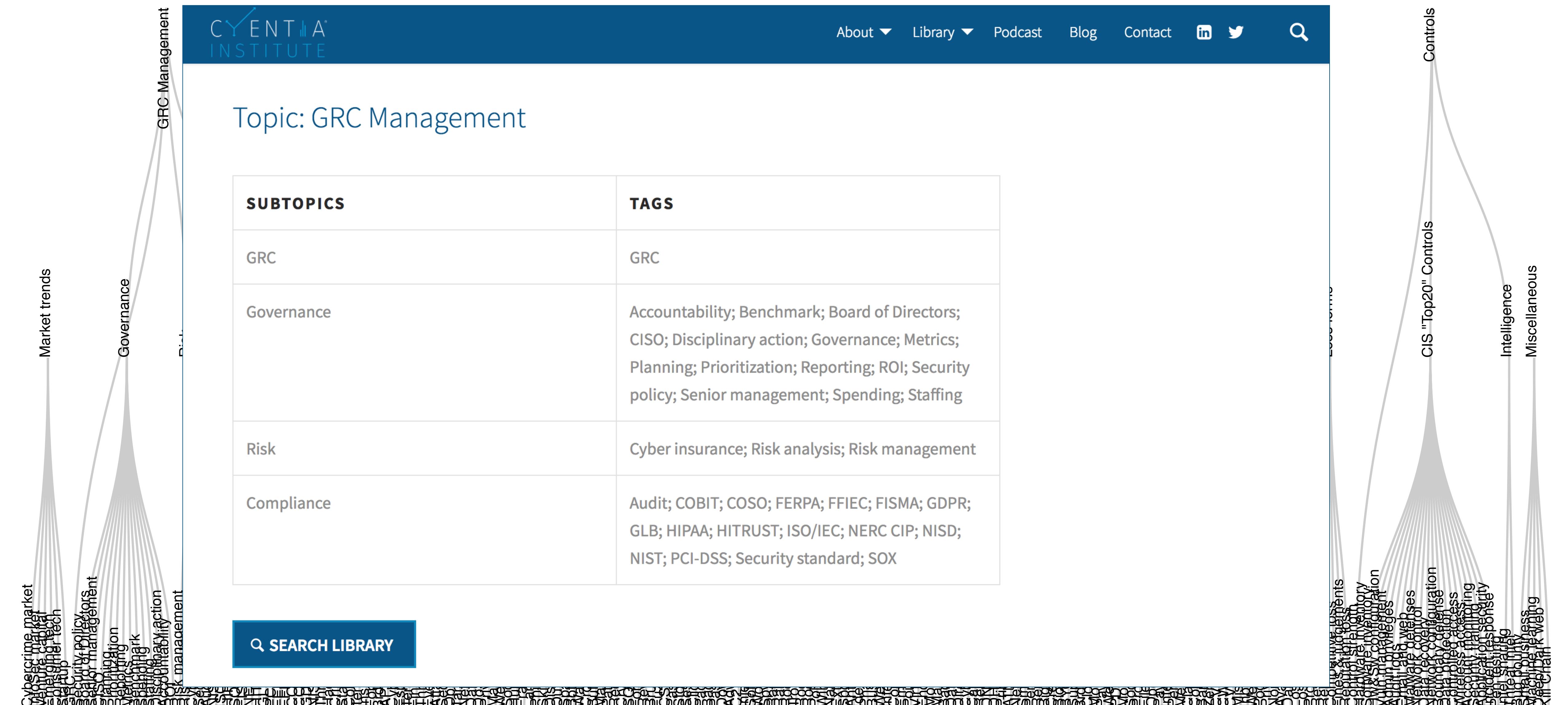
Source: Cyentia Institute with data from RSA Conference



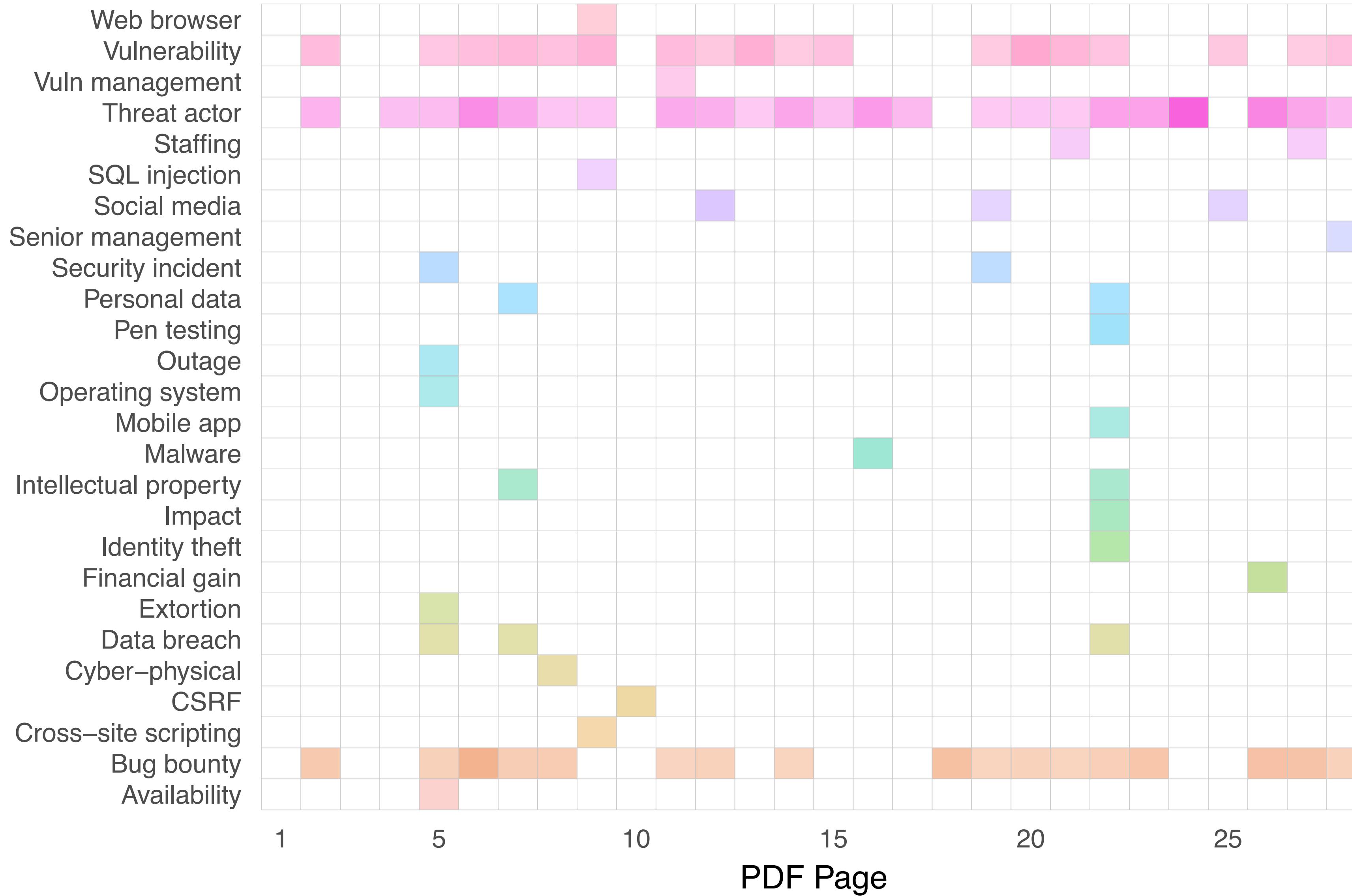
# Topic Tagging

# Cyentia Library Tagging System





# Hacker One: Security Report



# Cisco Mid-Year Report

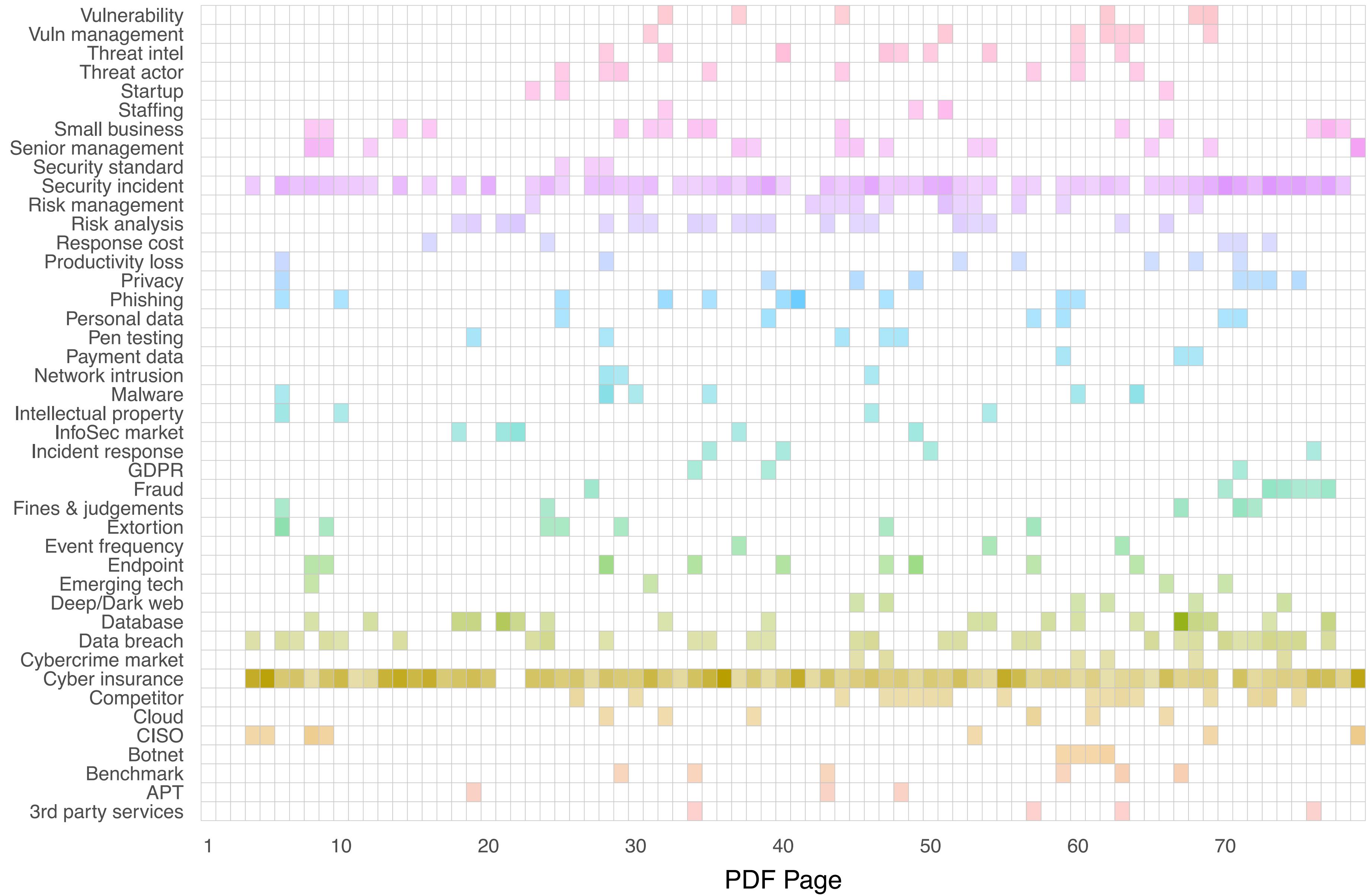


1 10 20 30 40 50 60 70 80

PDF Page



# Aite: Cyber Insurance and Cybersecurity

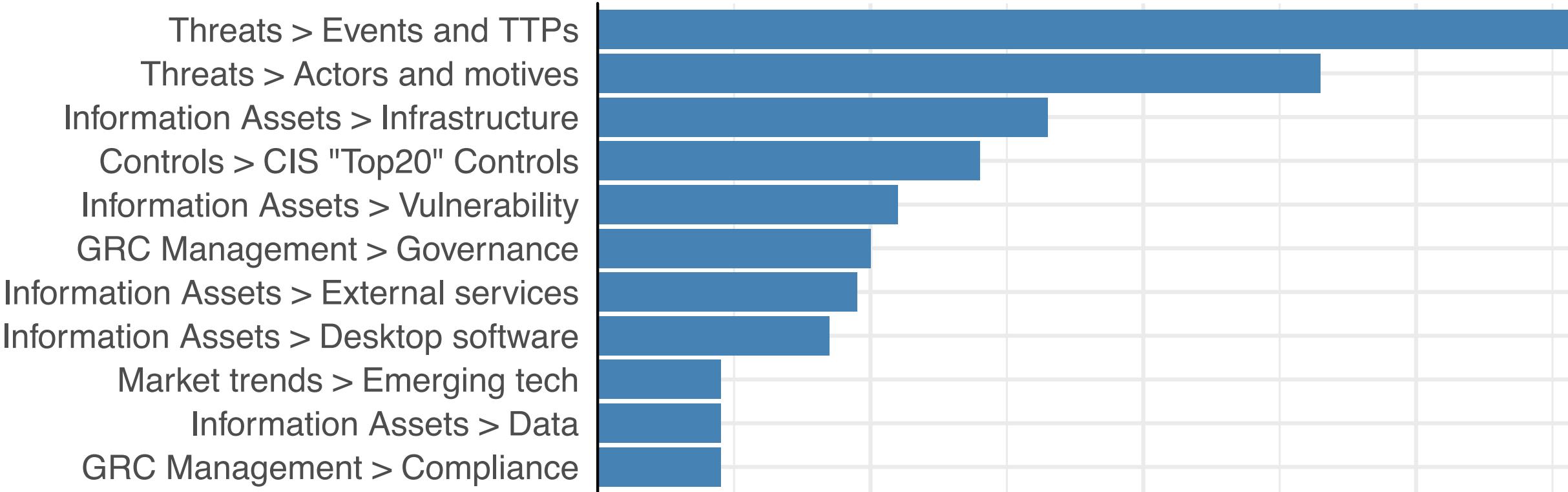


# Verizon DBIR 2017

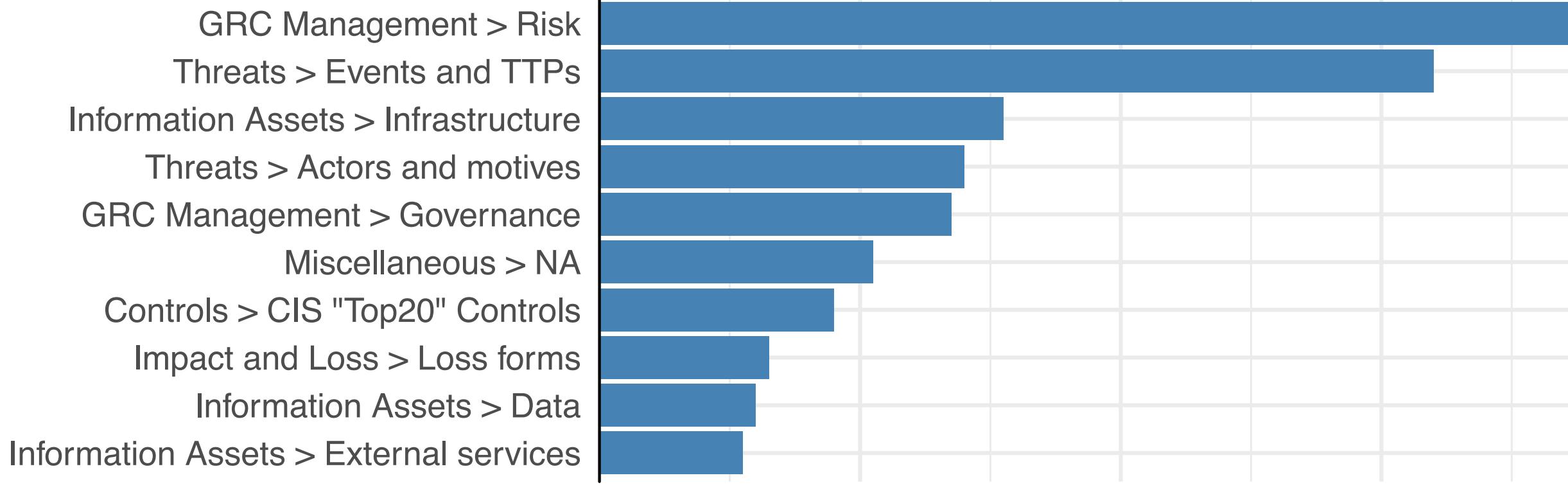


# Topic/Tagging

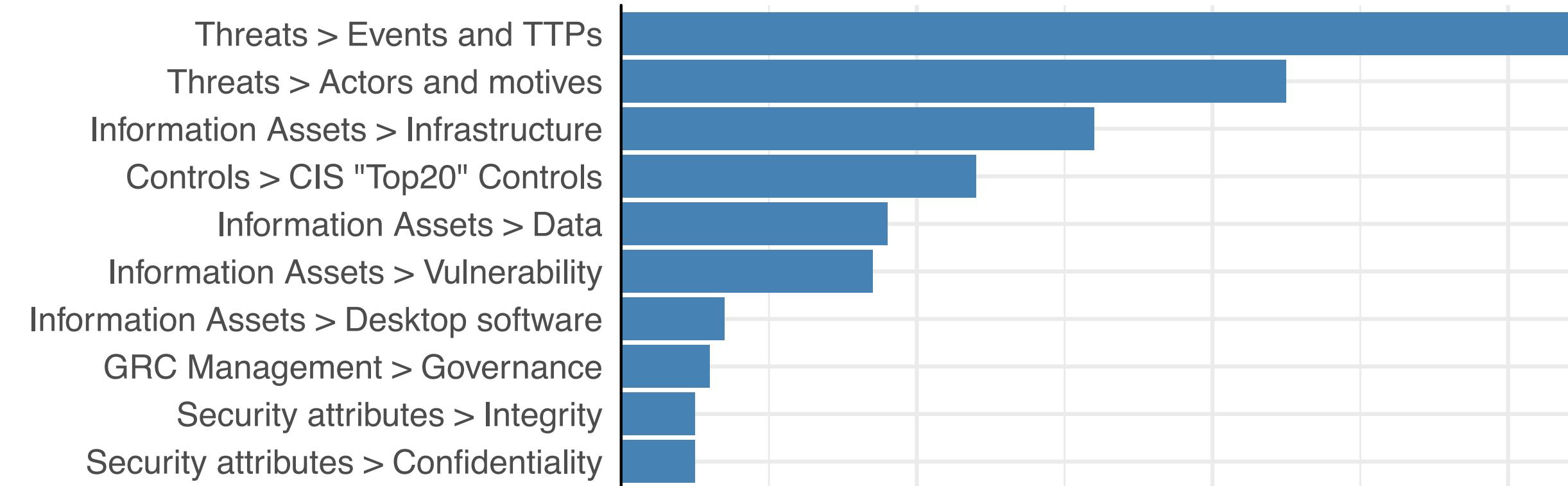
## Cisco Midyear 2017



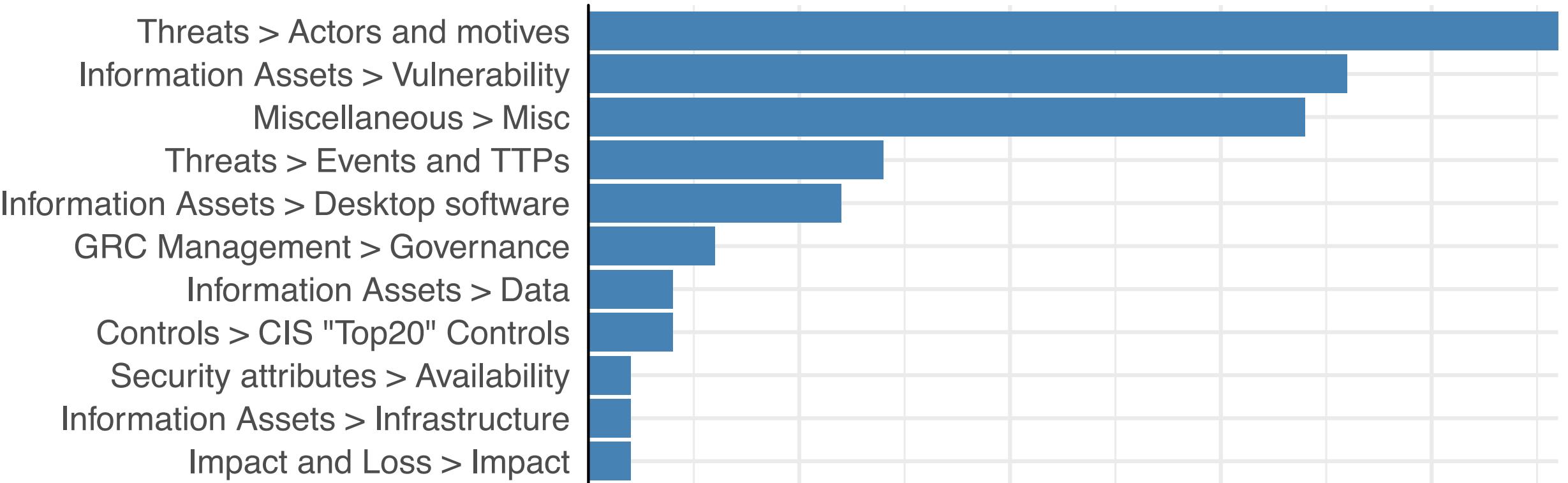
## Aite: Cyber Insurance



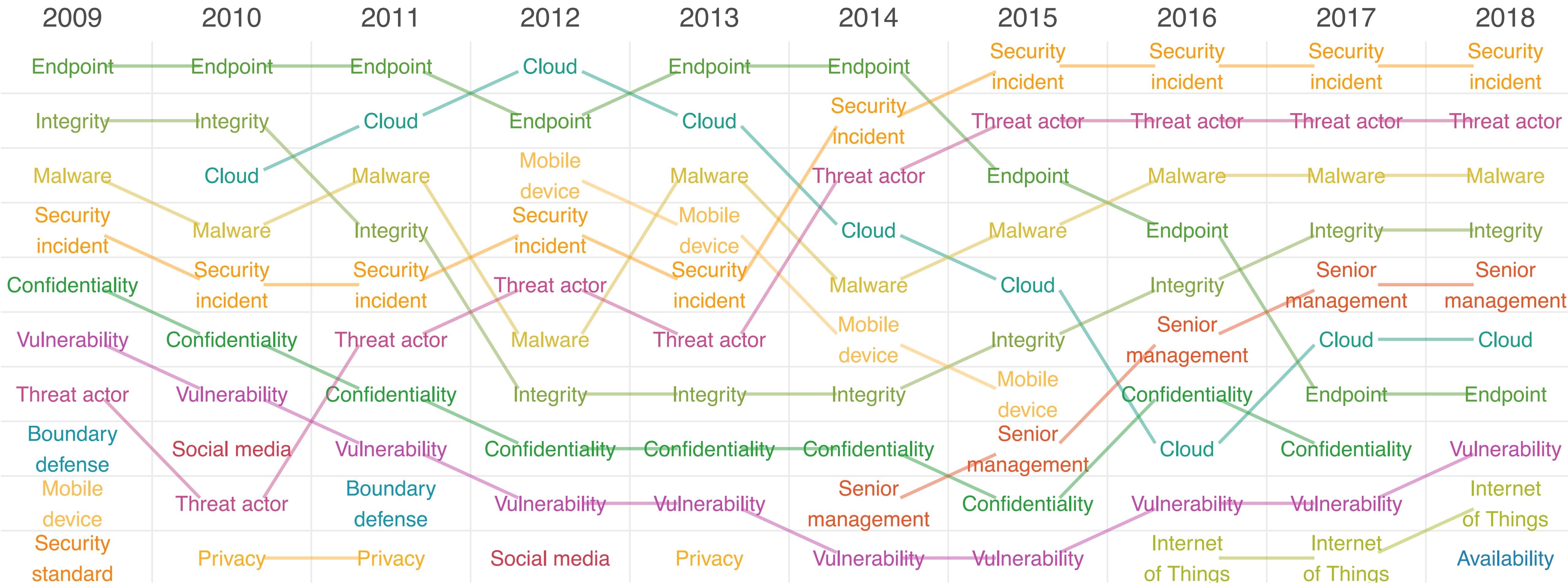
## Verizon DBIR 2017



## HackerOne: Bug Bounty

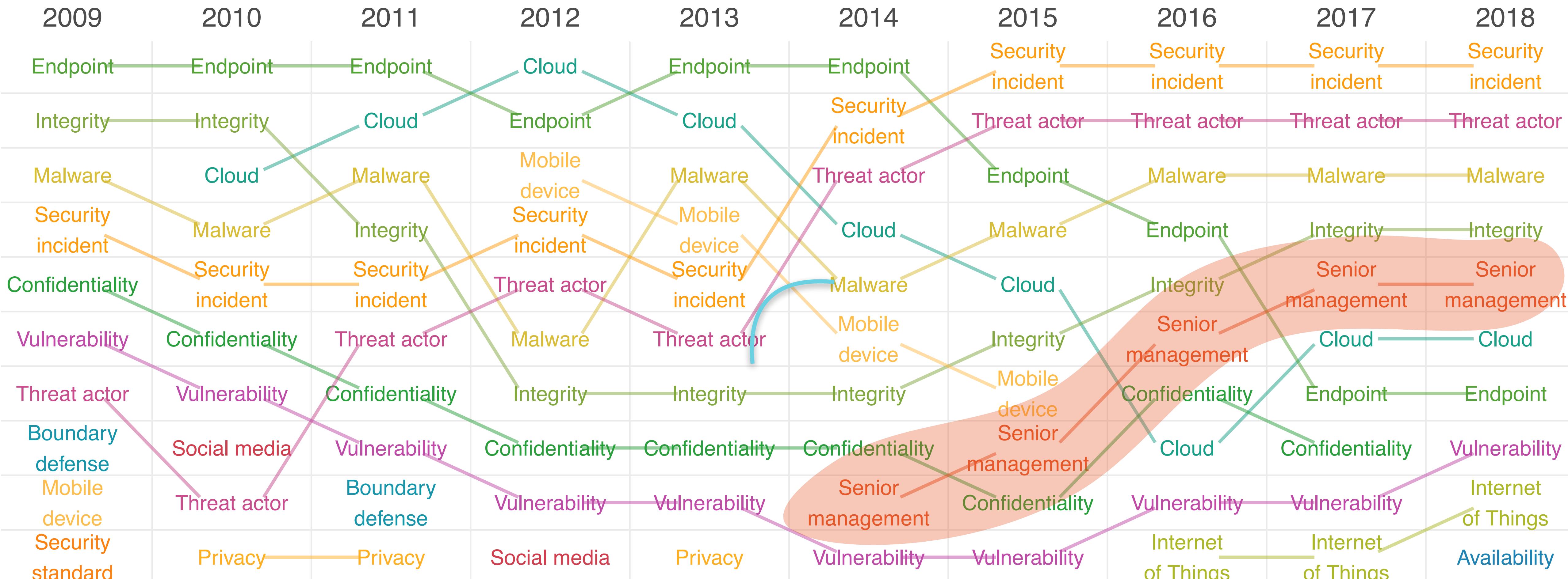


# Cyentia Library Tags



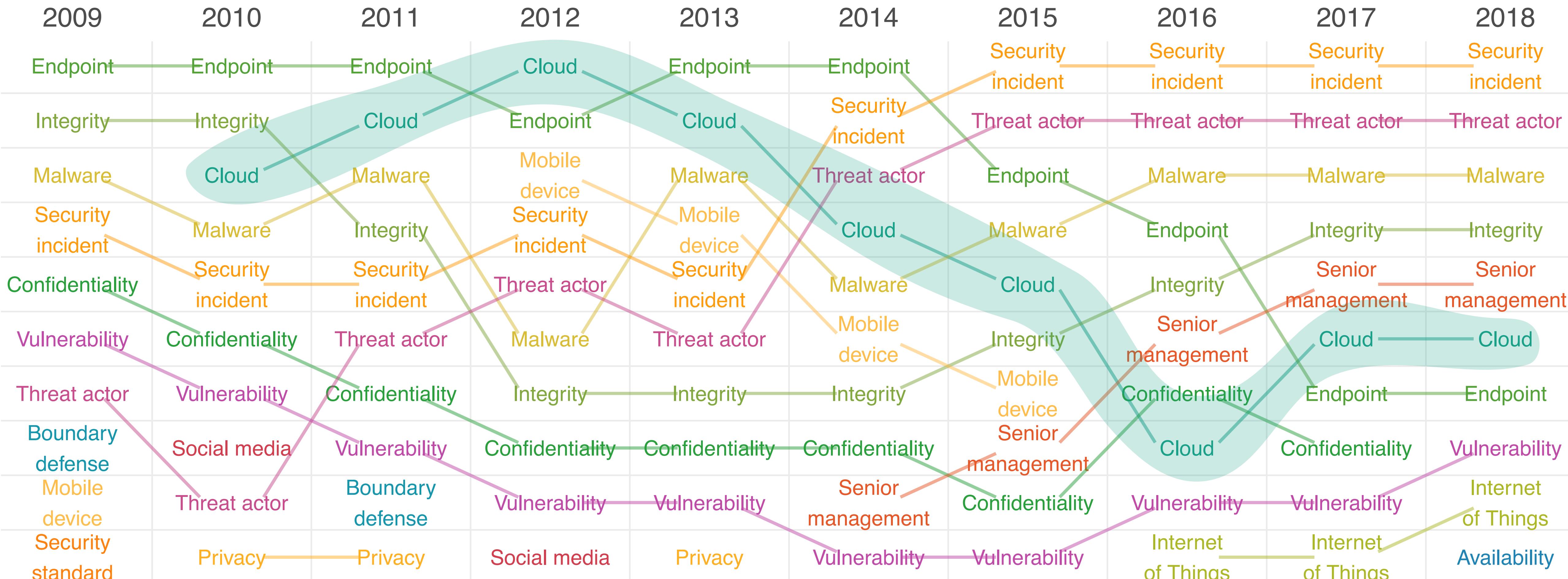
*Source: Cyentia Institute with data from RSA Conference*

# Cyentia Library Tags



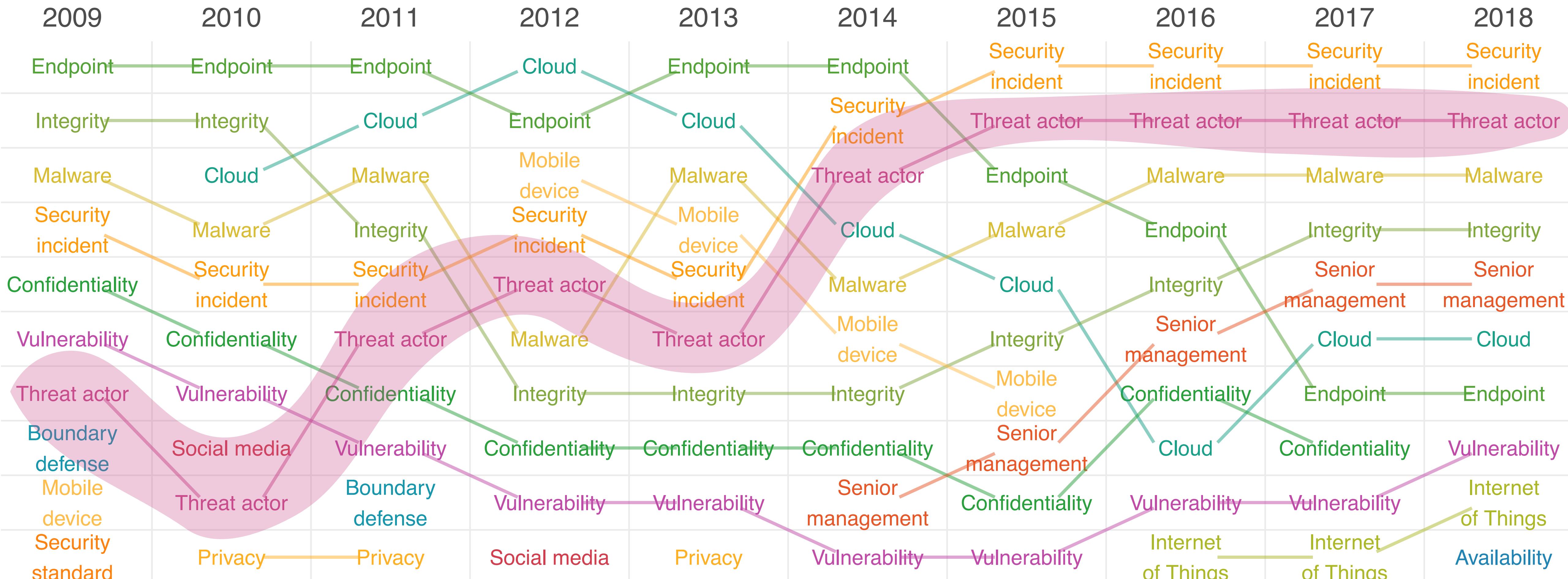
*Source: Cyentia Institute with data from RSA Conference*

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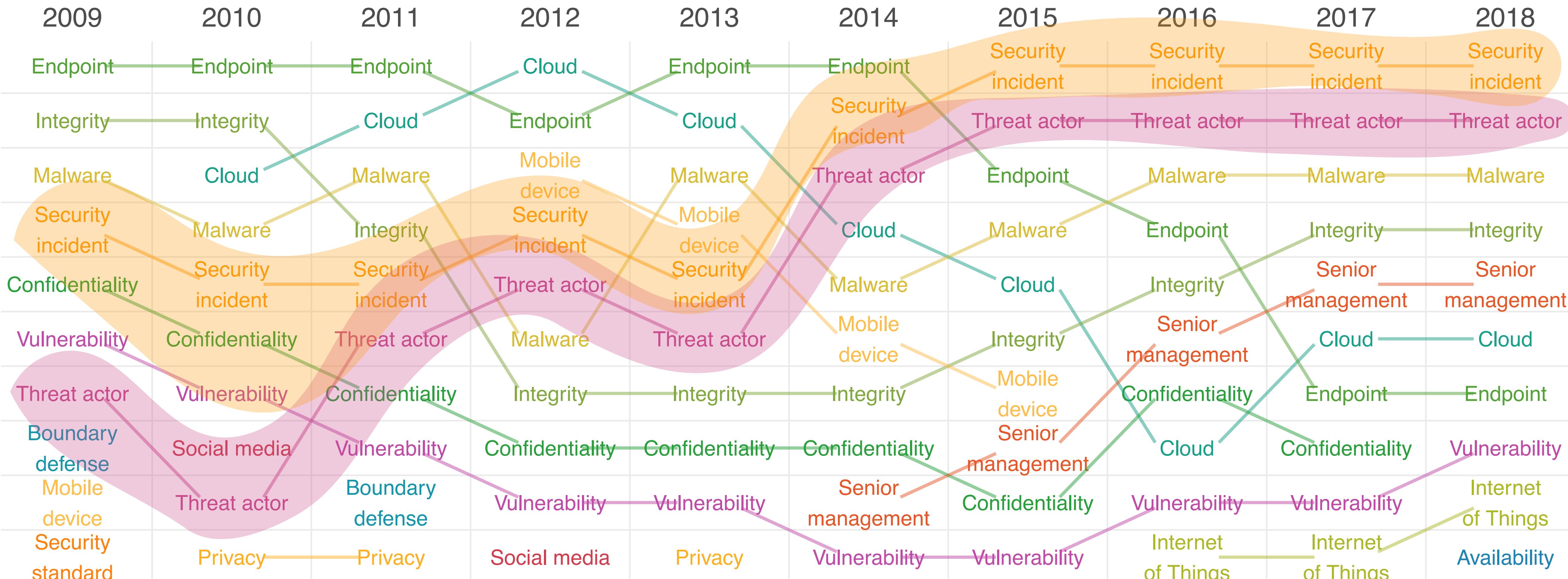
Source: Cyentia Institute with data from RSA Conference

# Cyentia Library Tags



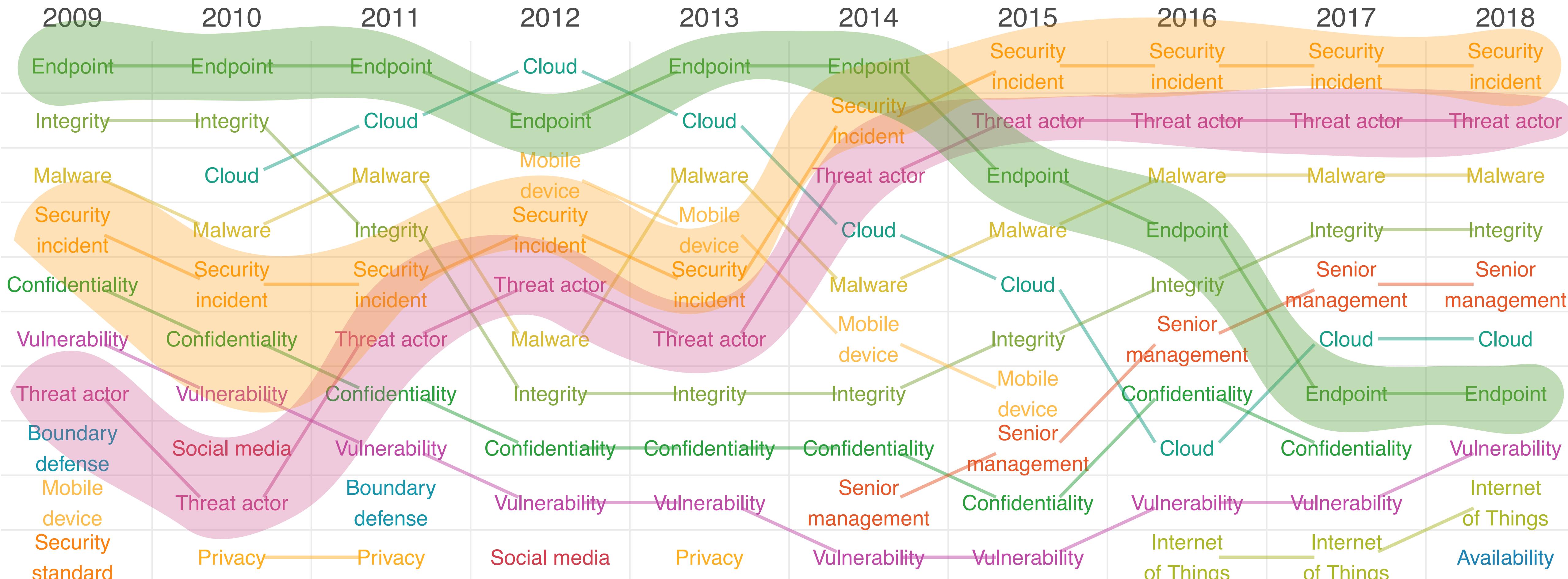
Source: Cyentia Institute with data from RSA Conference

# Cyentia Library Tags



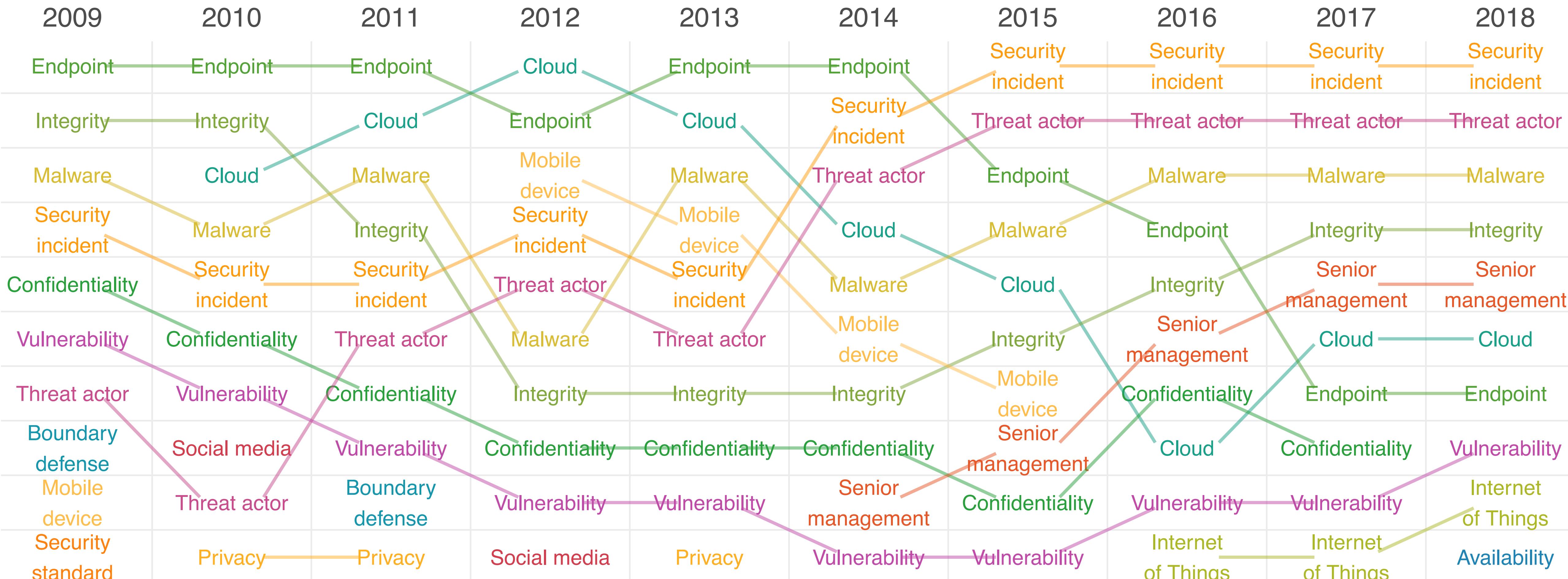
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# Cyentia Library Tags



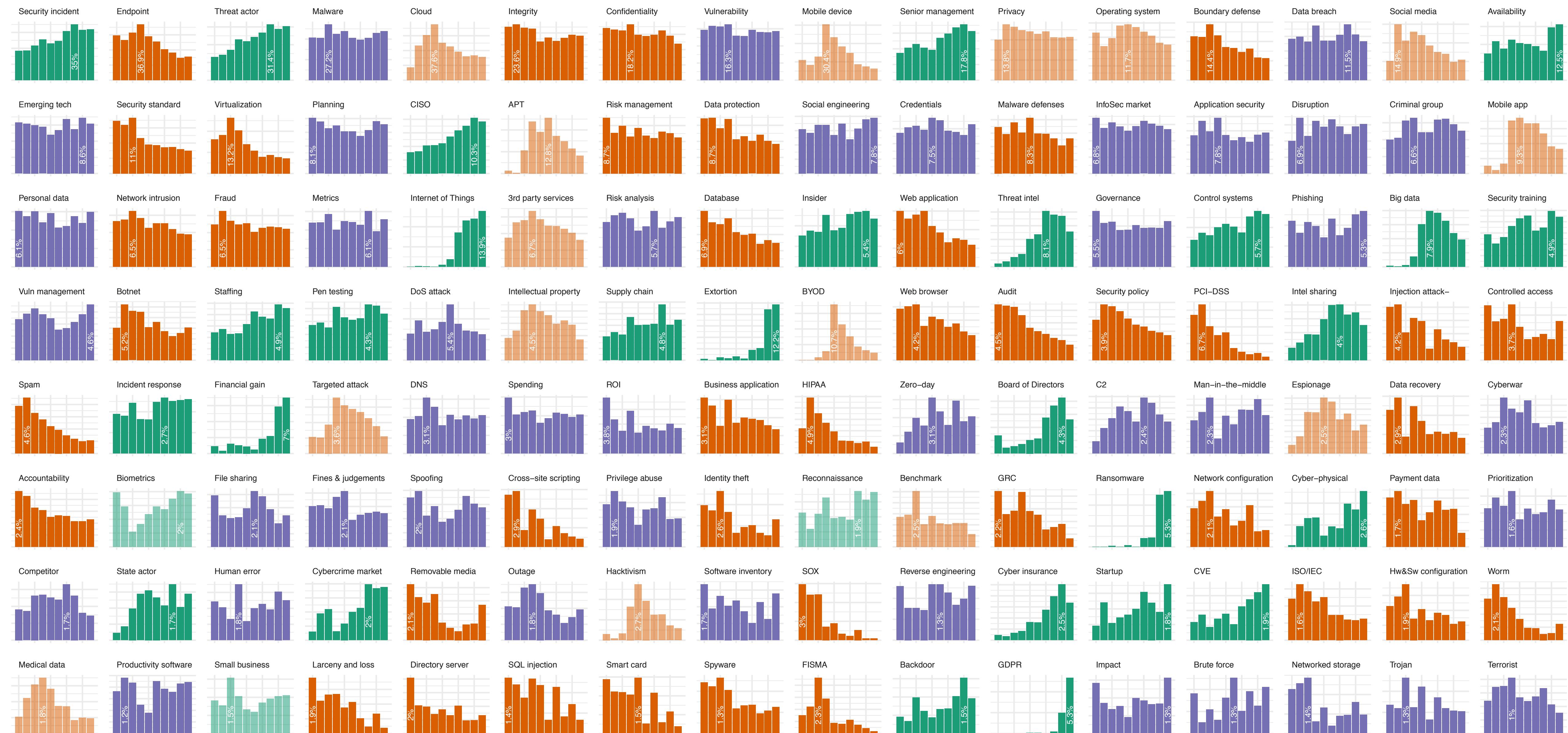
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# Cyentia Library Tags

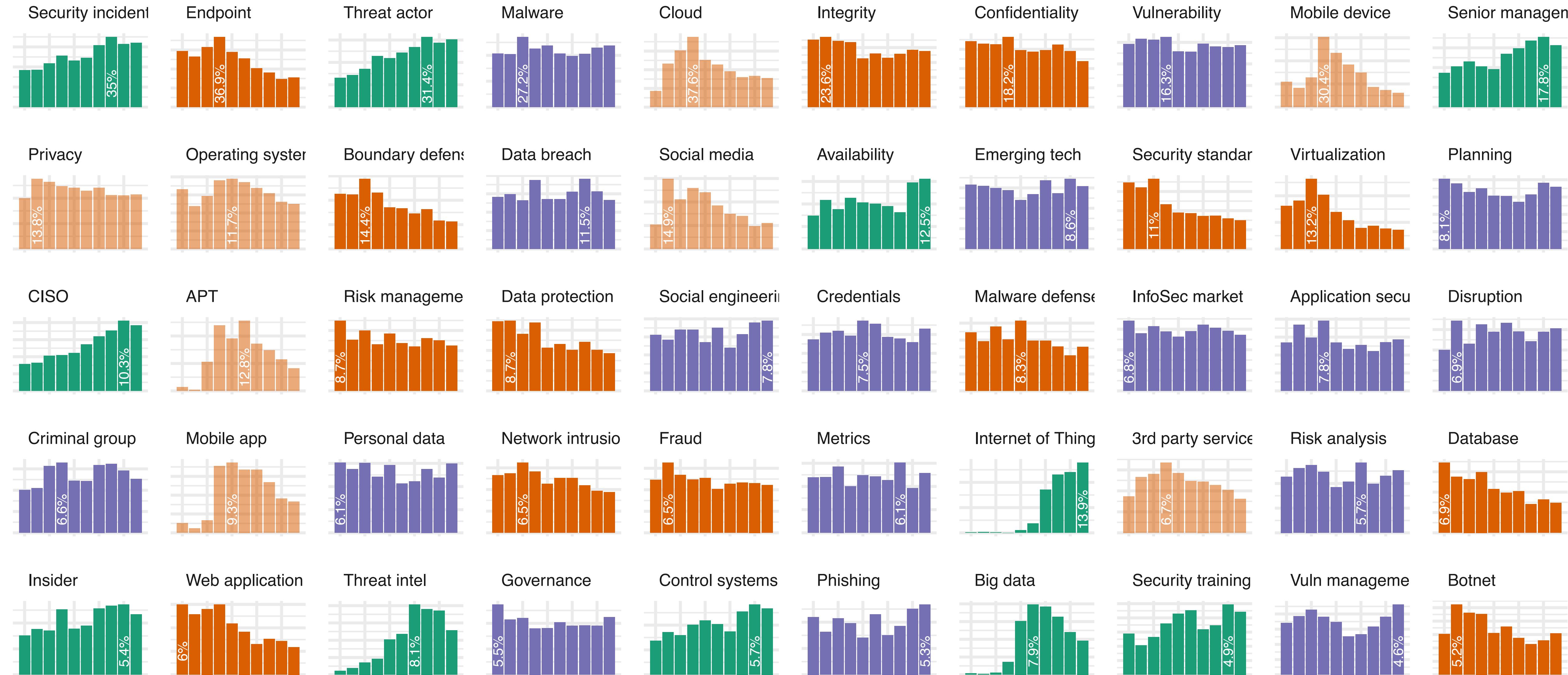


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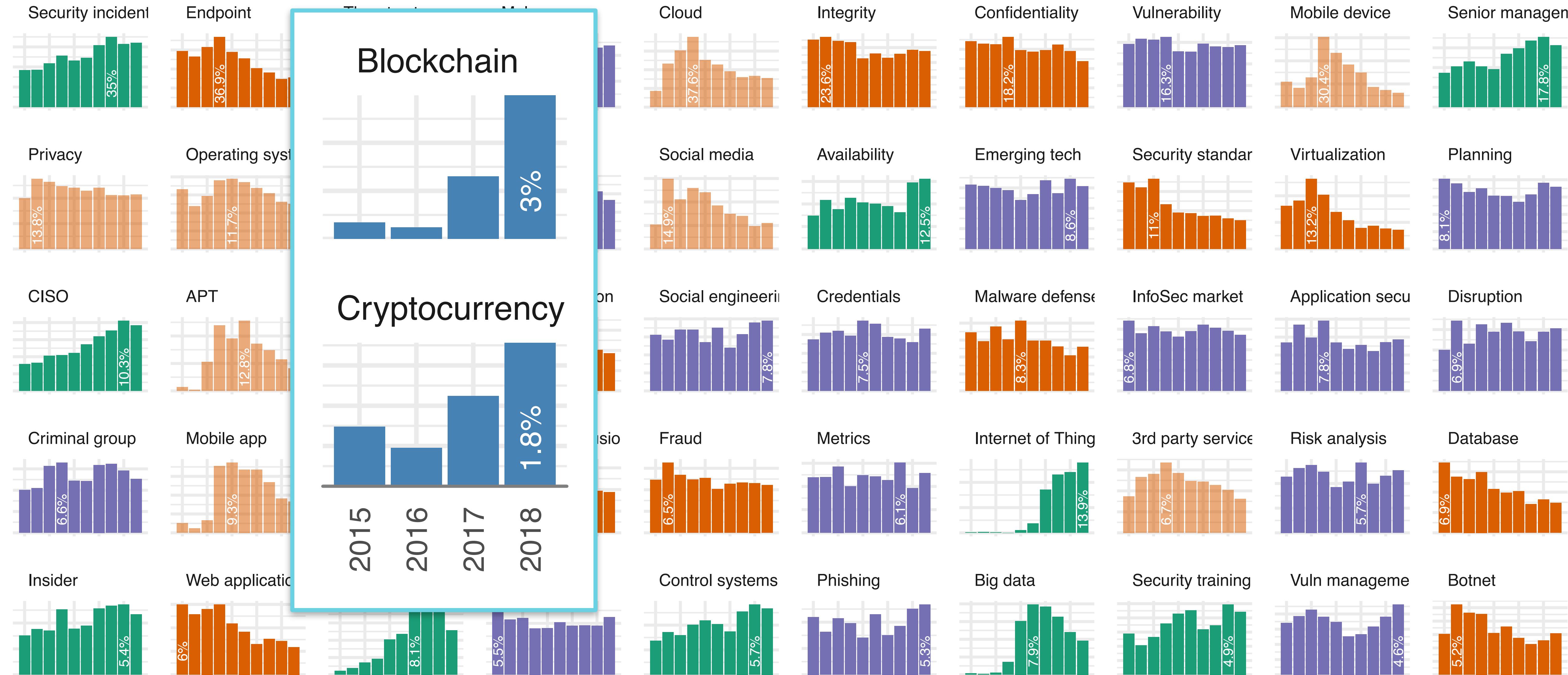
# Tags over time



# Tags over time (readable)

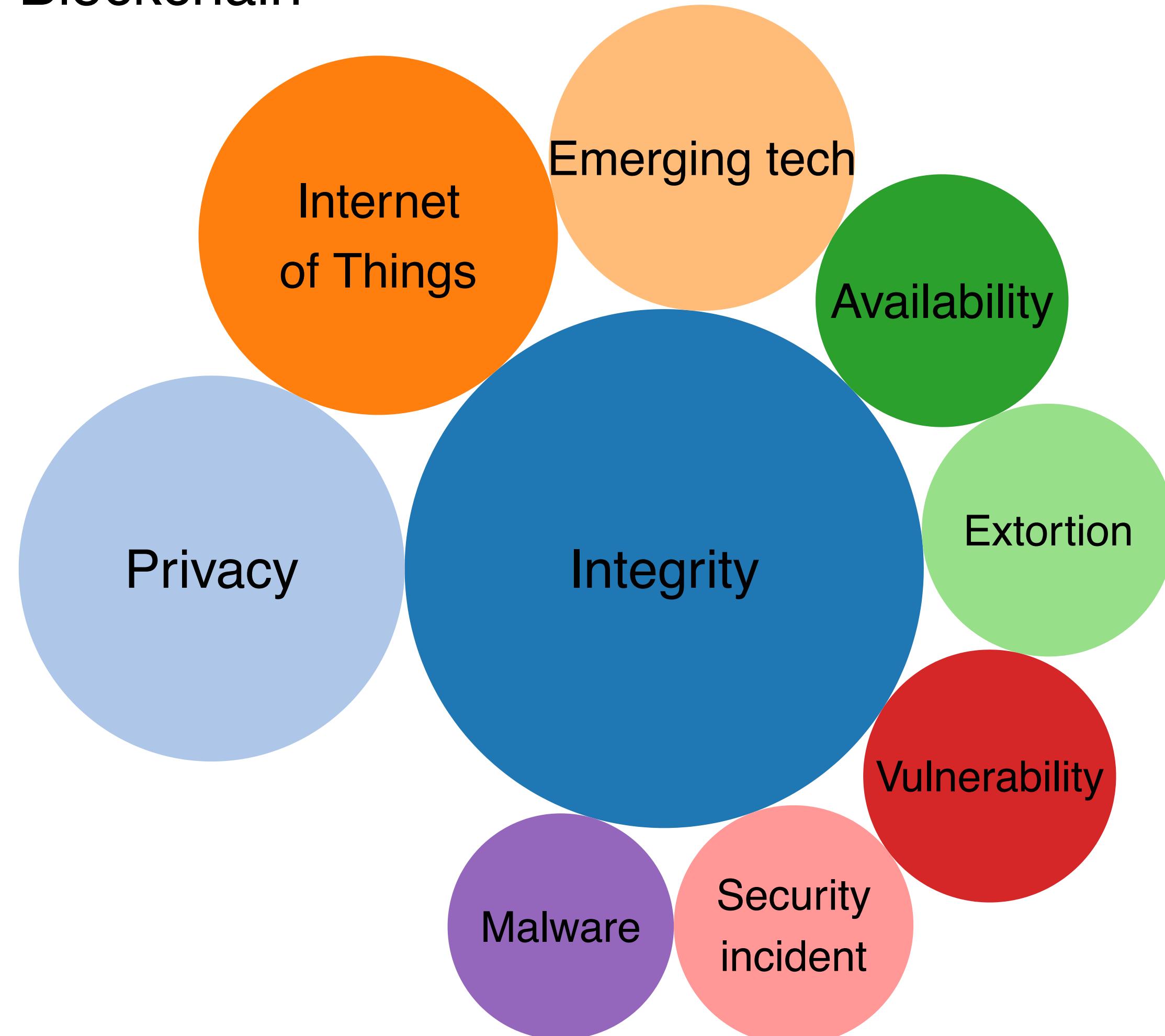


# Tags over time

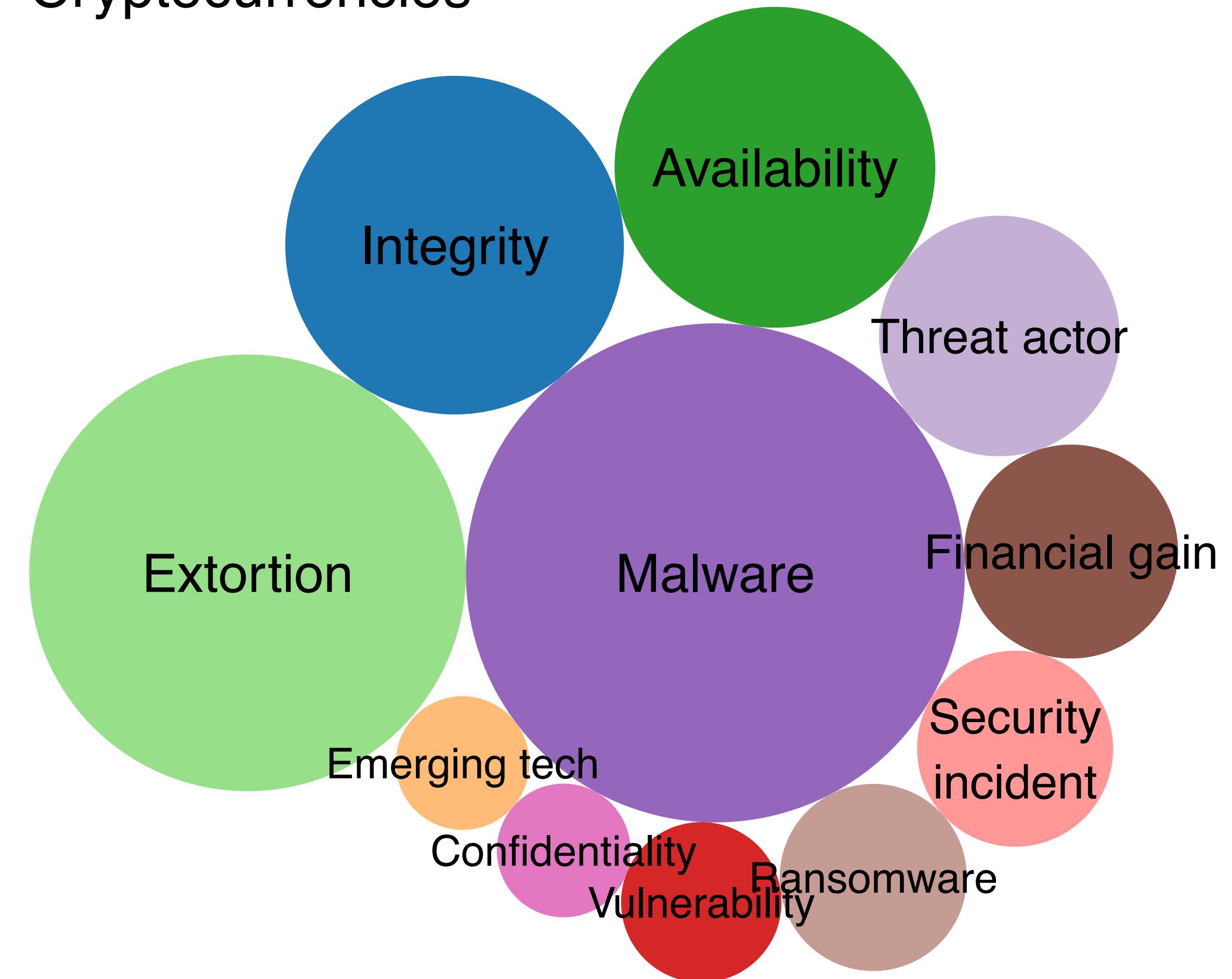


# Blockchain and Cryptocurrencies

## Blockchain

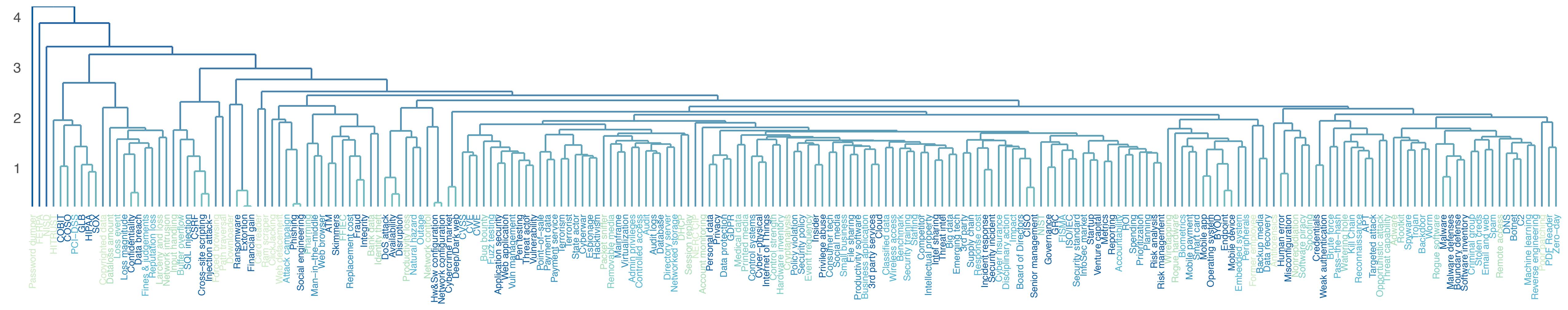


## Cryptocurrencies

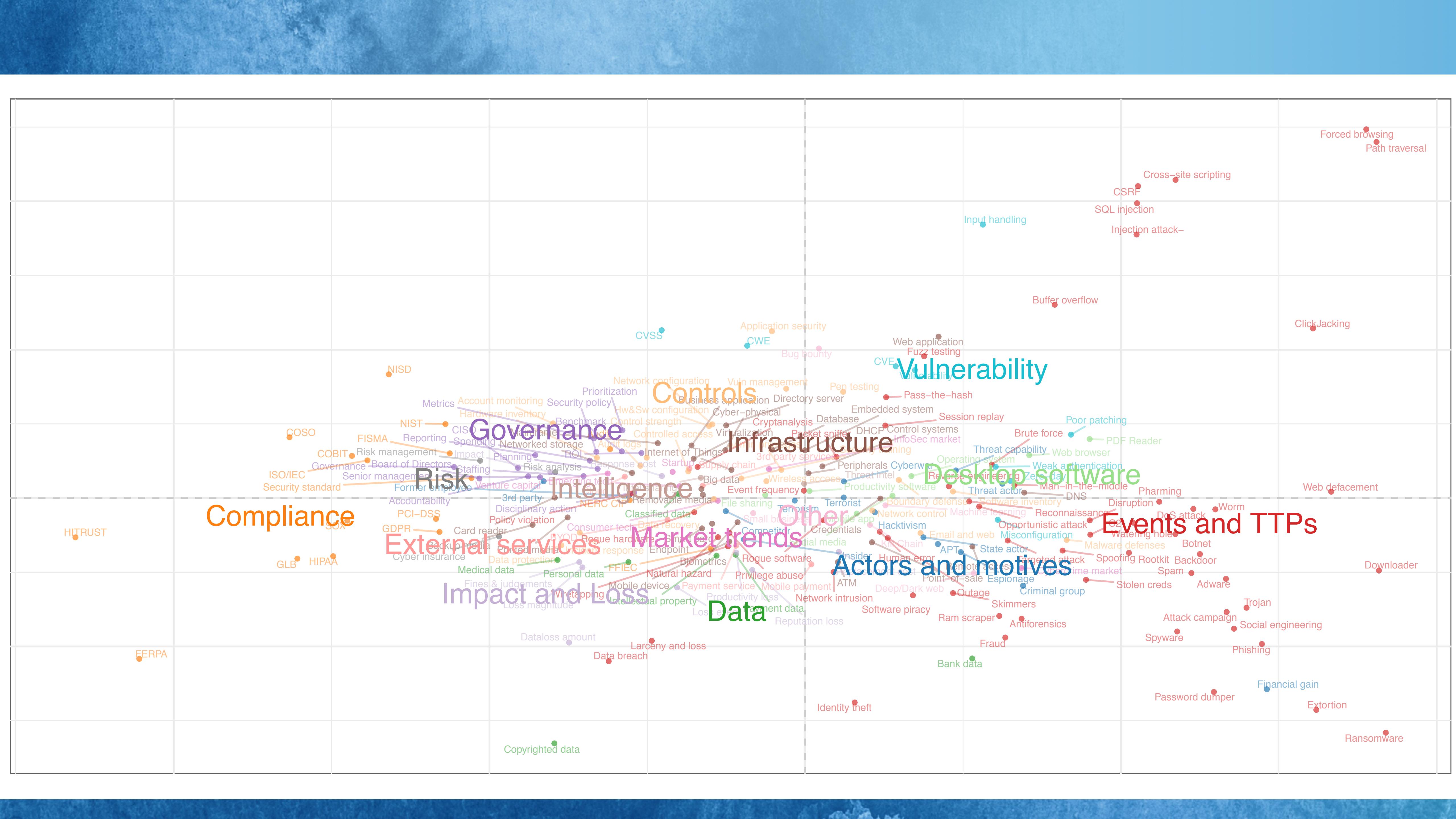


Source: Cyentia Institute with data from RSA Conference

# Tag Clustering

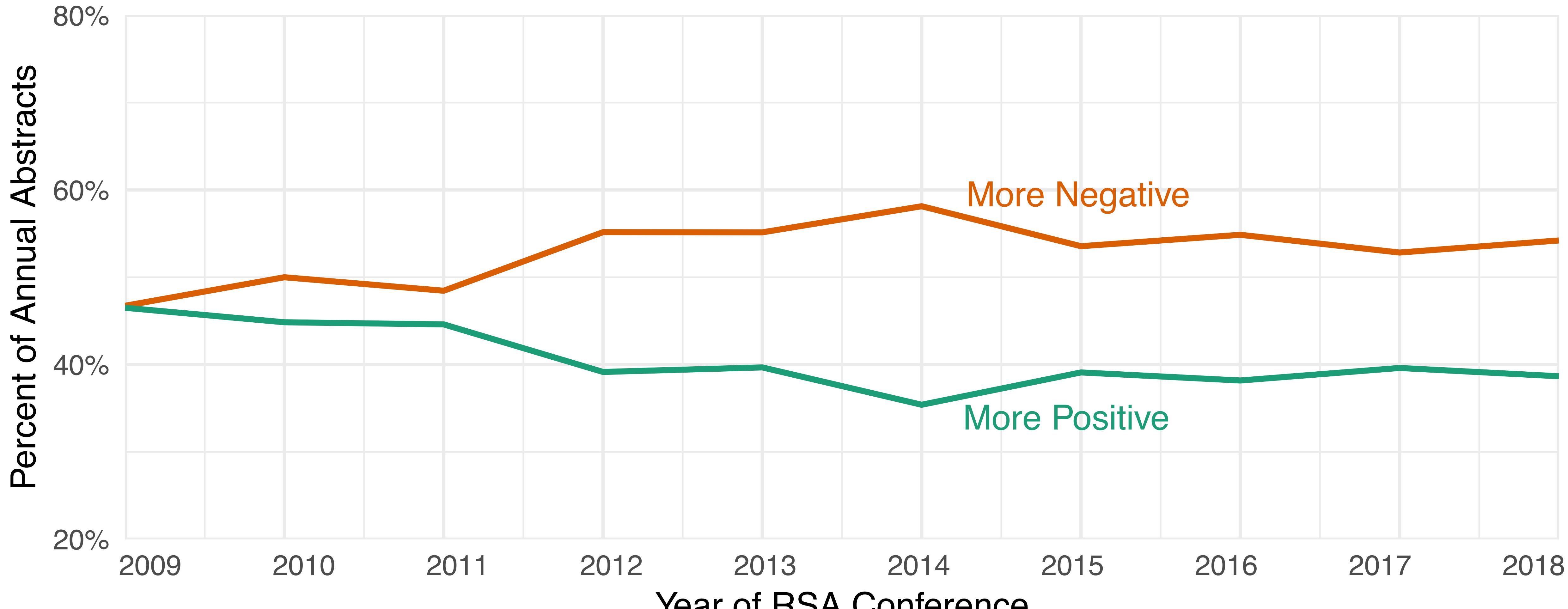


*Source: Cyentia Institute with data from RSA Conference*

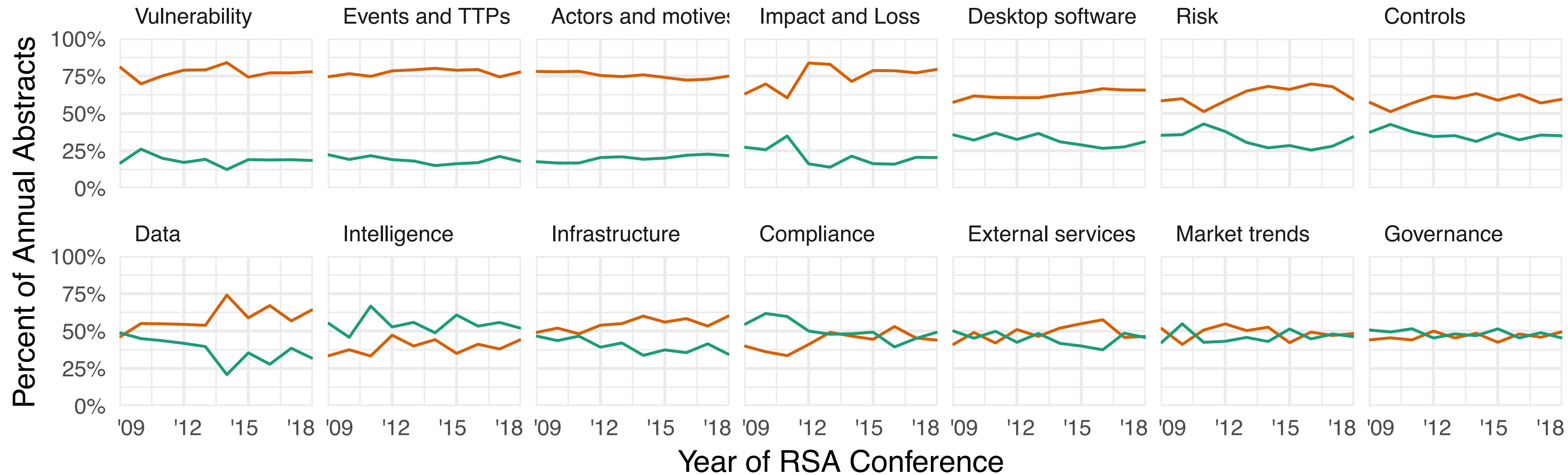




# Sentiment Analysis



*Source: Cyentia Institute with data from RSA Conference*



Source: Cyentia Institute with data from RSA Conference

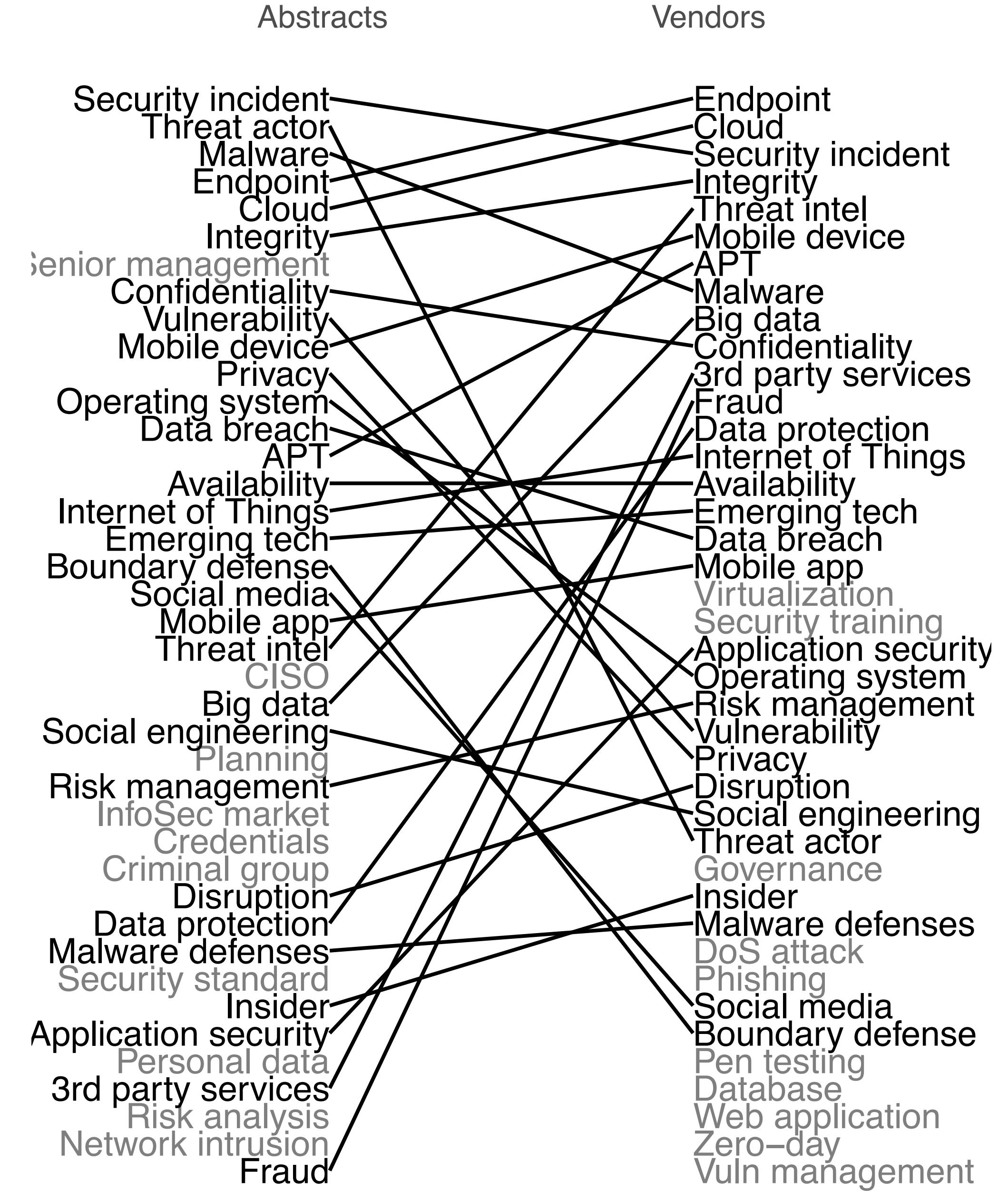


# Are Vendors in tune with the market?

# There is correlation, but some stragglers



# Tags between Abstracts and Vendors



# Taking it home



- Security has become an interdisciplinary field
- Trends and Relationships between “topics” adds another dimension to our understanding of our work and the industry
- Cybersecurity has undergone rapid developments in the past decade
- “Cyber” is a thing.

# Thank you

