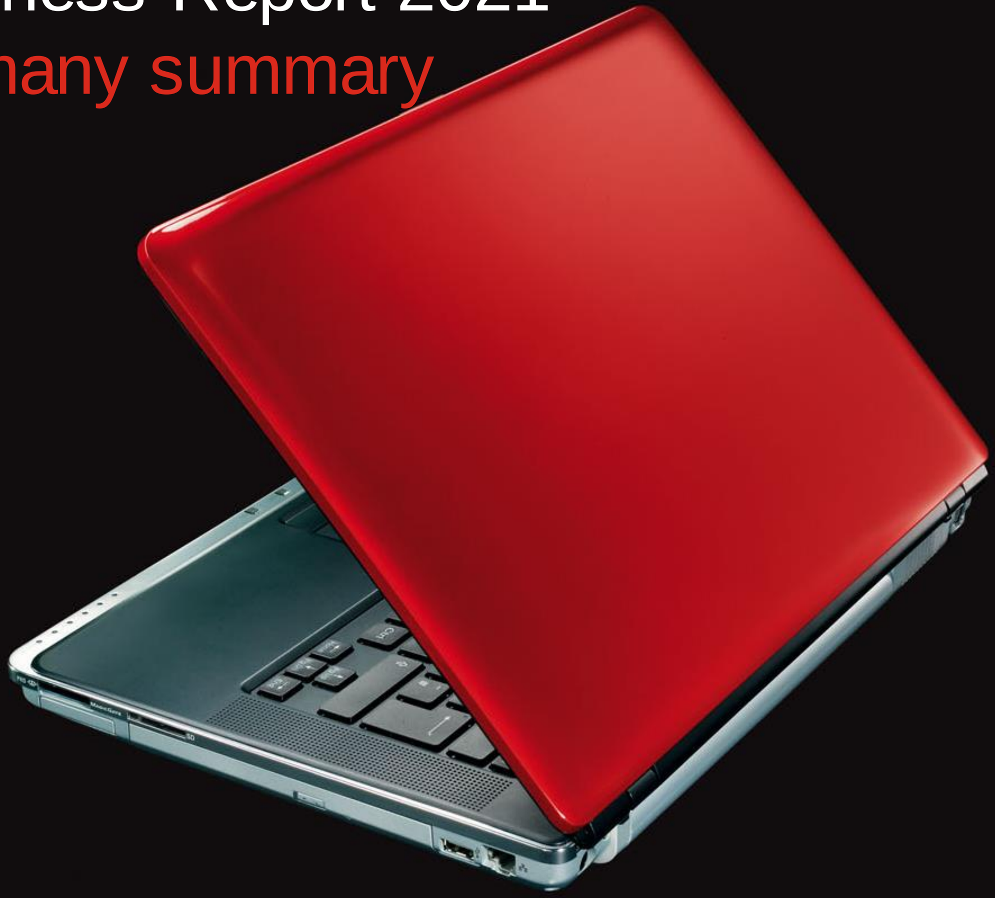
Cyber Readiness Report 2021
Hiscox Germany summary



Global overview

Key findings

- **More firms targeted**
  The proportion of firms attacked rose from 38% to 43%. Many suffered multiple attacks.

- **Frightening range of outcomes**
  Cost of attacks varies widely. One in six firms attacked says its survival was threatened.

- **IT budgets reorient to cyber**
  The average firm now devotes more than a fifth (21%) of its IT budget to cyber, a jump of 63%.

- **Ransomware now commonplace**
  Around one in six of those attacked were hit with a ransom. Phishing emails were the main starting point.

- **Experts fared better**
  Firms qualifying as experts had fewer ransomware attacks, were less likely to pay up and recovered more quickly.

- **People, process, technology**
  Our cyber readiness model shows people scores are lower than for the other two areas.

- **Insurance take-up slow**
  Take-up of standalone cover creeps up from 26% to 27%; adoption highest among experts/big companies.

- **Big country variations**
  US firms top table of experts, Spanish firms are most heavily targeted, Germans pay heaviest price.

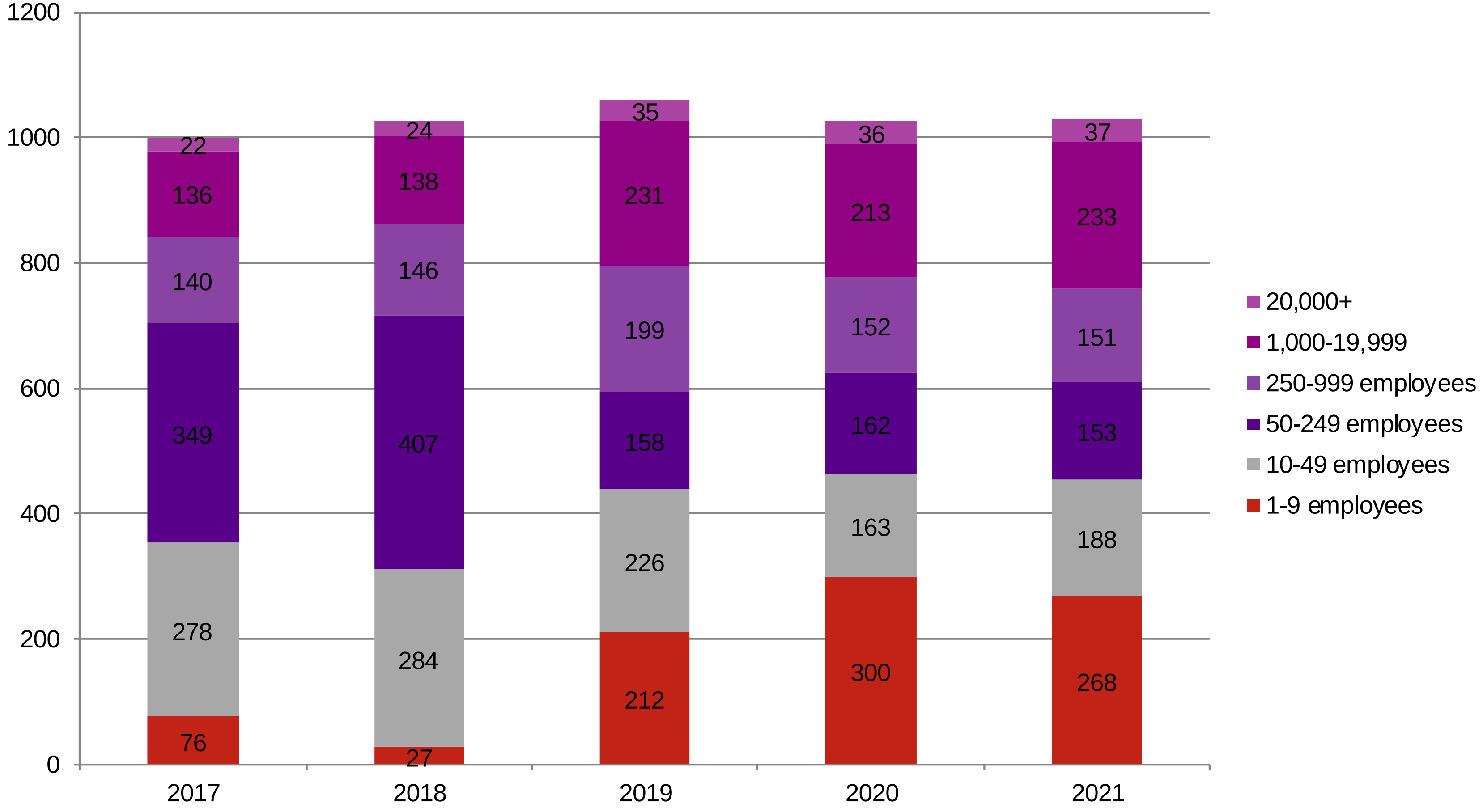
Hiscox Germany overview

Key findings

- German firms had highest median total cost of all cyberattacks (21.818 €) and single largest cyberattack (10.781 €)
- Germany had the highest sum total financial cost of all cyberattacks (43.5m €)
- Belgian and German firms were most likely to have had ransomware attacks (19%), and Dutch firms were least likely (13%)
- On average, German firms spent the most on cyber security (5m €) while Belgian firms spent the least (1.6m €)
- The biggest increase from 2019 were German firms, who spent on average 3.1m € in 2019 and 5m € in 2020 on cyber security, an increase of 155%
- Irish (43%), Spanish (37%), and German (36%) are most likely to have cyber insurance coverage as part of another policy

Hiscox Germany demographics

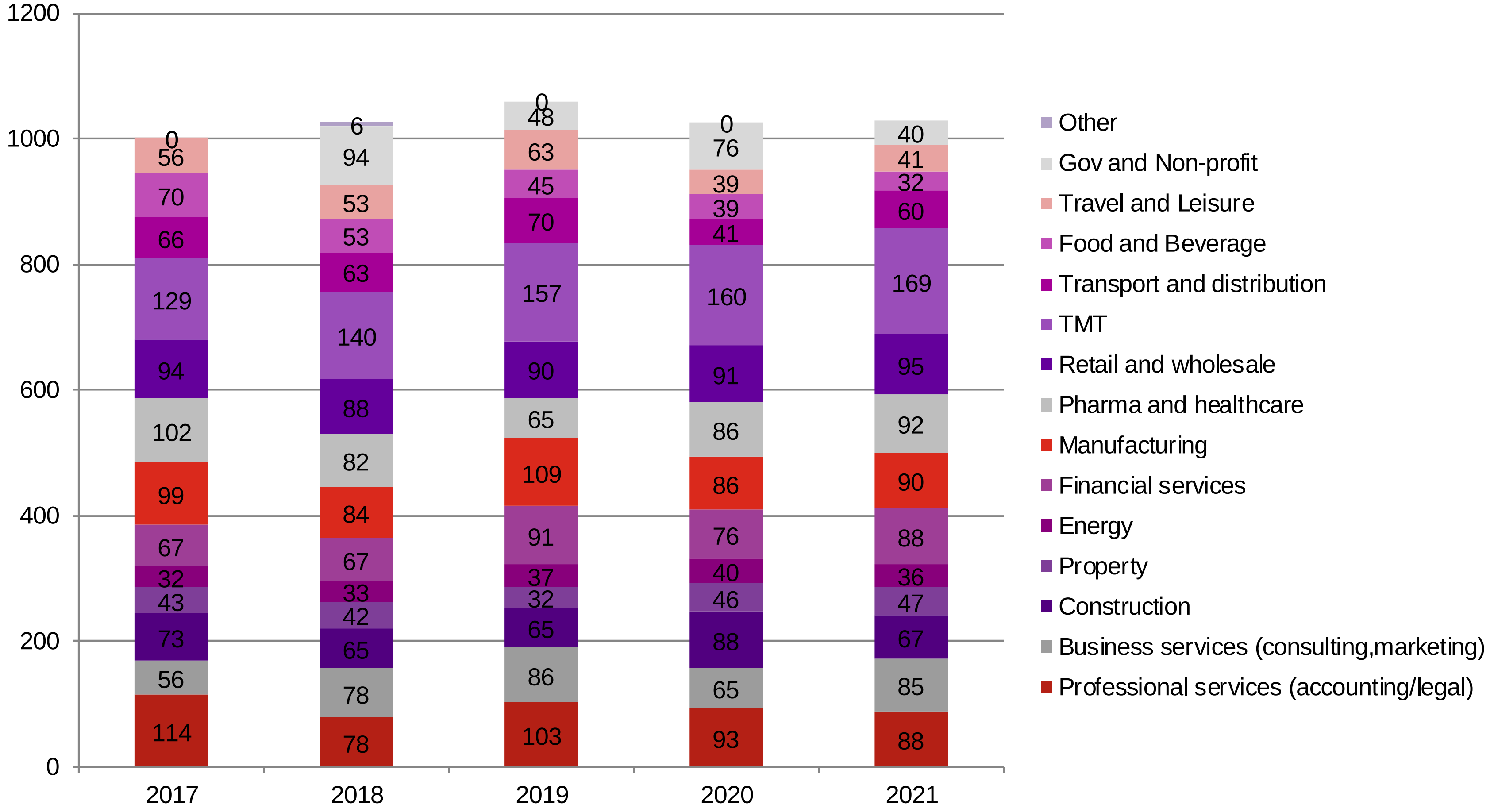
Audience breakdown stayed consistent between 2020 and 2021 report.



German response base 2017- 1,001; 2018 – 1,026; 2019 – 1,061; 2020 – 1,026; 2021 – 1, 030

Hiscox Germany demographics

Industry stays relatively consistent YOY.



German response base 2017- 1,001; 2018 – 1,026; 2019 – 1,061; 2020 – 1,026; 2021 – 1, 030

SIZE OF THE PROBLEM

Hiscox German IT Spending

Overall IT spend has stayed consistent from 2020, but the % spent on cyber security increased drastically since last year.

HISCOX

Total IT spending:

Year	Total average	Germany
2021	14m €	21.3m €
2020	14.3m €	16.3m €
2019	13.4m €	13.7m €
2018	10.2m €	9.6m €

Cyber security as % of IT spend:

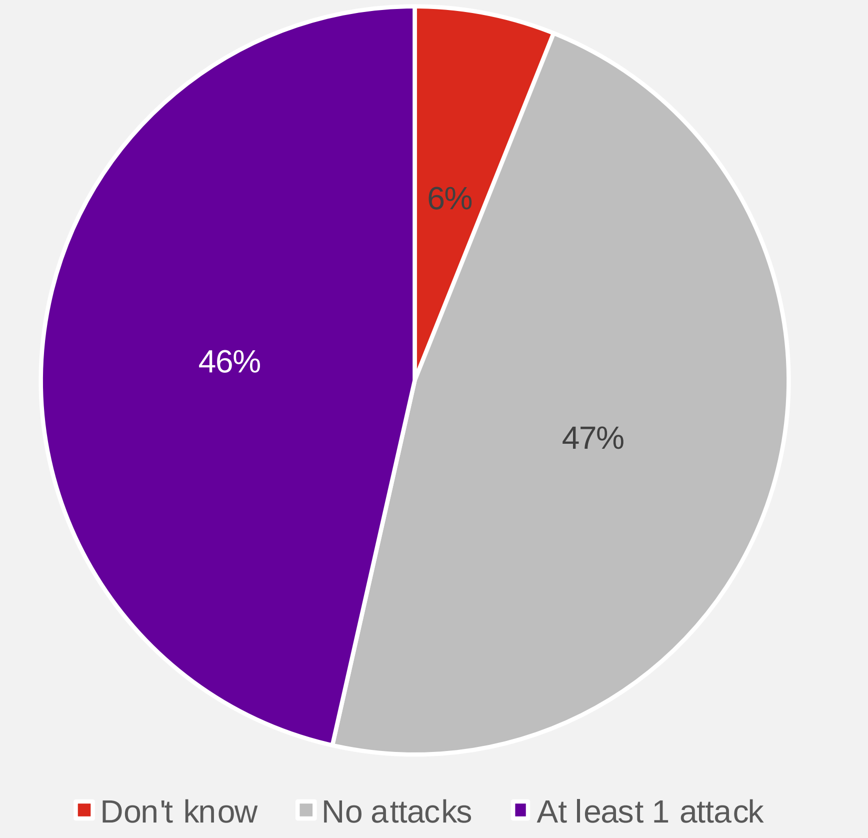
Year	Total average	Germany
2021	21%	20%
2020	13%	12%
2019	10%	11%
2018	11%	10%
2017	11%	9%

German response base: 2018 – 1,026; 2019 – 762; 2020 – 807; 2021 - 757

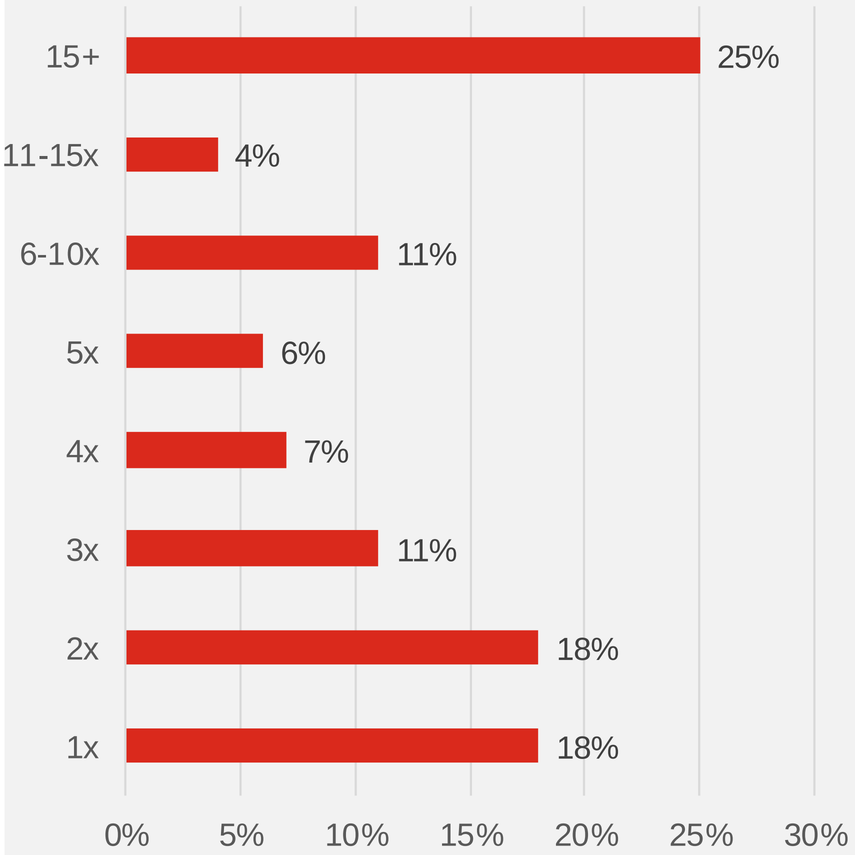
Hiscox Germany cyber attacks

More companies suffered attacks this year, and many suffered multiple.

Suffered an attack in past 12 months



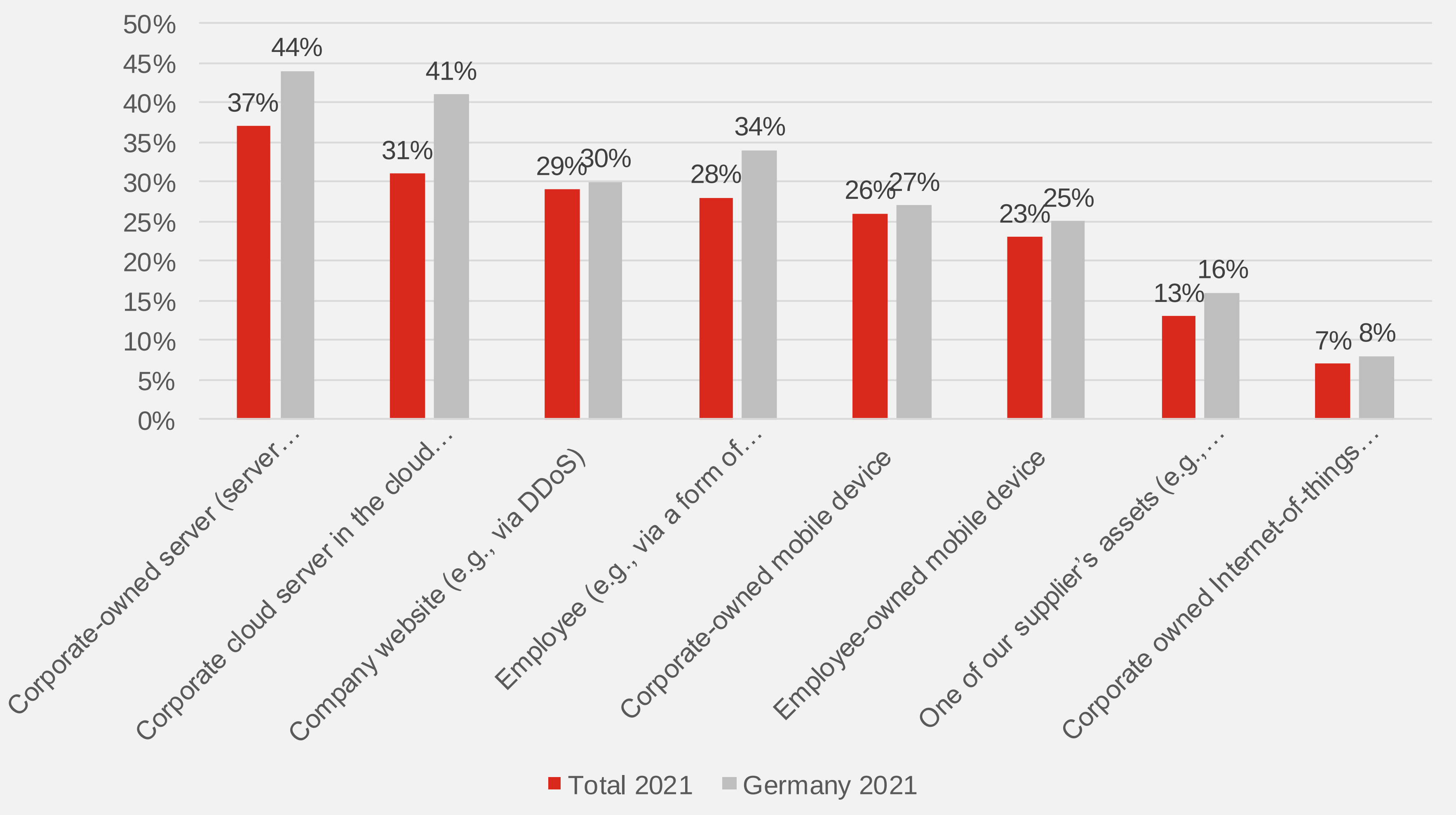
Frequency of attacks in past 12 months



Germany response base: 1,030

Hiscox Germany First points of entry

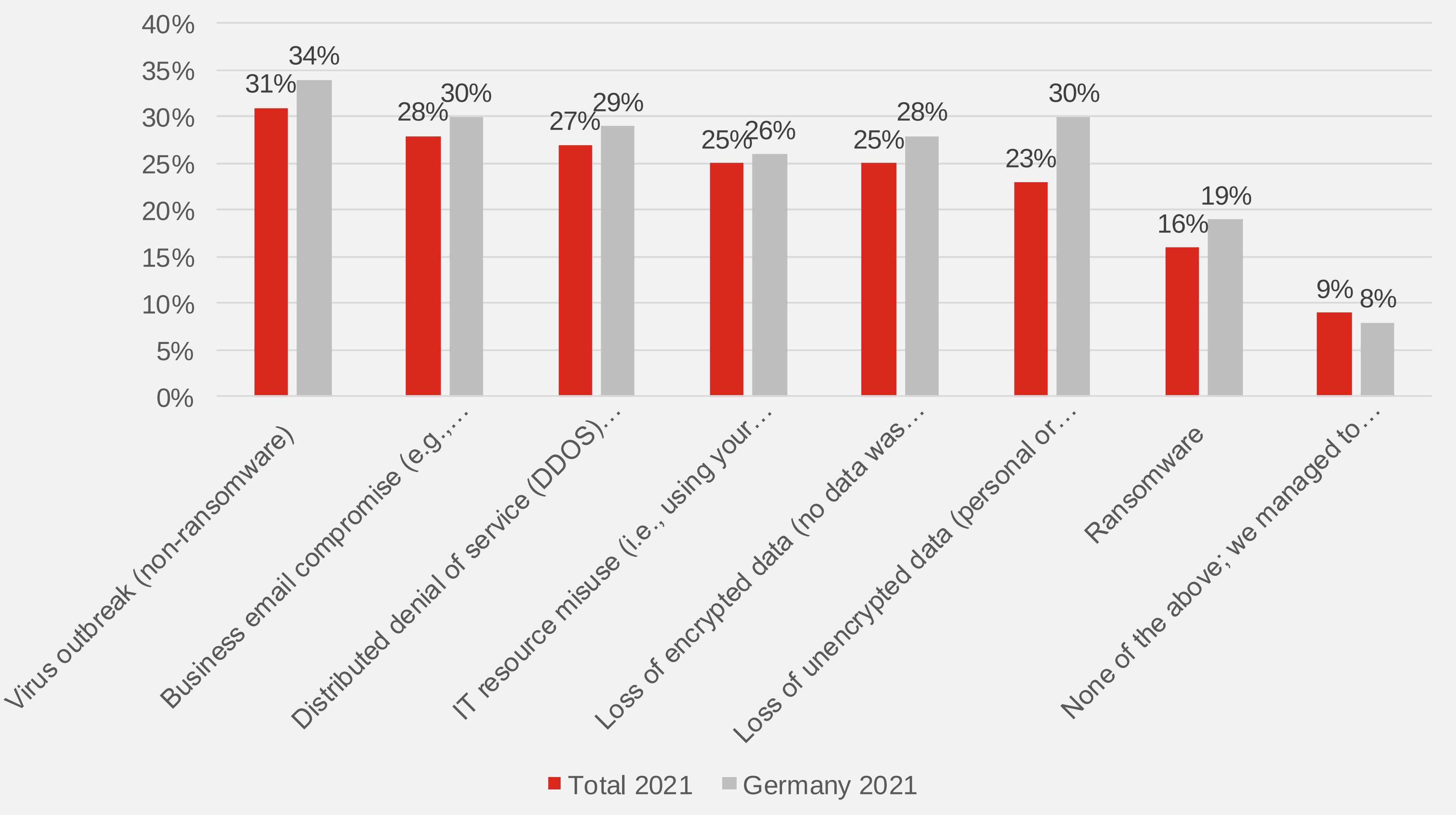
Germany scored above average how attacks occurred. Corporate-owned servers, cloud servers, and employee (i.e., phishing) were highest.



Total attacked response base 2,617
Germany attacked response base: 477

Hiscox Germany - Results/outcomes of cyber attacks

Germany outpaced the overall average across the board, but especially for loss of unencrypted data, virus outbreak, and ransomware.



Total attacked response base 2,617
Germany attacked response base: 477

Hiscox Germany - costs

If one only looks at average or median figures the financial impact may appear containable. But behind those figures is a range of outcomes, some orders of magnitude higher.

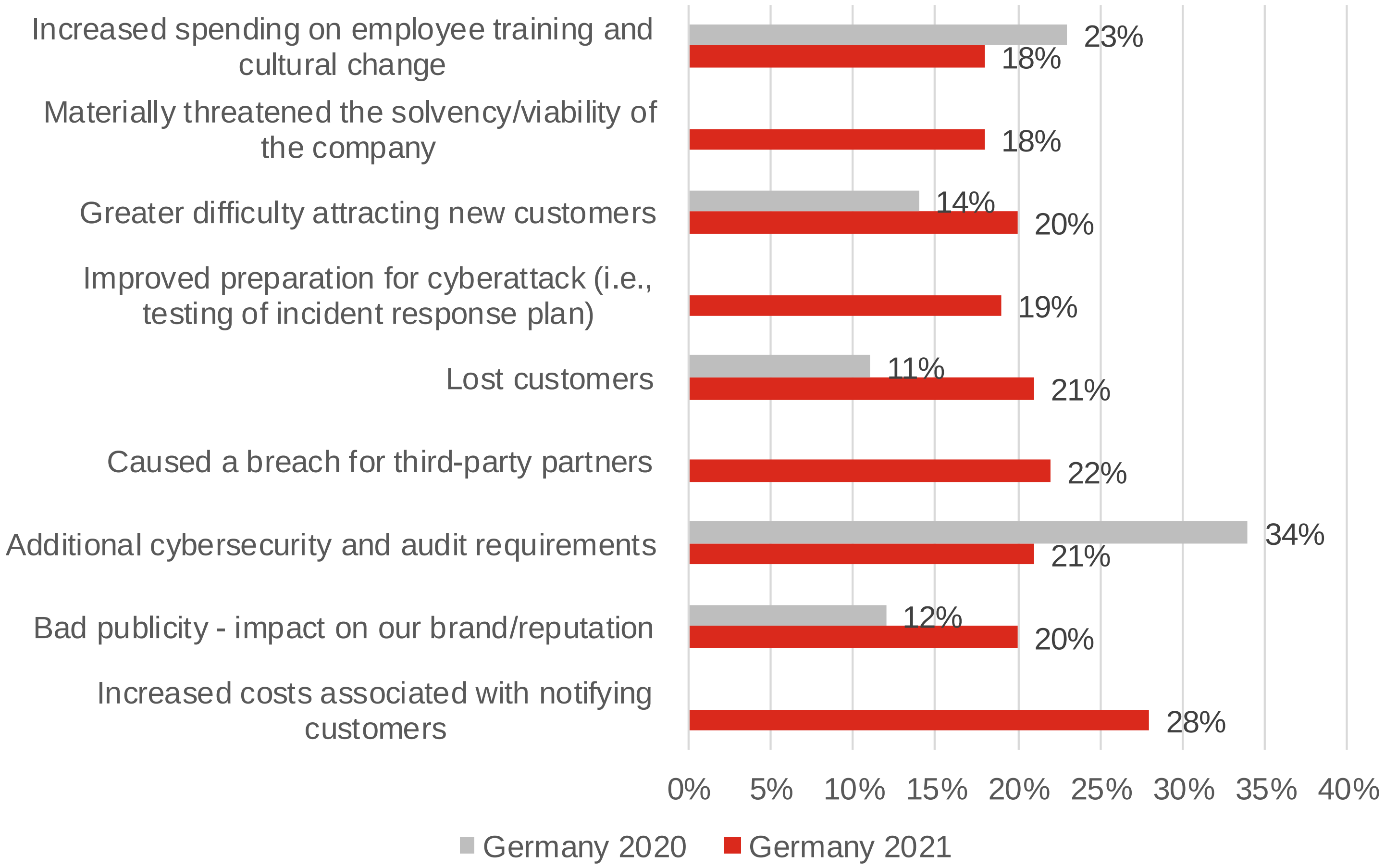
	2021	2020	2019
Germany median cost of incident / breach	21.818 €	72.000 €	9.000 €
Total median cost incident / breach	11.944 €	51.200 €	9.100 €

	2021	2020	2019
Germany cost single largest incidents / breach	4.636.364 €	6.200.000 €	29.120.000 €
Total cost single largest incident / breach	4.636.364 €	79.900.000 €	29.120.000 €

Total response base: 2021 – 1,709; 2020 - 1,971; 2019 – 2,257
German response base: 20201 - 314;2020 – 389; 2019 - 398

Hiscox Germany - impact and/or response to cyber attacks

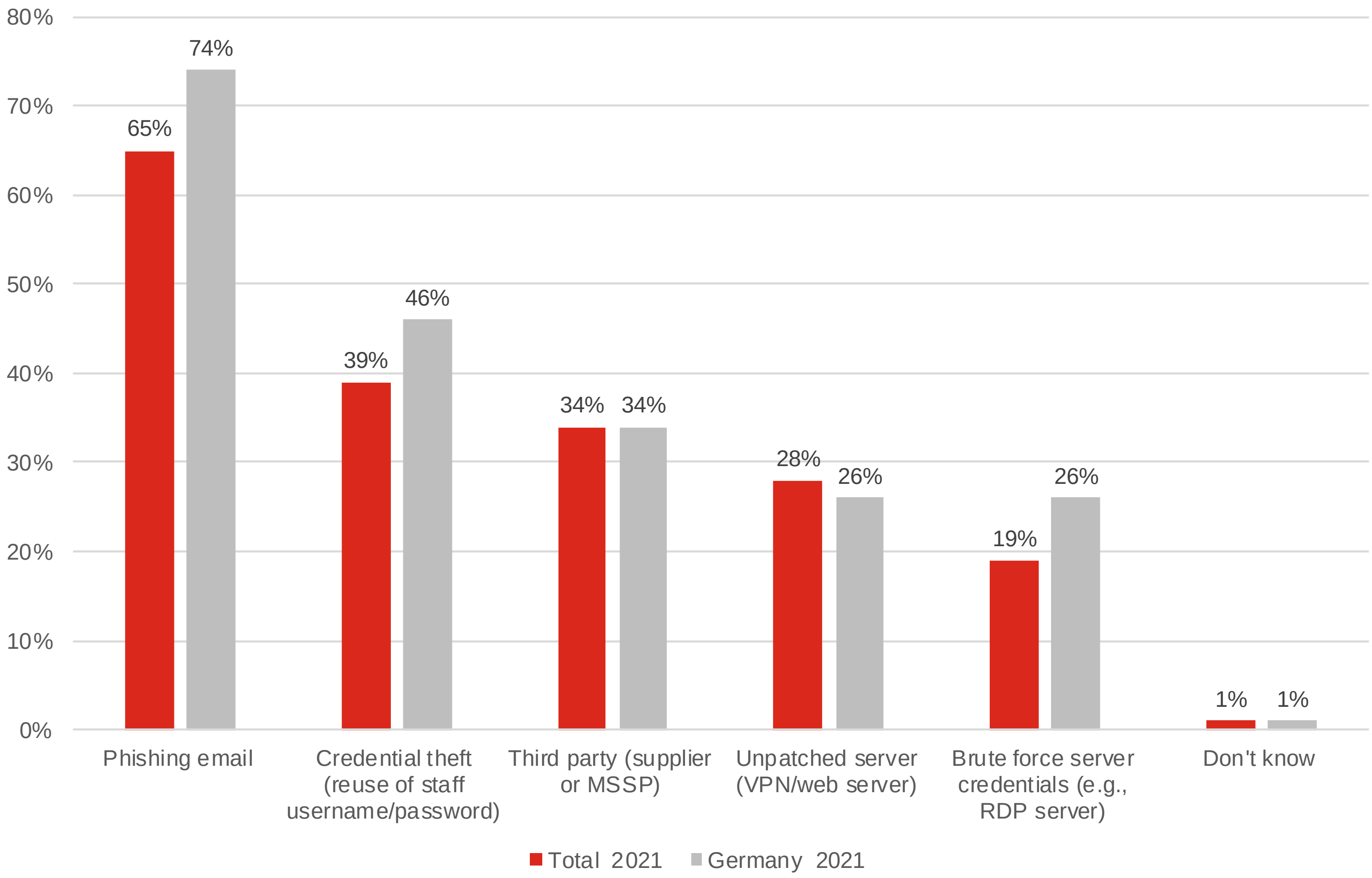
Though some new options were added, top scores in 2021 included increased costs to notify and a large increase in bad publicity.



Germany response base 2021: 477; 2020: 421

Hiscox Germany – Ransomware method of entry

Phishing was the main point of entry in Germany for ransomware, followed by credential theft, both of which can be managed with better employee training.



Response base: Total 2021 – 413; Total Germany 2021 - 93

READINESS MODEL

Hiscox Maturity Model background

Our readiness model is based on a capability-oriented architecture, encompassing the people, processes and technology needed to create an effective cyber security management system.

OVERALL (N=6,042)	People	Process	Technology	Total
Business Resilience Management	3.12	3.13	3.10	**3.12**
Cryptography and Key Management	2.93	2.90	2.94	**2.93**
Identity and Access Management	3.05	2.95	2.94	**2.97**
Security Information and Event Management	2.93	3.10	2.99	**2.99**
Threat and Vulnerability Management	3.00	3.12	3.28	**3.13**
Trust Management	3.07	3.05	3.09	**3.07**
Total	**3.02**	**3.04**	**3.06**	**3.03**

- It assesses a firm's maturity in six different areas of capability (domains) using the COBIT measurement framework. The six domains make up all the elements required to install, run, manage and govern an effective security system.

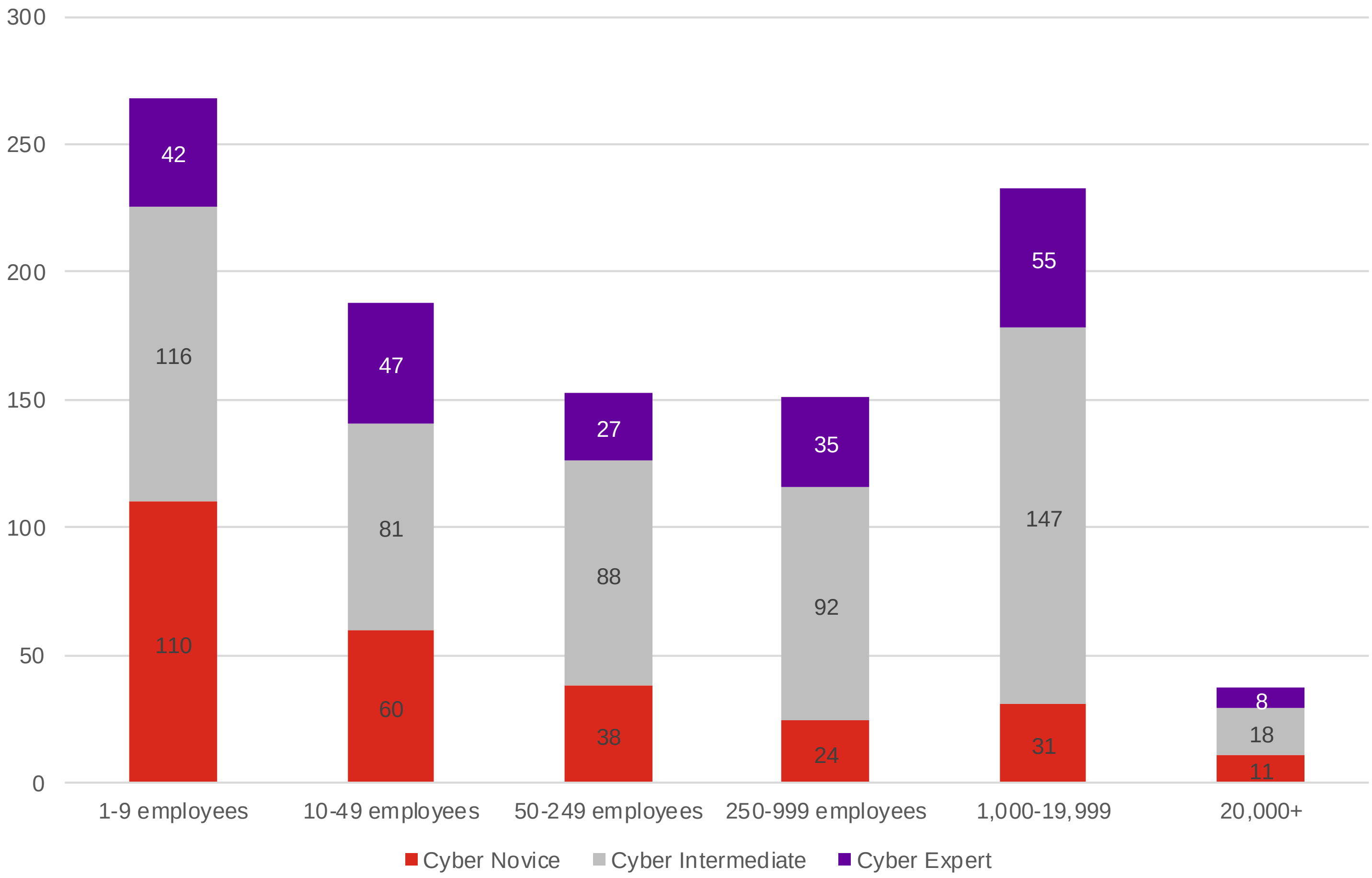
- Each domain is measured against three different attributes – people process and technology

- The scoring system marks each attribute according to how well developed it is – from non-existent or ad hoc at one end of the scale to optimised at the other.

- Firms can not only measure the effectiveness of their security controls but better understand the gaps the model reveals.

Hiscox Germany - readiness model

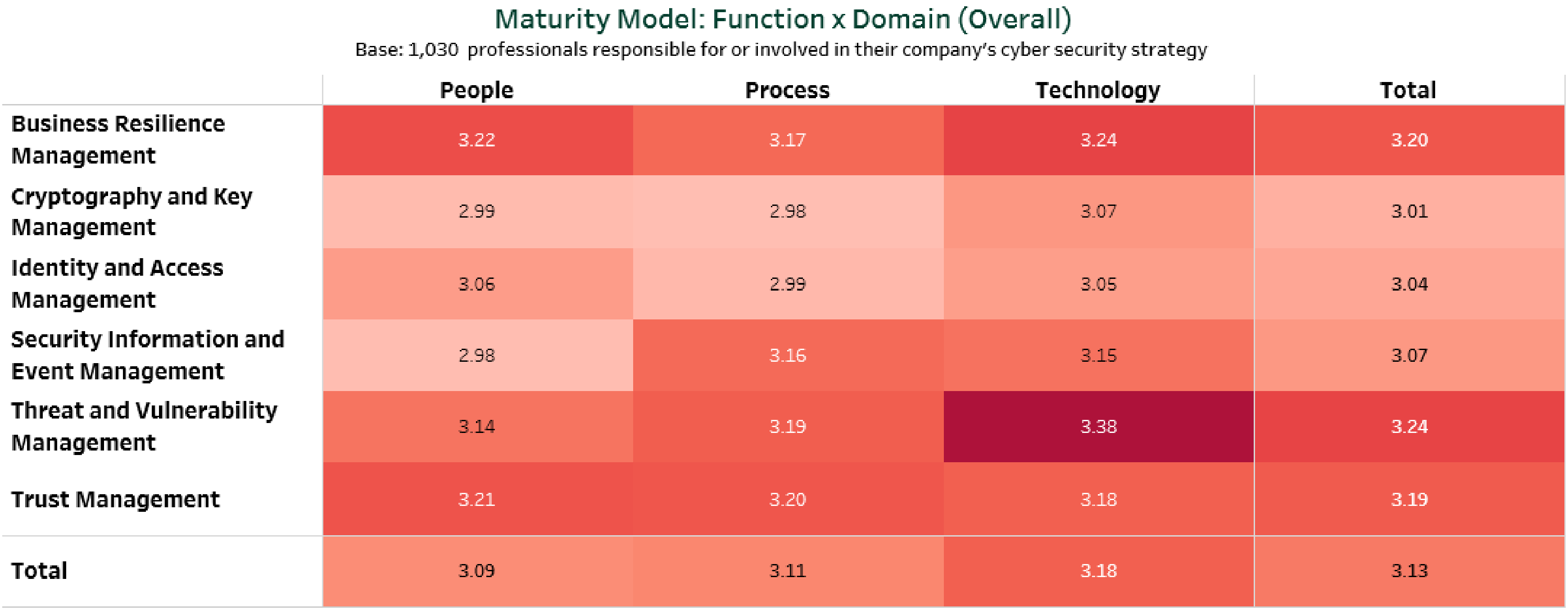
New model doesn't allow us to compare exactly to last year, though cyber experts have increased slightly in Germany and many novices are now intermediates.



Response base: Germany 2021- 1030

Hiscox Germany - readiness model

Top performing area is Threat Mgmt Tech. Biggest areas of improvement are also in Process and People for Cryptography, as well as Process for Identity Access and People for Security Information and Event Management.



Maturity Model: Function x Domain (Overall)

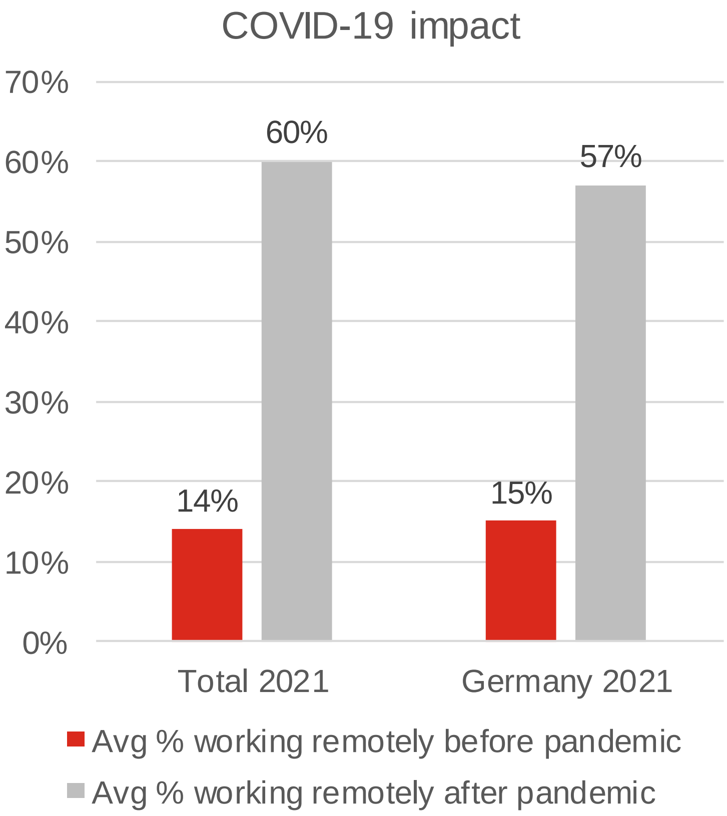
Base: 1,030 professionals responsible for or involved in their company's cyber security strategy

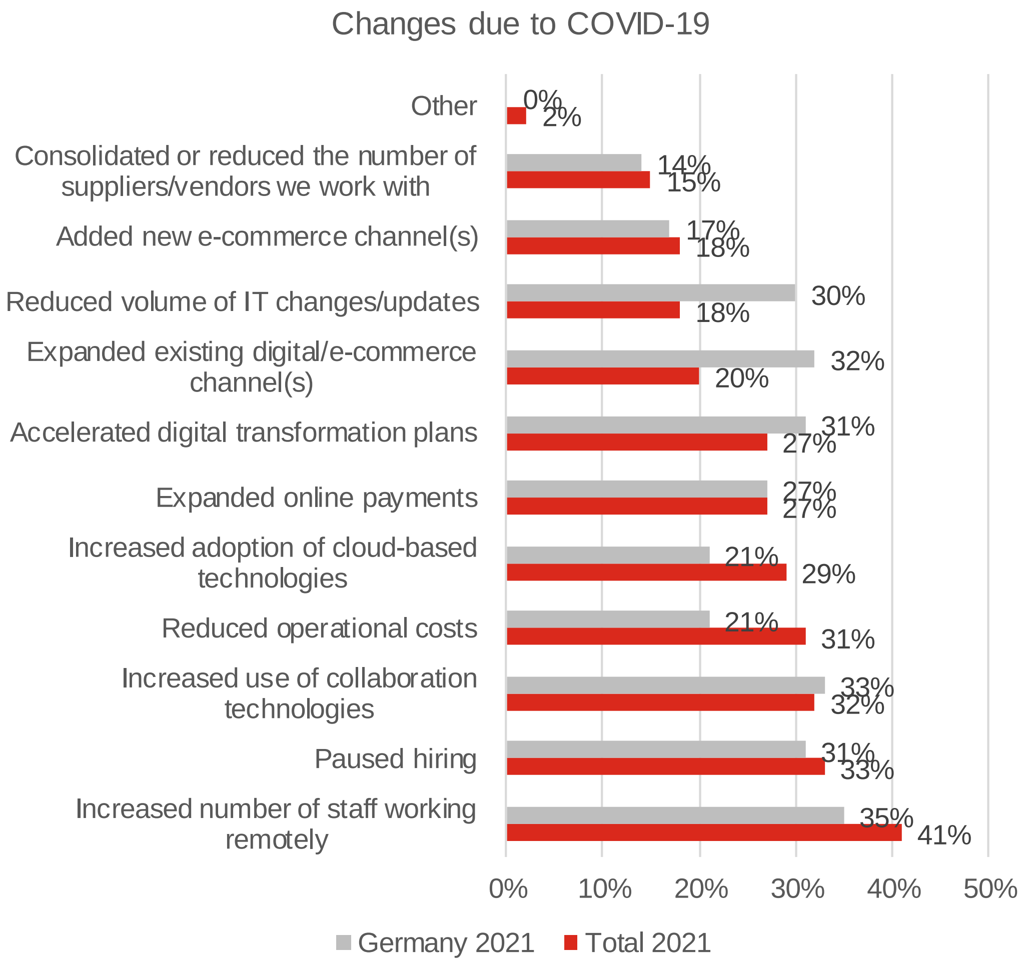
	People	Process	Technology	Total
Business Resilience Management	3.22	3.17	3.24	3.20
Cryptography and Key Management	2.99	2.98	3.07	3.01
Identity and Access Management	3.06	2.99	3.05	3.04
Security Information and Event Management	2.98	3.16	3.15	3.07
Threat and Vulnerability Management	3.14	3.19	3.38	3.24
Trust Management	3.21	3.20	3.18	3.19
Total	3.09	3.11	3.18	3.13

BUILDING RESILIENCE

Hiscox Germany COVID-19 impact

COVID caused a definite increase in remote working, causing an increased use in collaboration tools and expanding ecommerce channels.



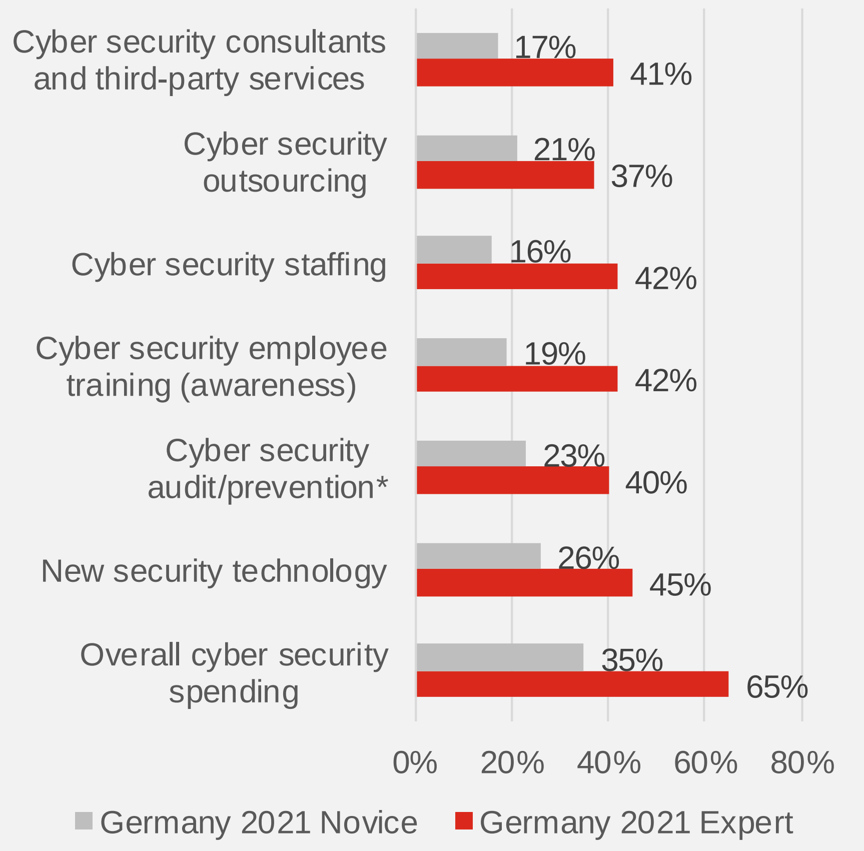


Response base: Total 2021 – 6042; Germany 2021: 1,030

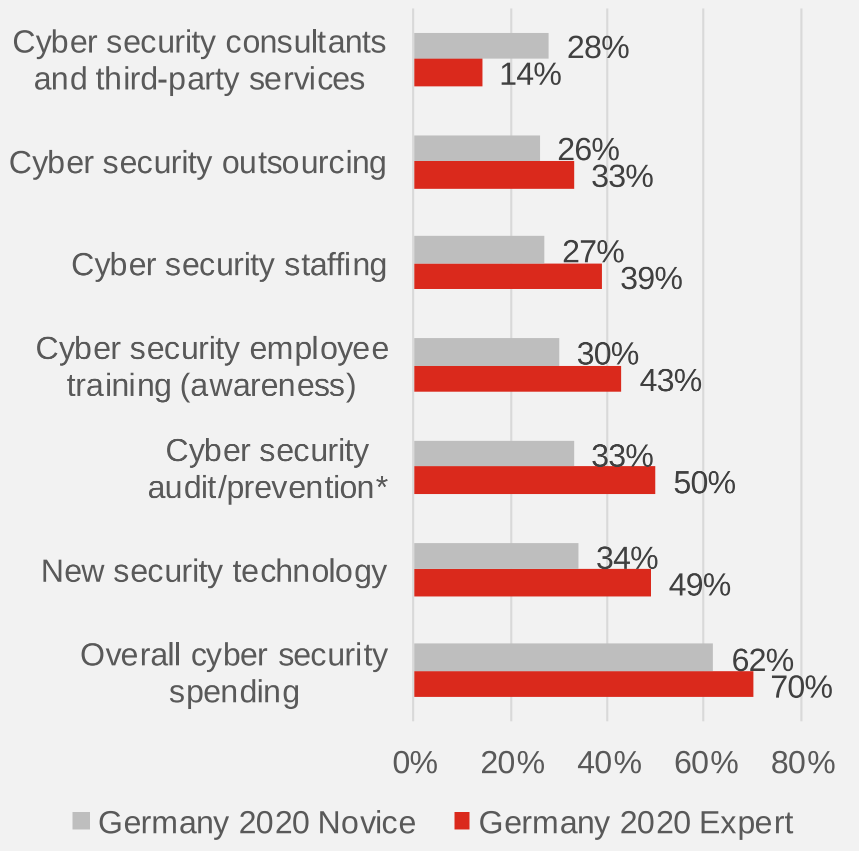
Hiscox Germany cyber spending

Percentage planning to increase spending within the next 12 months with focus on new tech, staffing, and employee training.

Germany 2021



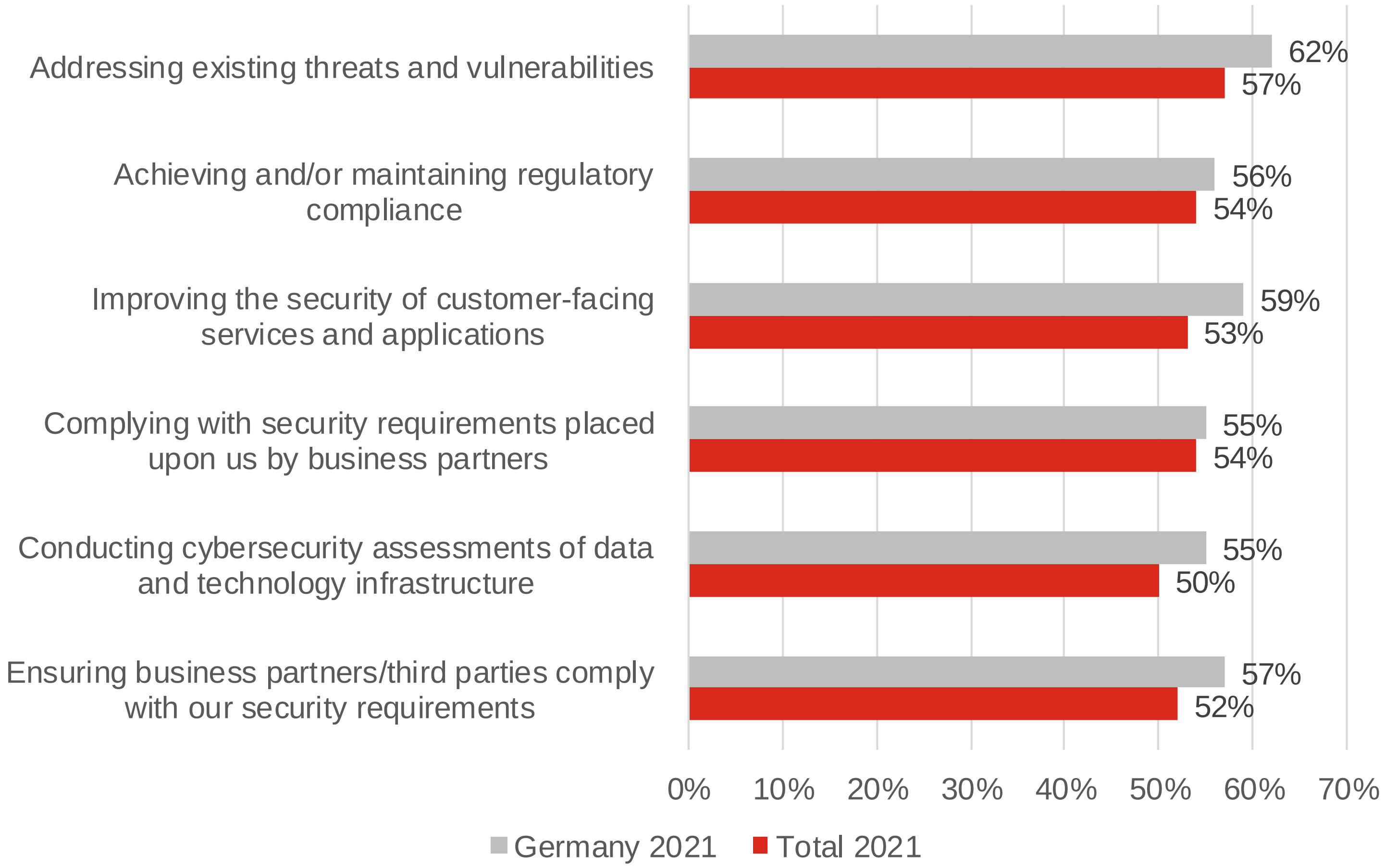
Germany 2020



Germany 2021 response base: 367
Germany 2020 response base: 807

Hiscox Germany – top cyber spending priorities

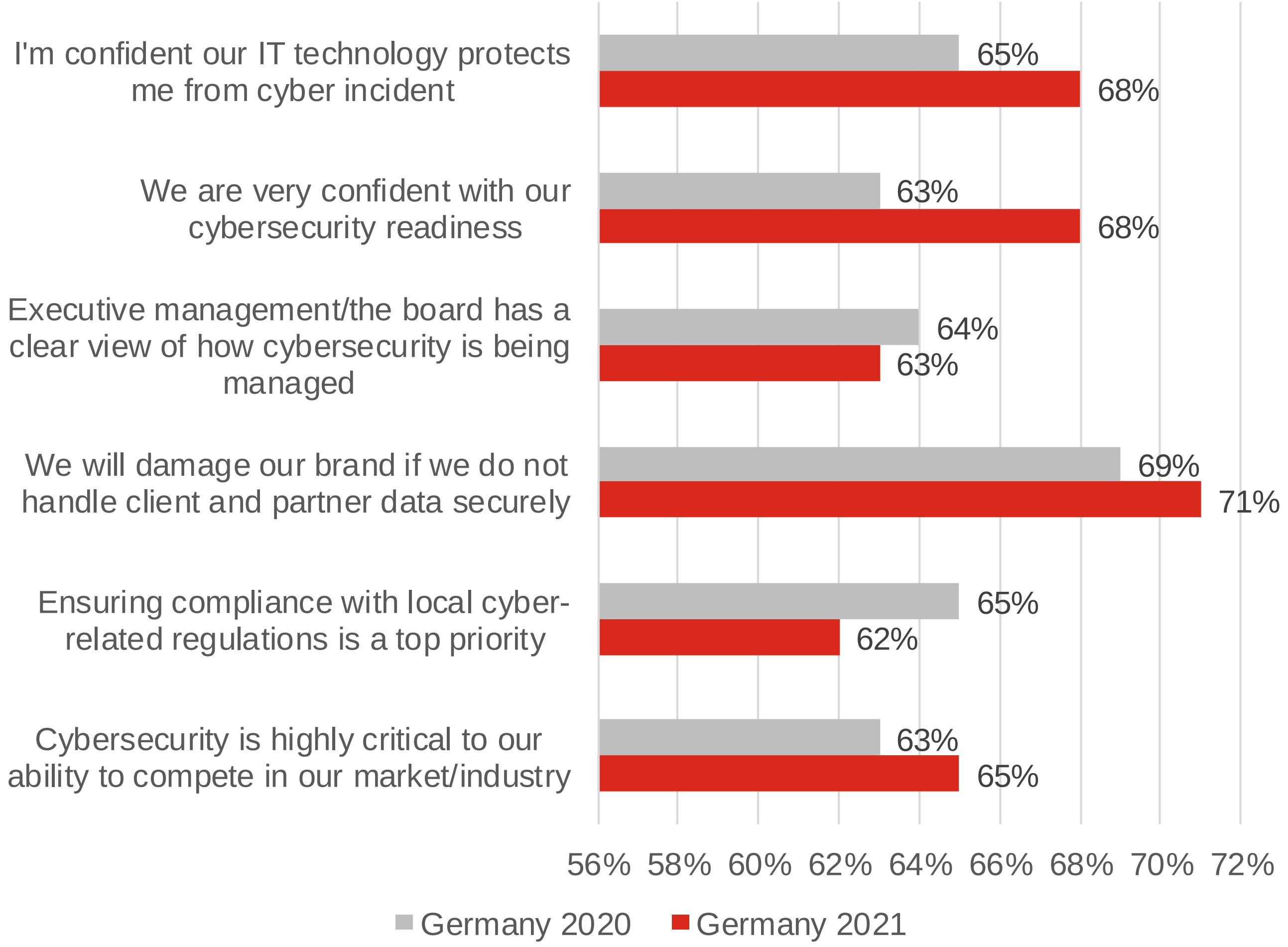
Addressing existing threats became a major area of importance, as well as improving security of customer-facing services and ensuring third parties comply with security requirements.



Base response: Total 2021 – 6059; Germany 2021 - 1030

Hiscox Germany – cyber security confidence

Top areas of confidence in 2021 or lack there-of showed large increases from 2020, especially in the potential to damage the brand with a cyber breach.



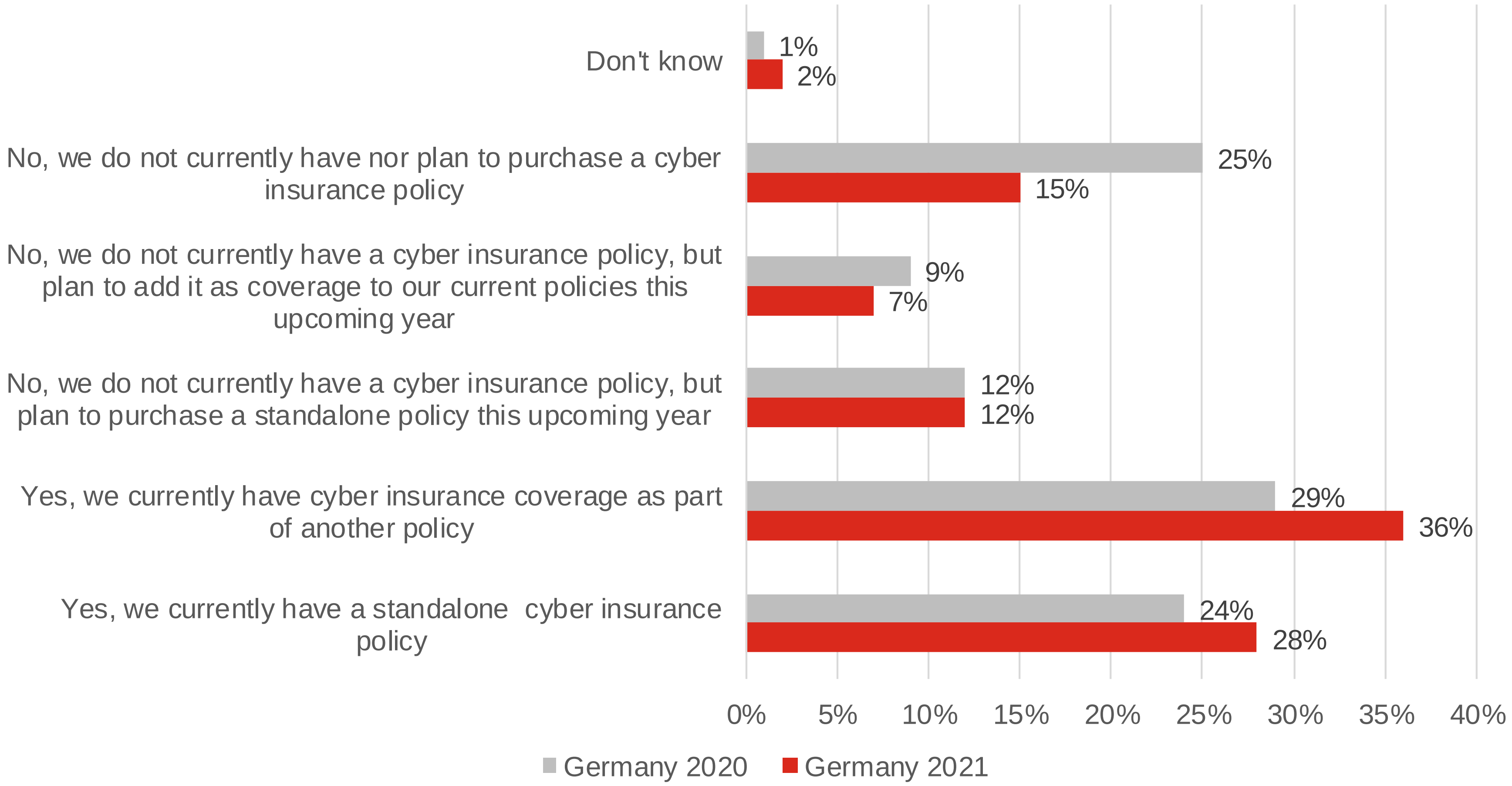
New questions asked in 2021 highlighted perception around COVID and cyber security for Germany:

- My organisation has been more vulnerable to cyberattacks since the start of the coronavirus pandemic – 46%
- Because more employees are working from home, my organisation is more vulnerable to cyberattacks – 57%
- My organisation has increased my cyber defenses because of the coronavirus pandemic – 52%

Base response: Germany 2021 – 1030; Germany 2020 - 1026

Hiscox Germany - insurance purchase activity

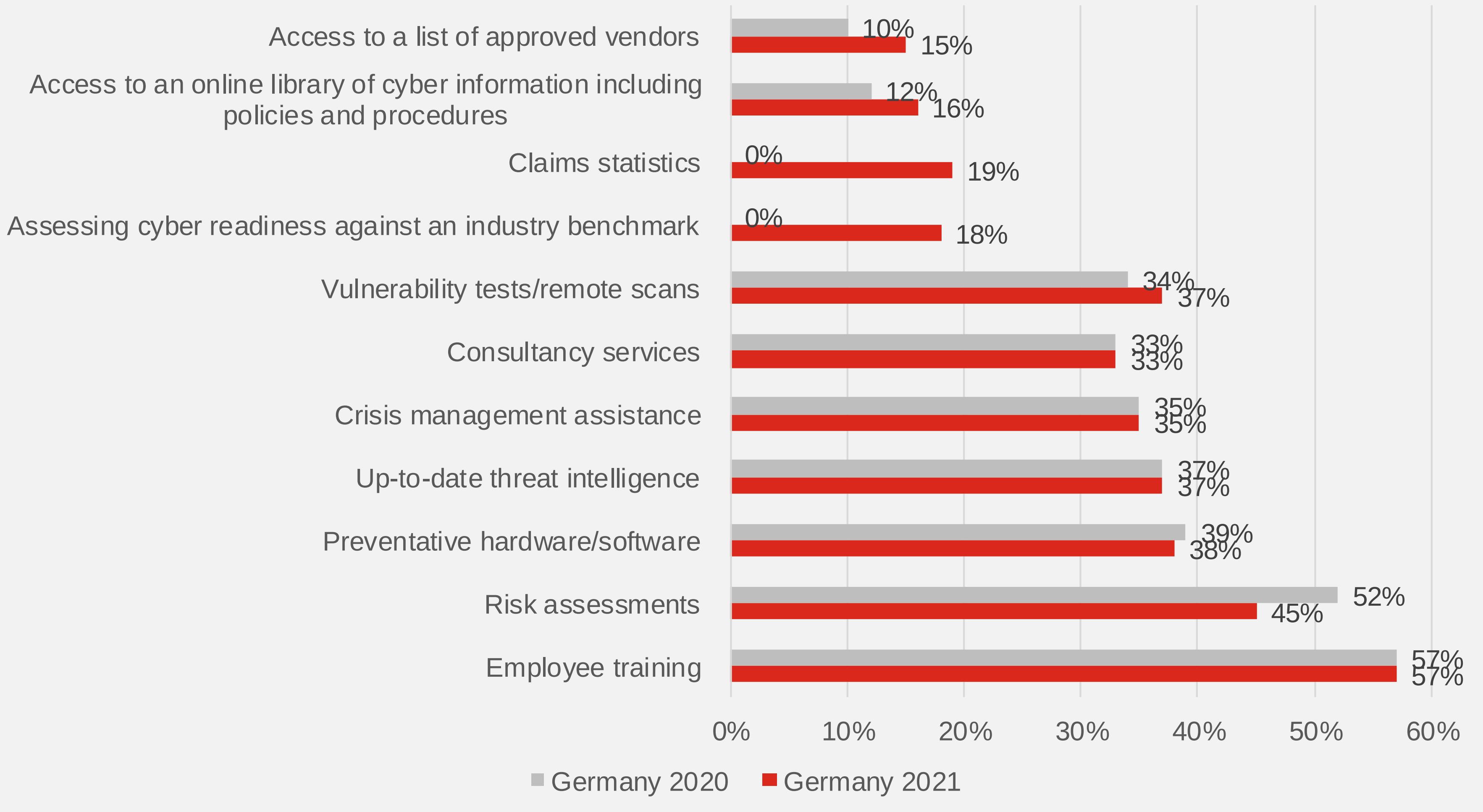
Standalone cyber policies increase, as well as combined policies, while those not planning on purchasing a policy decreases.



Response base: Germany 2020 response base: 790; Germany 2021 - 731

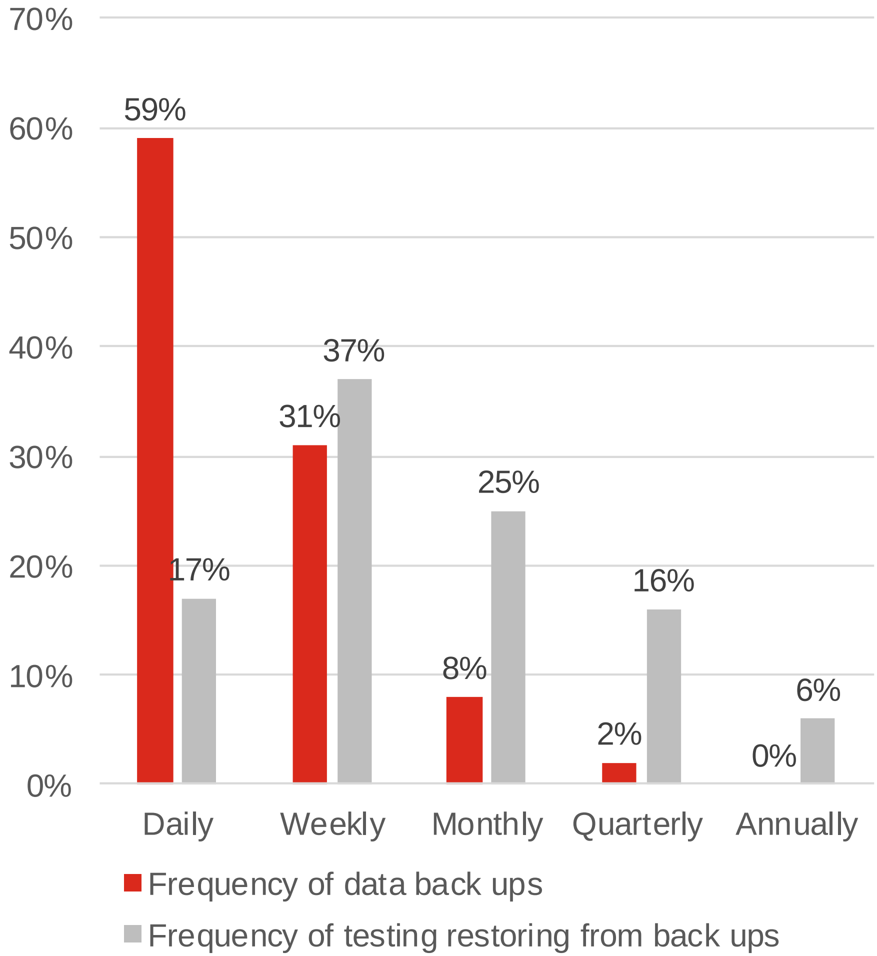
Hiscox Germany - additional services

Customers in Germany are interested in the below additional services that might be offered through their insurance carrier.

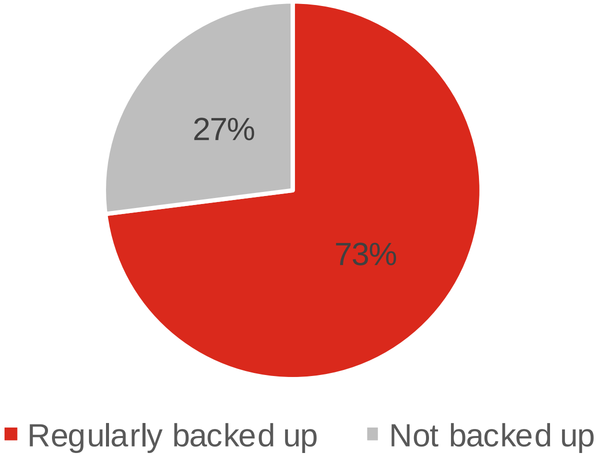


Response base: Germany 2020 - 293; Germany 2021 - 292

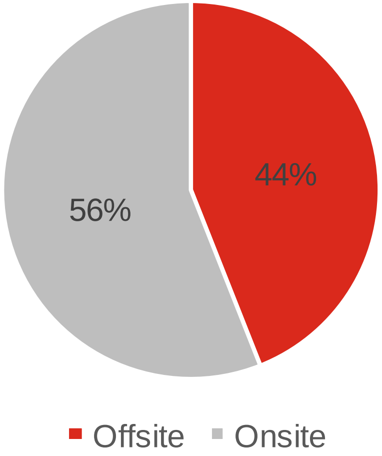
Hiscox Germany - back-ups



Avg % of critical data



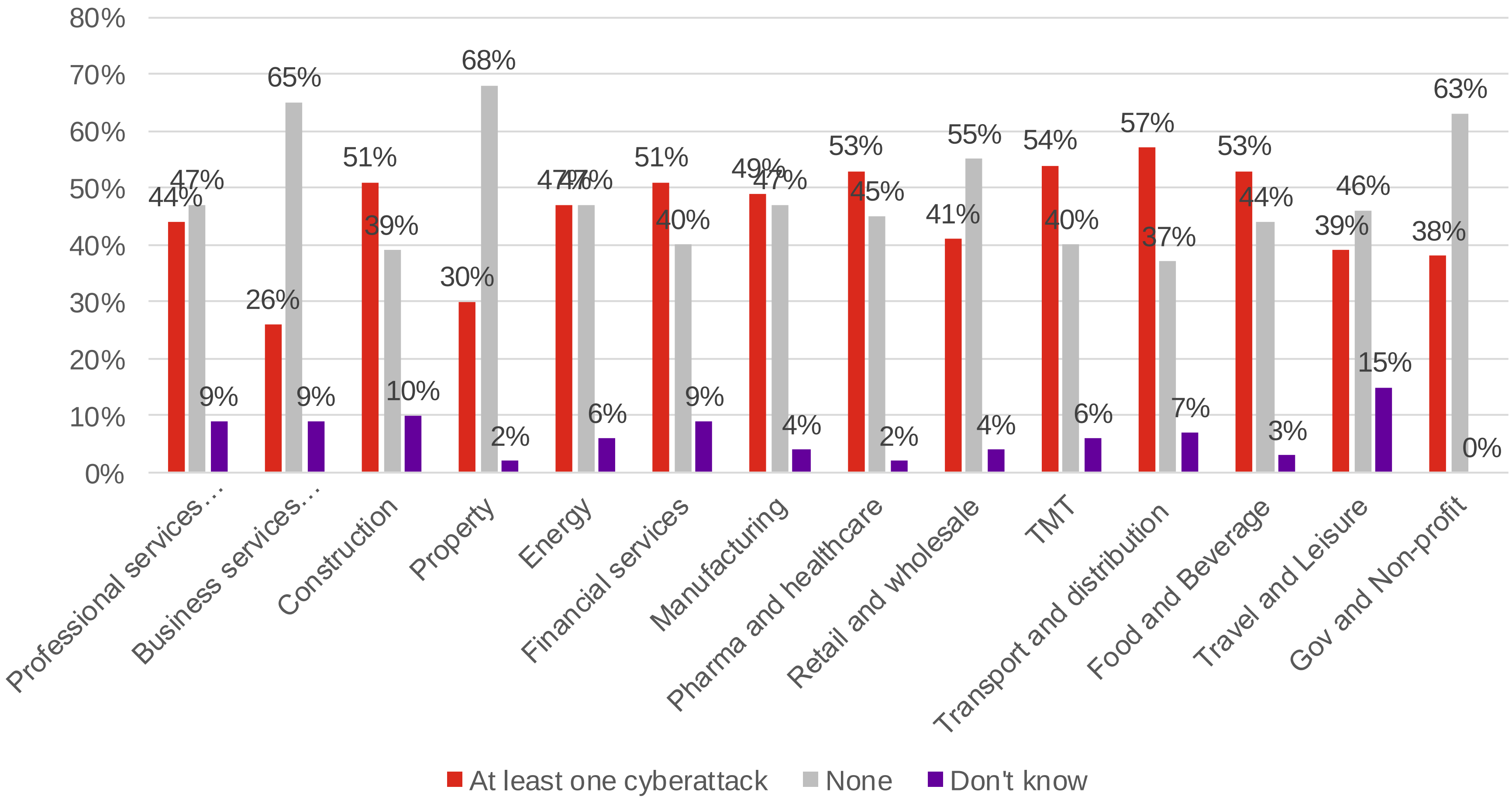
Avg % of critical data backed up



Response base: backups – 1030; onsite/offsite – 1013; frequency - 782

APPENDIX

Germany focus – industry

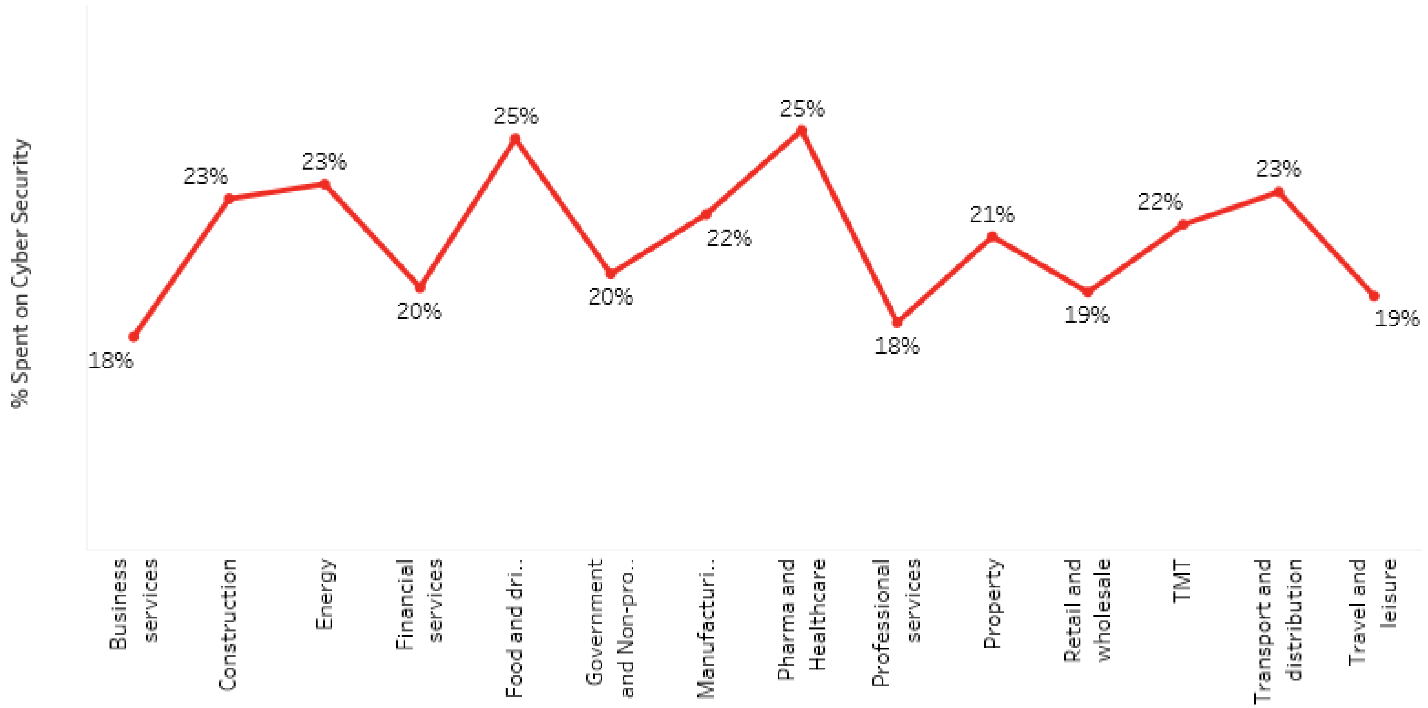


Base size - 1030

Germany focus – industry (cont.)

IT budget spent on Cyber Security

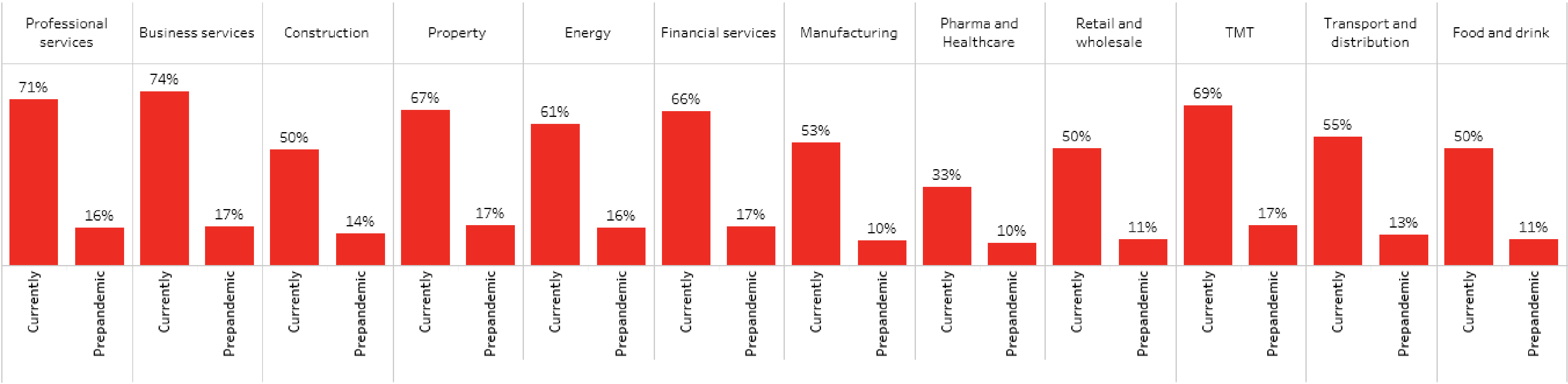
Base: 757 professionals responsible for or involved in their company's cyber security strategy

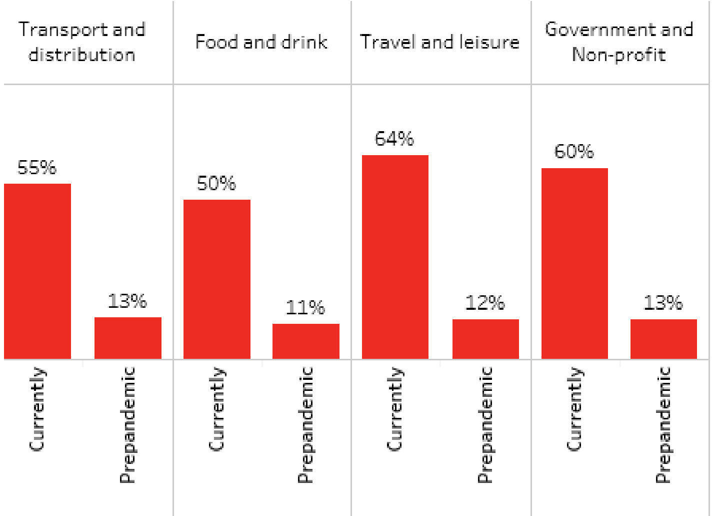


Germany focus – industry (cont.)

Employees Working Remotly Before and After Pandemic

Base: 6,043 professionals responsible for or involved in their company's cyber security strategy





The fifth annual international Hiscox Cyber Readiness Report provides an up-to-the-minute picture of the cyber readiness of organisations and offers a blueprint for best practice in the fight to counter an ever-evolving threat. It is based on a survey of executives, departmental heads, IT managers and other key professionals. Drawn from a representative sample of organisations across eight countries by size and sector, these are the people on the front line of the business battle against cyber crime.

About this year's report

The countries covered (Belgium, France, Germany, the Netherlands, Spain, the UK and the US) have been extended this year to include the Republic of Ireland. The size of the respondents has increased from 5,569 companies to 6,042, reinforcing the position of the Hiscox Cyber Readiness Report as one of the broadest of its kind.

We have adopted median rather than mean figures for numbers of attacks and costs this year and restated prior-year figures in the same terms. Given the extreme variation in the underlying figures between the very smallest and very largest companies, this provides a more accurate representation of the study group as a whole.