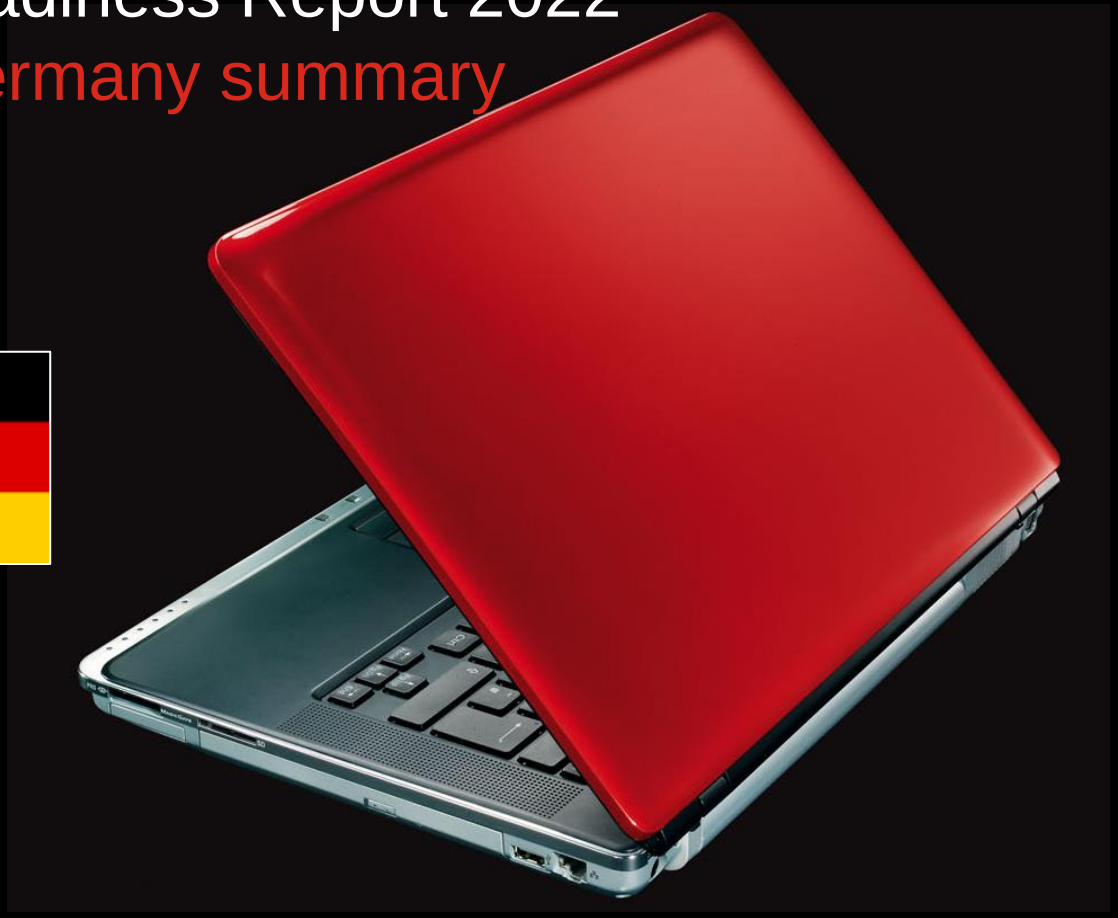
HISCOX

Cyber Readiness Report 2022

Hiscox Germany summary



Global overview

2022 Key findings

- **Perceived risk high:** seven out of eight countries rank cyber attack as the number one threat to their business – ahead of the pandemic, economic downturn and skills shortages.
- **Increased attack intensity:** Nearly half of companies report cyber attacks (48%, up from 43% last year) in the last 12 months.
- **More severe impact:** The median cost of attacks has risen 29% to just under 15.300 €.
- **Expertise does pay-off:** Median cyber attack costs expressed as a percentage of revenues are two-and-a-half times higher for firms ranked as ‘cyber novices’ as for the experts.
- **More ransomware attacks:** Nearly one in five firms (19%) report a ransomware attack, up from 16% last year.
- **Remote working shifts attacks:** Corporate servers are the main weak link, with a big jump in entry via cloud server.
- **Spending divide:** Mean spending across all respondents has increased 60% in the past year to 4.8m € and is up 250% since 2019.
- **Insurance take-up continues:** 64% of companies now have cyber insurance as standalone or part of another policy, up from 58% two years ago.

Hiscox Germany overview

Key findings

- 50/50 split in those that were attacked versus not attacked
- Most common point of entry was corporate server in the cloud
- Most common outcome of the cyberattacks were IT resource misuse
- The average cost of a cyberattack to a German company seems to have decreased in value this year, down from a mean average of 136.800 € last year to 125.100 € this year.
- Cyber insurance ownership is highest in Germany (67%)

Hiscox Germany demographics

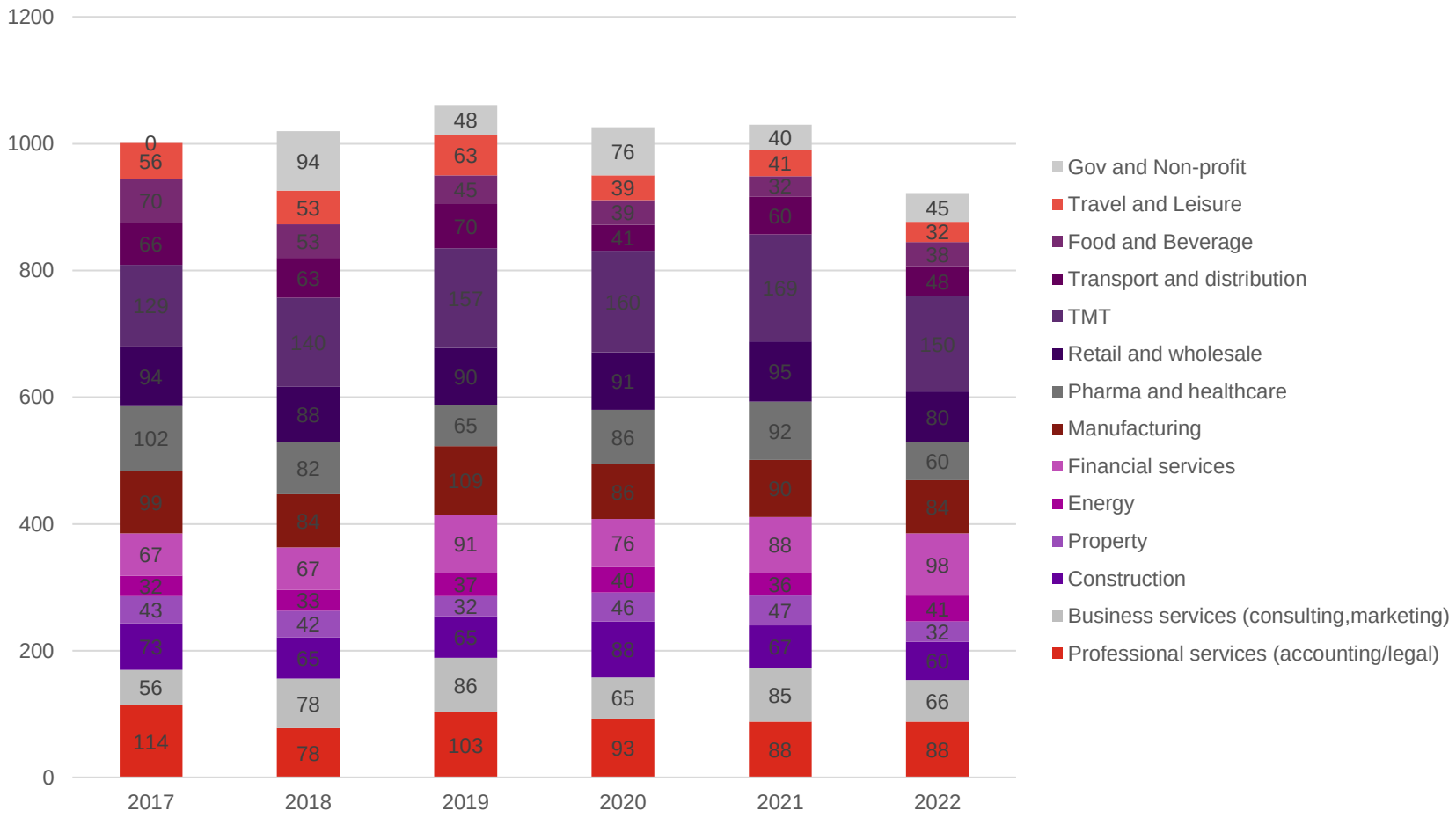
Audience breakdown stayed consistent between 2022 and 2021 report.



German response base 2017- 1,001; 2018 – 1,026; 2019 – 1,061; 2020 – 1,026; 2021 – 1, 030; 2022 - 922

Hiscox Germany demographics

Industry stays relatively consistent YOY.

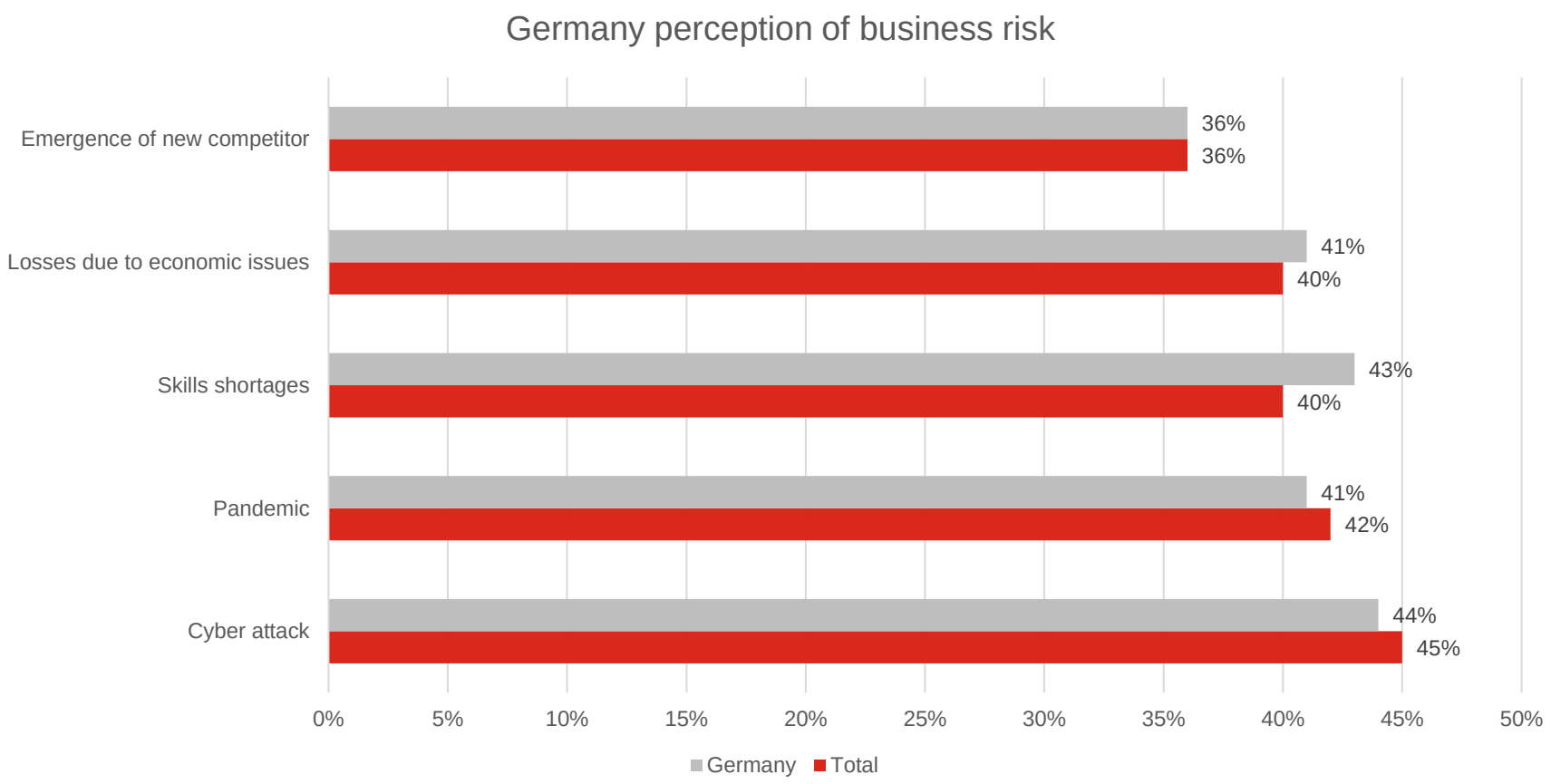


German response base 2017- 1,001; 2018 – 1,026; 2019 – 1,061; 2020 – 1,026; 2021 – 1, 030; 2022 - 922

PERCEPTION OF CYBER RISK

Hiscox Germany perception of business risk

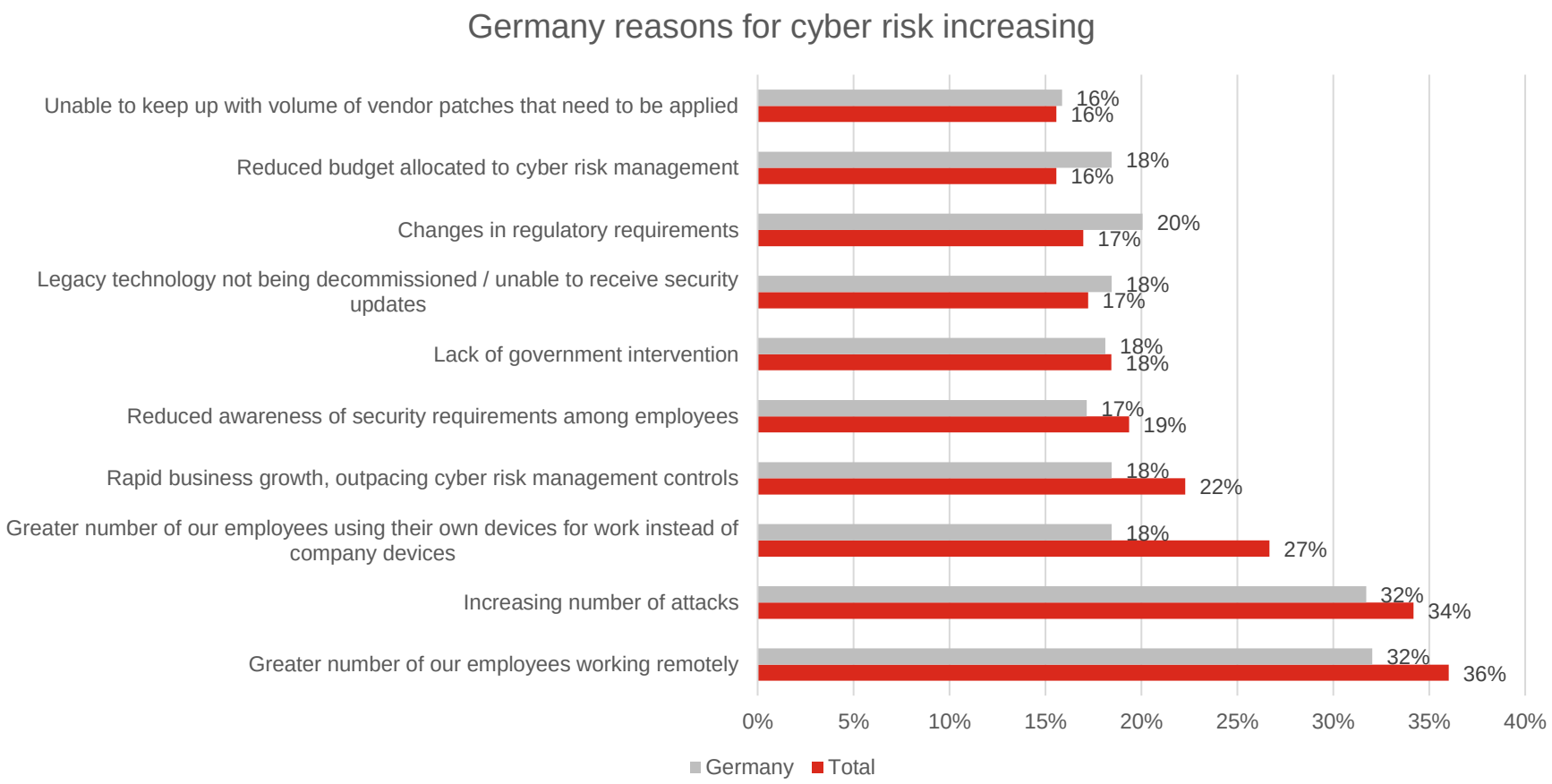
Cyber attacks are viewed as top business risk for companies in Germany, above pandemic or skills shortage risks.



2022 Total – 5181; 2022 German - 922

Hiscox Germany top reasons for cyber risk increasing

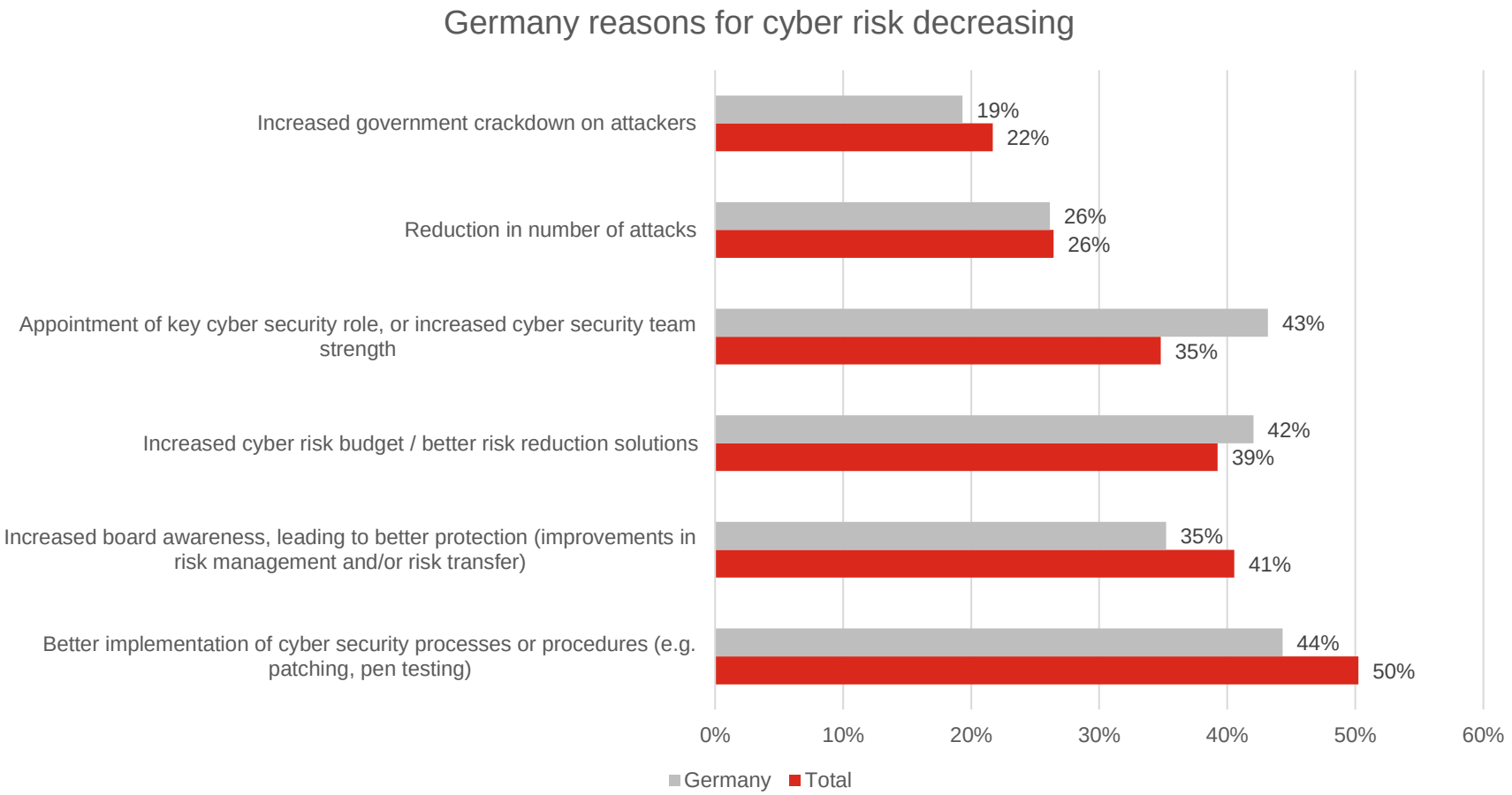
What's going wrong? Companies in Germany are most worried about remote working and the general increase in attacks.



2022 Total – 1638; 2022 Germany - 309

Hiscox Germany top reasons for cyber risk decreasing

What's going right? Companies in Germany think they're doing a better job implementing cyber security processes and creating a specific cyber role.



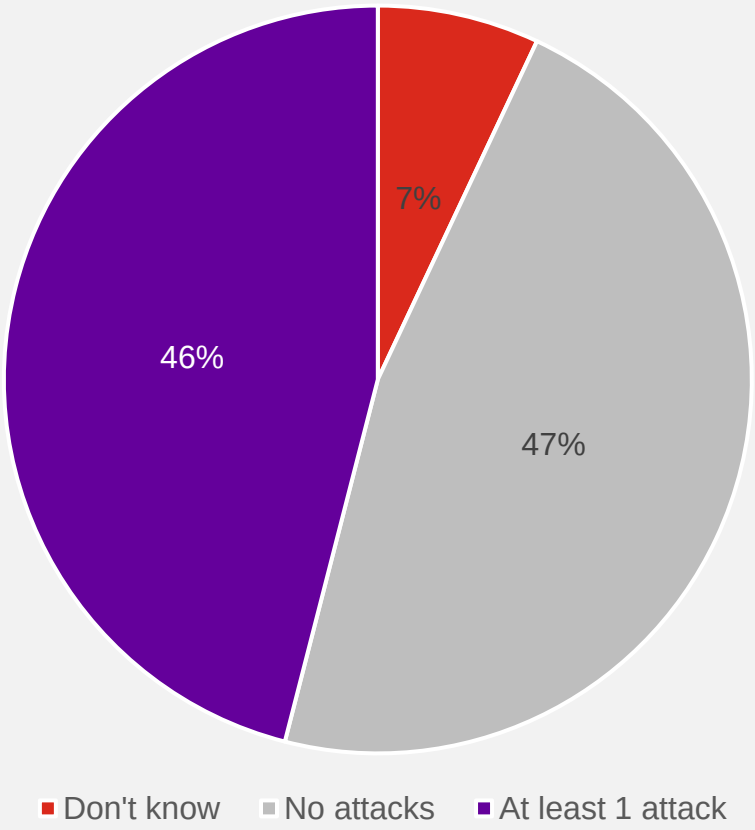
2022 Total – 609 ; 2022 Germany - 88

REALITY OF CYBER RISK: ATTACKS AND OUTCOMES

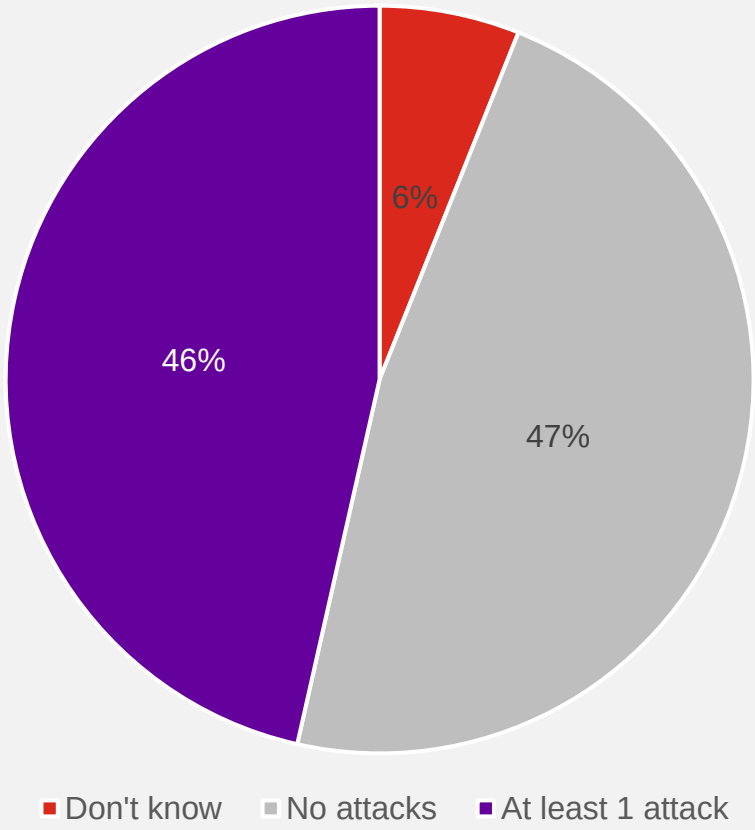
Hiscox Germany cyber attacks

Nearly the same number of companies suffered attacks this year compared to last year.

2022 Germany suffered an attack in past 12 months



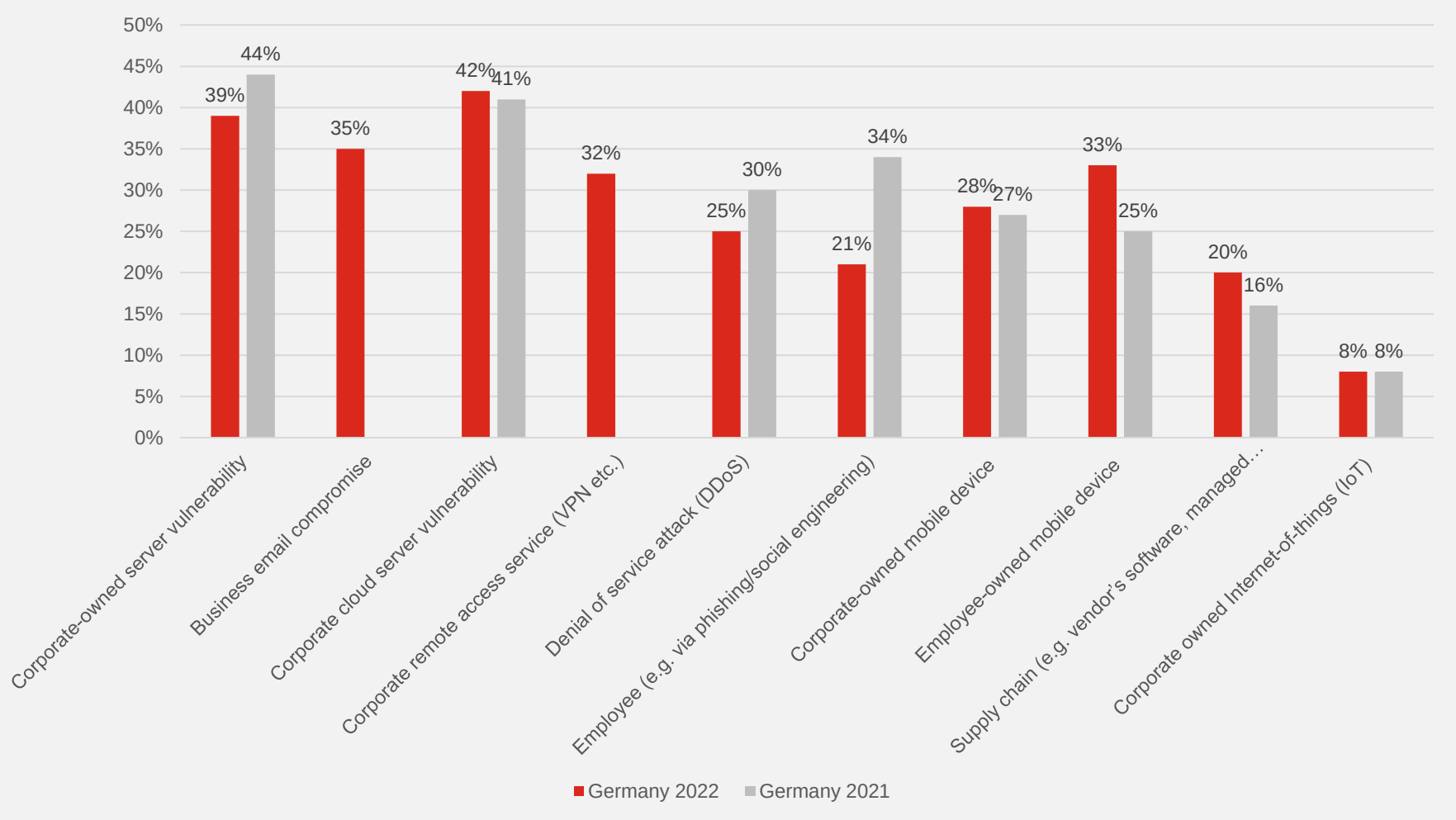
2021 Germany suffered an attack in past 12 months



Germany response base: 2021- 1,030; 2022 - 922

Hiscox Germany First points of entry

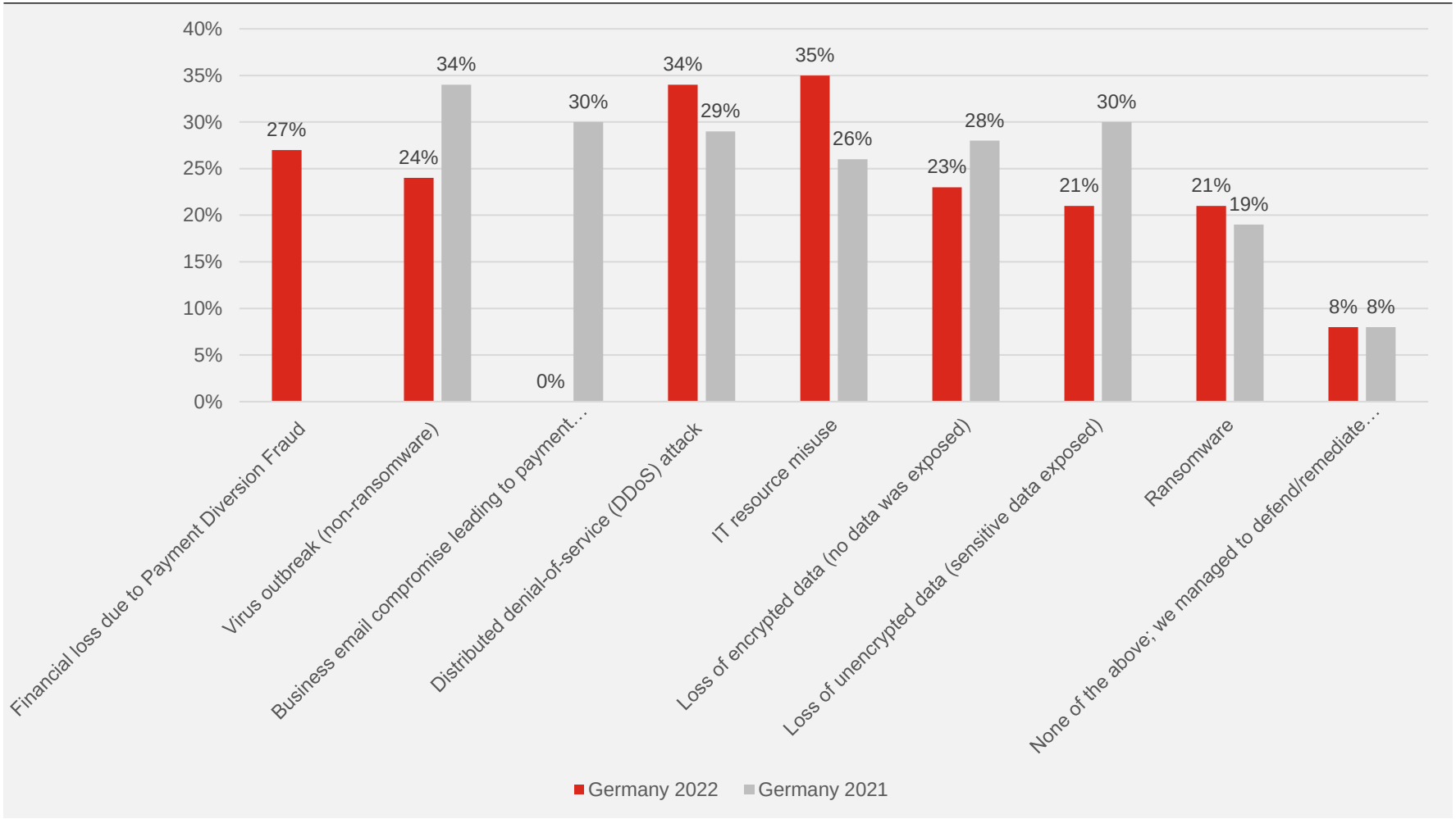
Corporate cloud servers and mobile devices increased since last-year. This is likely a reflection of remote working and continued transitions by companies to cloud-based platforms. BEC was new this year but appears to be common.



Germany attacked response base: 2021 -477; 2022 - 424

Hiscox Germany - Results/outcomes of cyber attacks

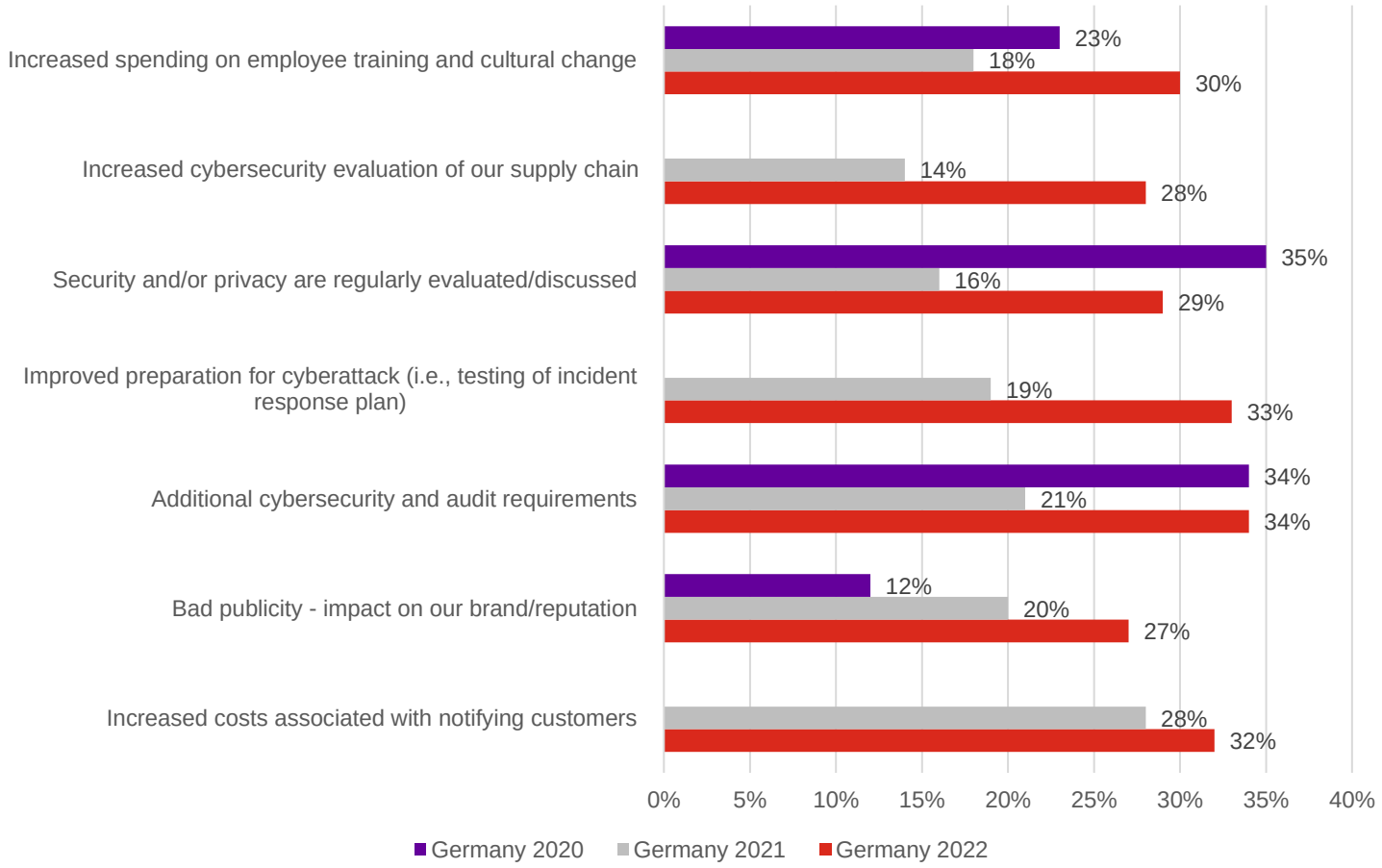
Large increases in IT resource misuse and DDoS attacks compared to last year. Financial loss a big player, though a new option this year.



Germany attacked response base: 2021 -477; 2022 - 424

Hiscox Germany - impact and/or response to cyber attacks

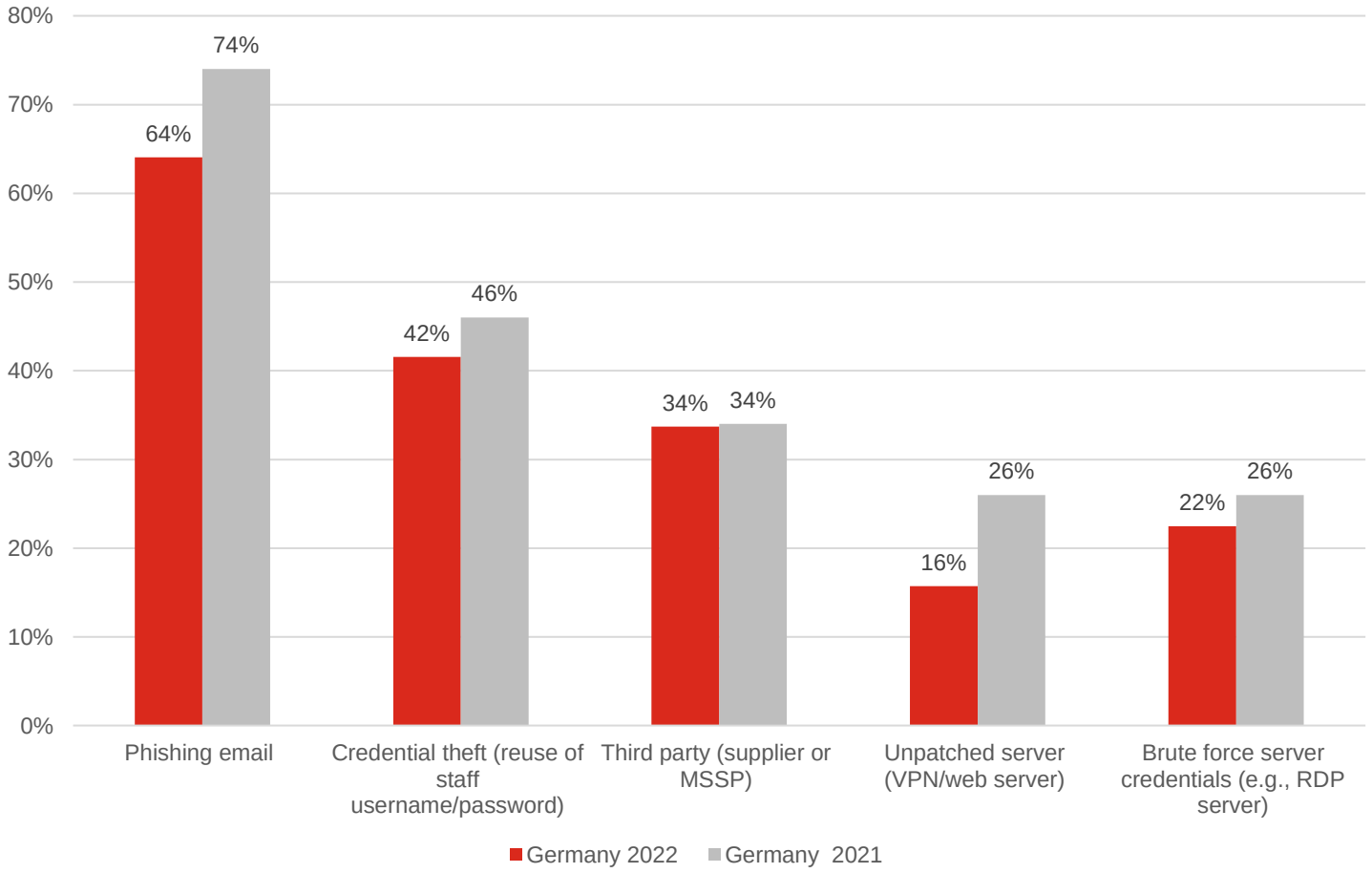
Bad publicity and increase costs to notify continue to increase in affecting businesses. Priorities are focused on audit requirements and improved preparation.



Germany response base 2022 – 424; 2021: 477; 2020: 421

Hiscox Germany – cyber criminals' method of entry

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



Response base: Total Germany 2021 – 93; Germany 2022 - 89

WHAT ARE THE EXPERTS DOING?

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.

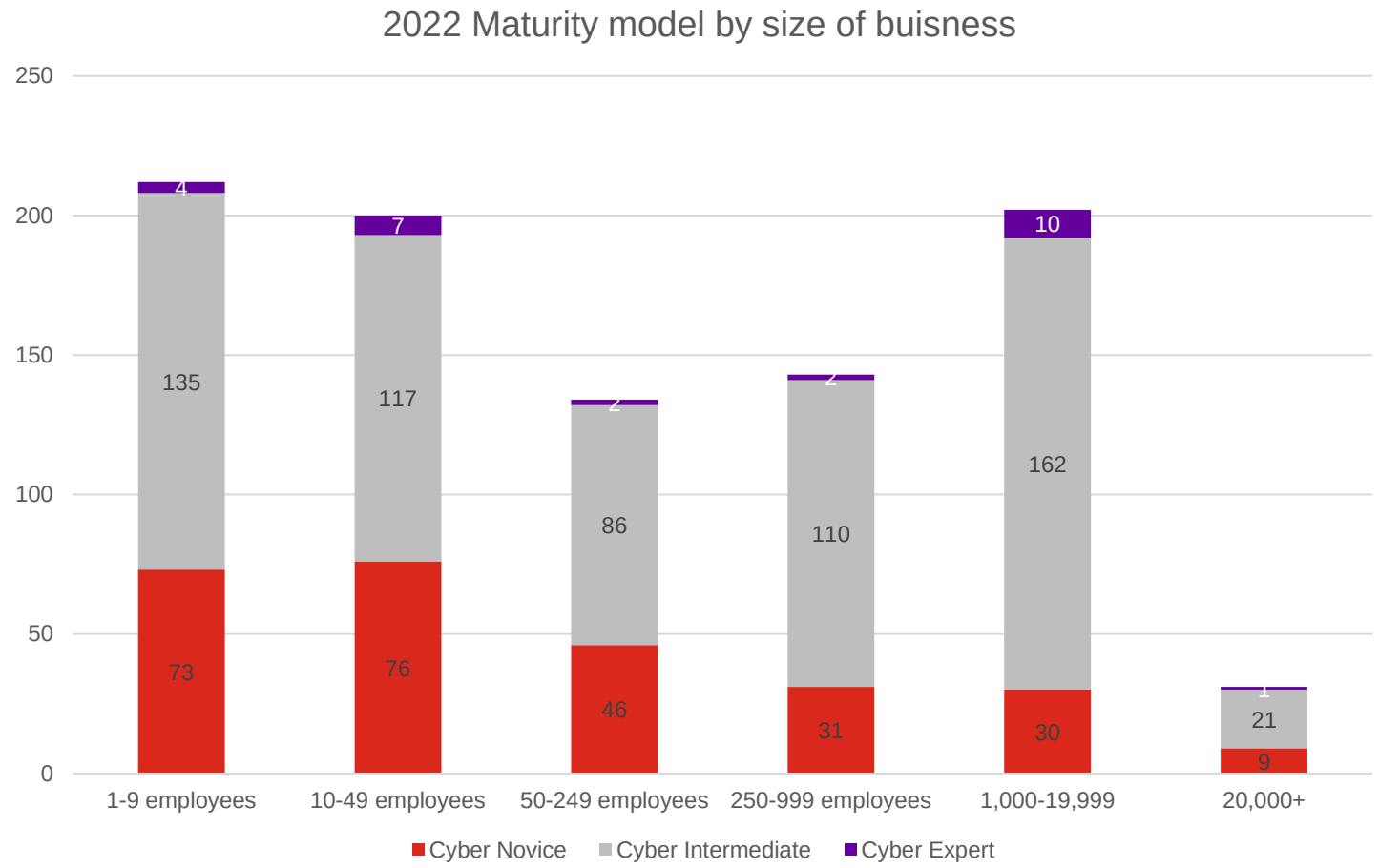
2020				
OVERALL (N=6,042)	People	Process	Technology	Total
Business Resilience Management	3.12	3.13	3.10	**3.12**
Cryptography and Key Management	2.93	2.90	2.94	**2.93**
Identity and Access Management	3.05	2.95	2.94	**2.97**
Security Information and Event Management	2.93	3.10	2.99	**2.99**
Threat and 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**

2021				
OVERALL (N=5,181)	People	Process	Technology	Total
Business Resilience Management	2.98	2.91	3.02	2.98
Cryptography and Key Management	2.88	2.74	2.92	2.85
Identity and Access Management	3.06	2.81	2.93	2.93
Security Information and Event Management	2.95	2.72	2.96	2.91
Threat and Vulnerability Management	2.95	2.89	3.04	2.96
Trust Management	2.96	3.01	3.04	3.01
Total	2.97	2.85	3.00	2.95

- 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

Cyber expert have significantly decreased from last year. We can see the trend falling after confidence spiralled mid-research following the Log4j vulnerability in Dec 2021.



Response base: Germany 2022 - 922

Hiscox Germany - readiness model

Top performing area is Trust management in Tech. Very low performance in process, especially with cryptography, security information, and identity access management.

GERMANY (N=922)	People	Process	Technology	Total
Business Resilience Management	2.96	2.83	3.00	2.93
Cryptography and Key Management	2.90	2.74	2.90	2.85
Identity and Access Management	3.03	2.77	2.87	2.89
Security Information and Event Management	2.96	2.72	2.93	2.91
Threat and Vulnerability Management	3.01	2.85	3.05	2.97
Trust Management	2.98	2.98	3.08	3.04
Total	2.98	2.81	3.00	2.94

Hiscox German IT Spending

Overall IT spend has slightly decreased from 2021, but the % spent on cyber security continues to increase at pace.

Total IT spending:

Year	Total average	Germany
2022	20.5m €	19.8m €
2021	13.9m €	21m €
2020	14.1m €	16.1m €
2019	13.2m €	13.6m €
2018	10.1m €	9.5m €

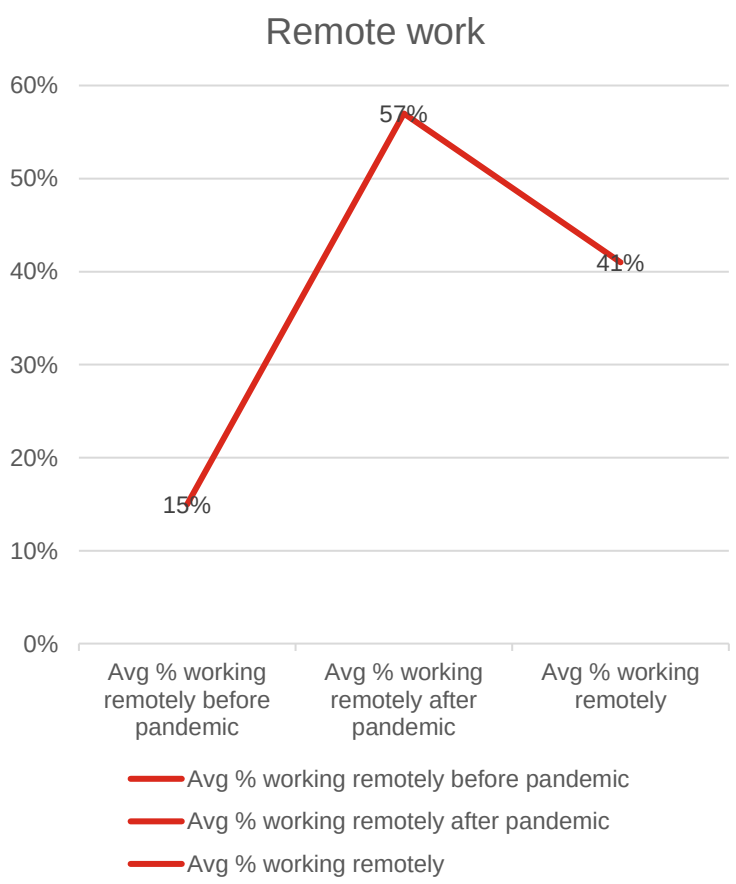
Cyber security as % of IT spend:

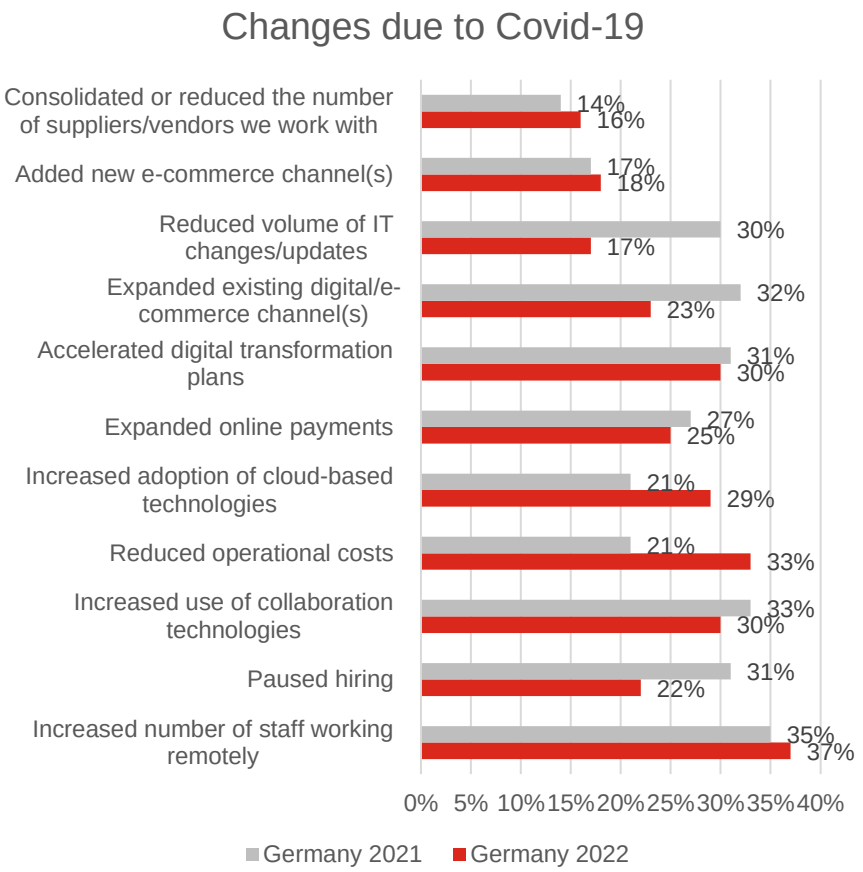
Year	Total average	Germany
2022	23%	24%
2021	21%	20%
2020	13%	12%
2019	10%	11%
2018	11%	10%
2017	11%	9%

German response base: 2018 – 1,026; 2019 – 762; 2020 – 807; 2021 – 757; 2022 - 712

Hiscox Germany COVID-19 impact

Remote working has seemed to level-out along with some of the more extreme pauses in hiring and reduction in operational costs.

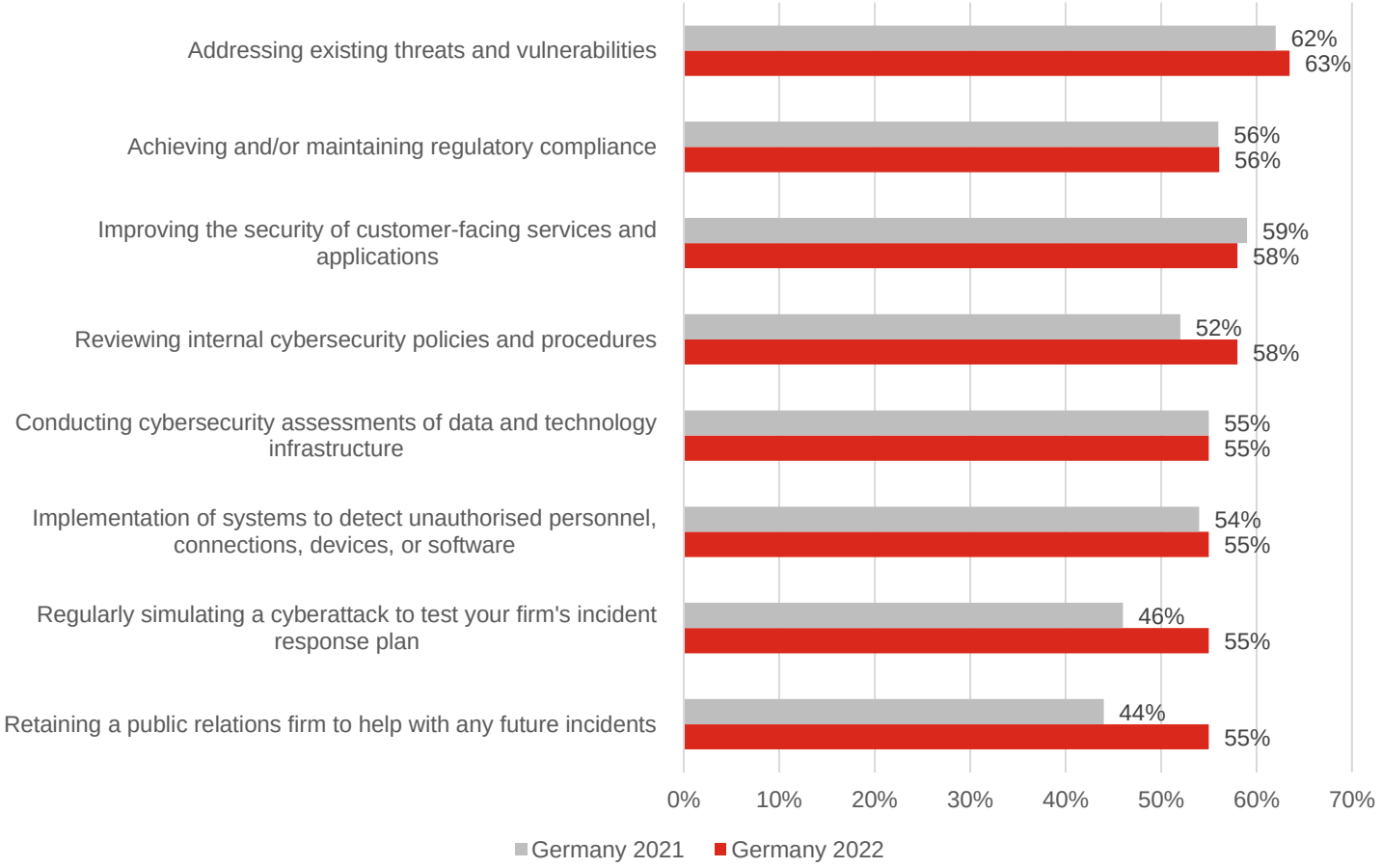




Response base: Germany 2021: 1,030; 2022 - 922

Hiscox Germany – top cyber spending priorities

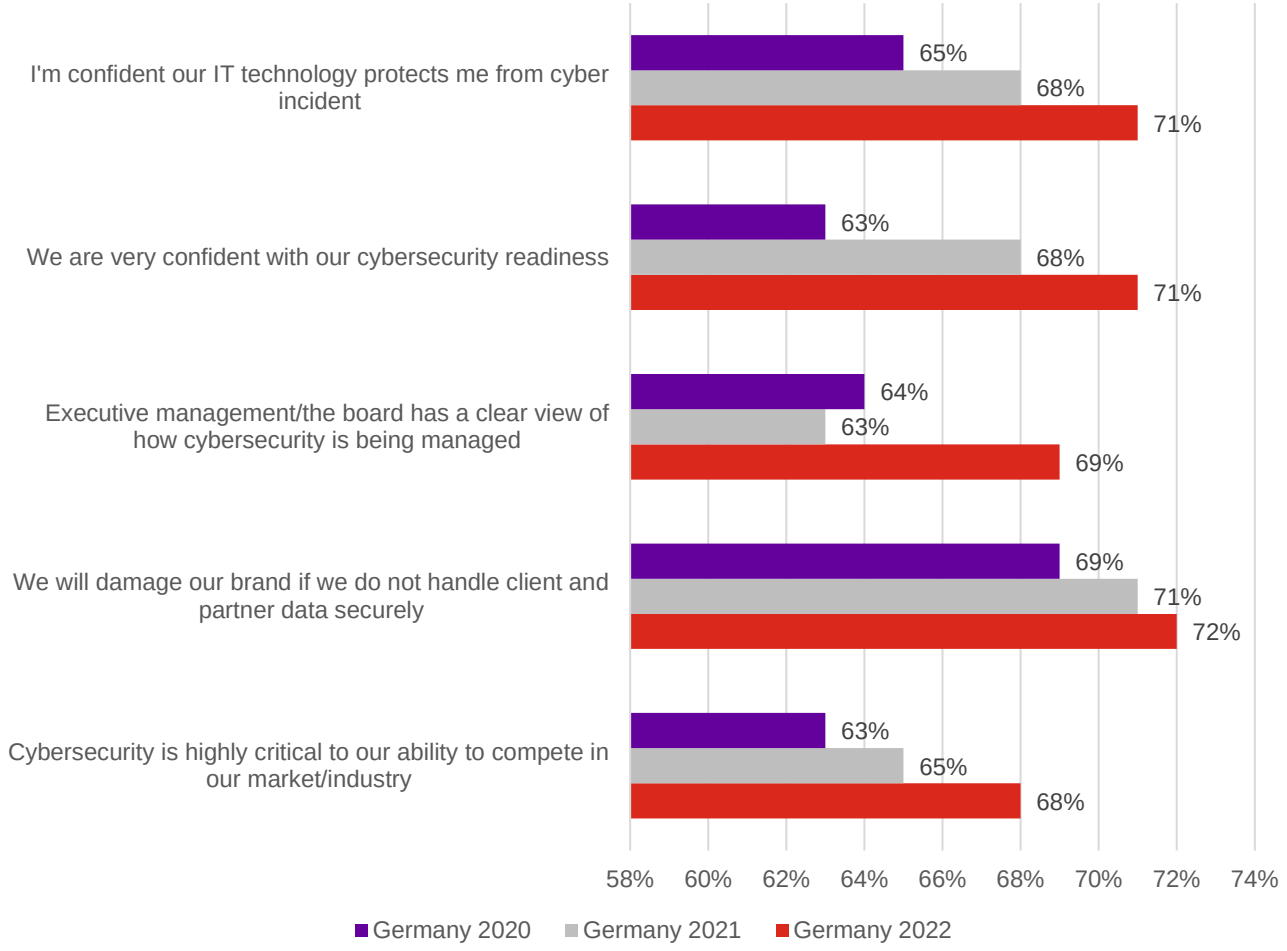
Addressing existing threats continues to be a major area of importance, as well as improving security of customer-facing services and reviewing internal policies.



Base response: Germany 2021 – 1030; 2022 - 922

Hiscox Germany – cyber security confidence

Top areas of confidence in 2022 continue to increase from 2022, especially in the potential to damage the brand with a cyber breach.



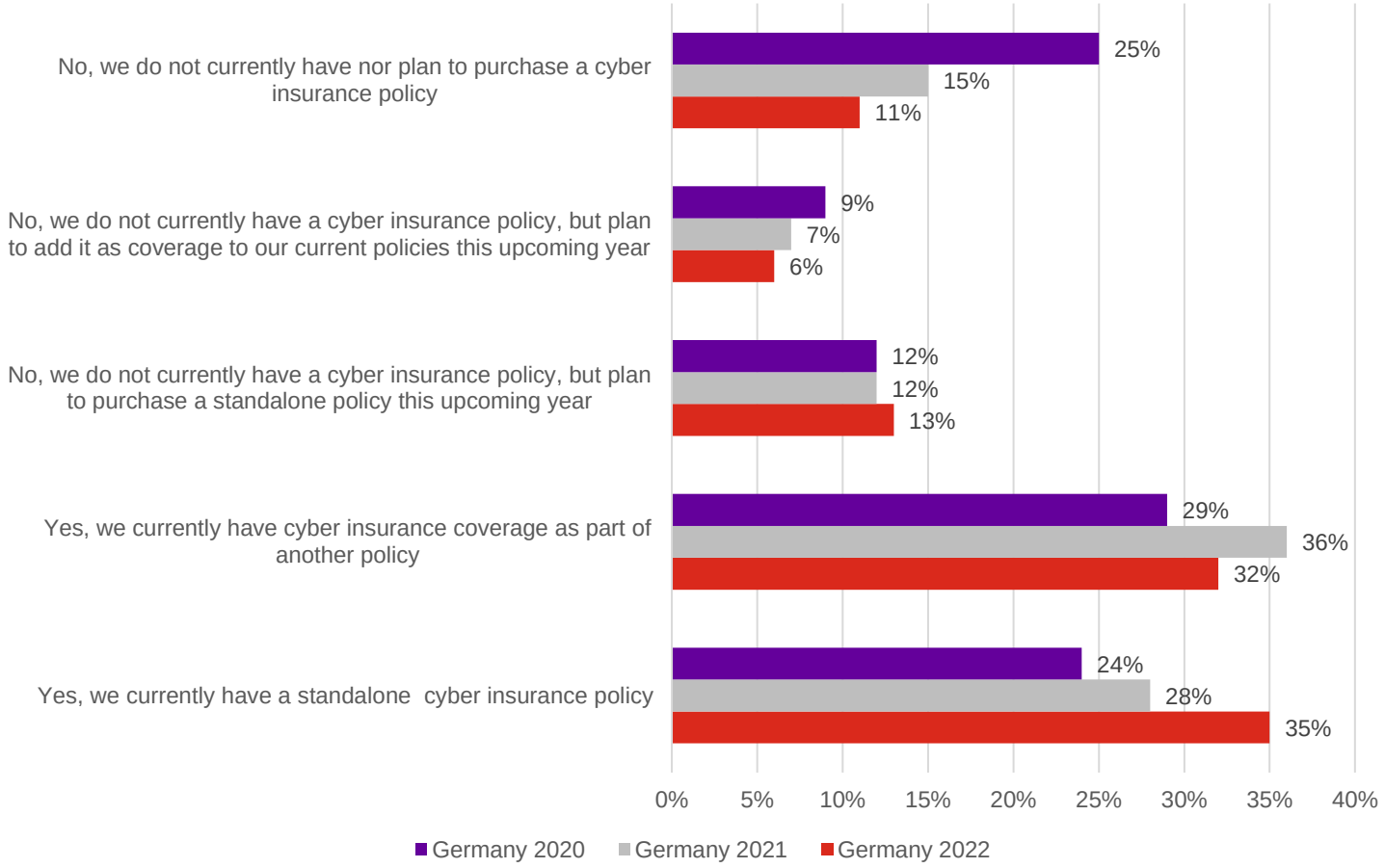
New questions asked in 2021 highlighted perception around COVID and cyber security for Germany:

- My organisation has been more vulnerable to cyberattacks since the start of the coronavirus pandemic – 46% (2021); 50% (2022)
- Because more employees are working from home, my organisation is more vulnerable to cyberattacks – 57% (2021); 61% (2022)
- My organisation has increased my cyber defenses because of the coronavirus pandemic – 52% (2021); 61% (2022)

Base response: 2022 – 922; Germany 2021 – 1030; Germany 2020 - 1026

Hiscox Germany - insurance purchase activity

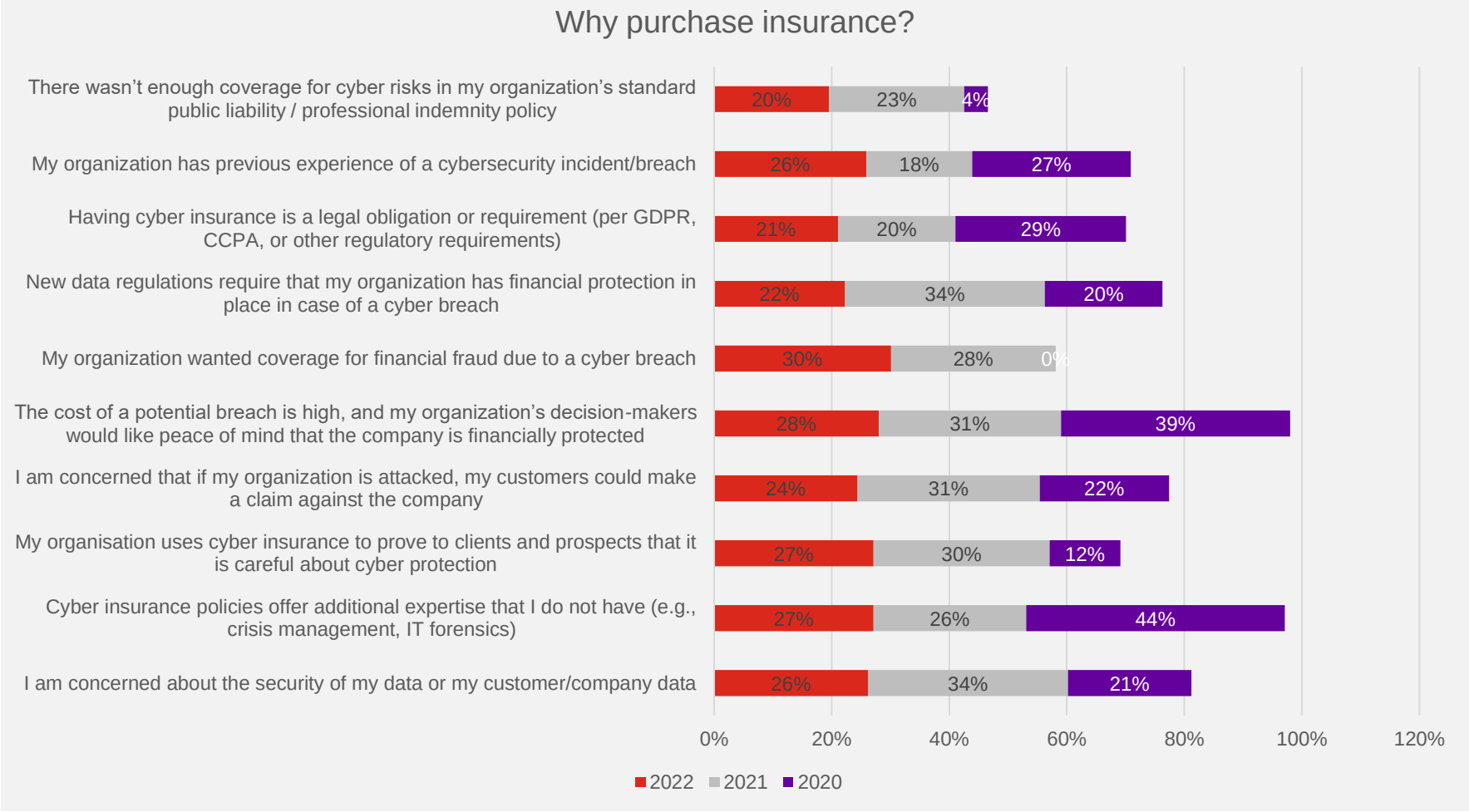
Standalone cyber policies increase, but combined policies slightly decrease. Those not planning on purchasing a policy continues to decrease.



Response base: Germany 2020 response base: 790; Germany 2021 – 731; 2022 - 681

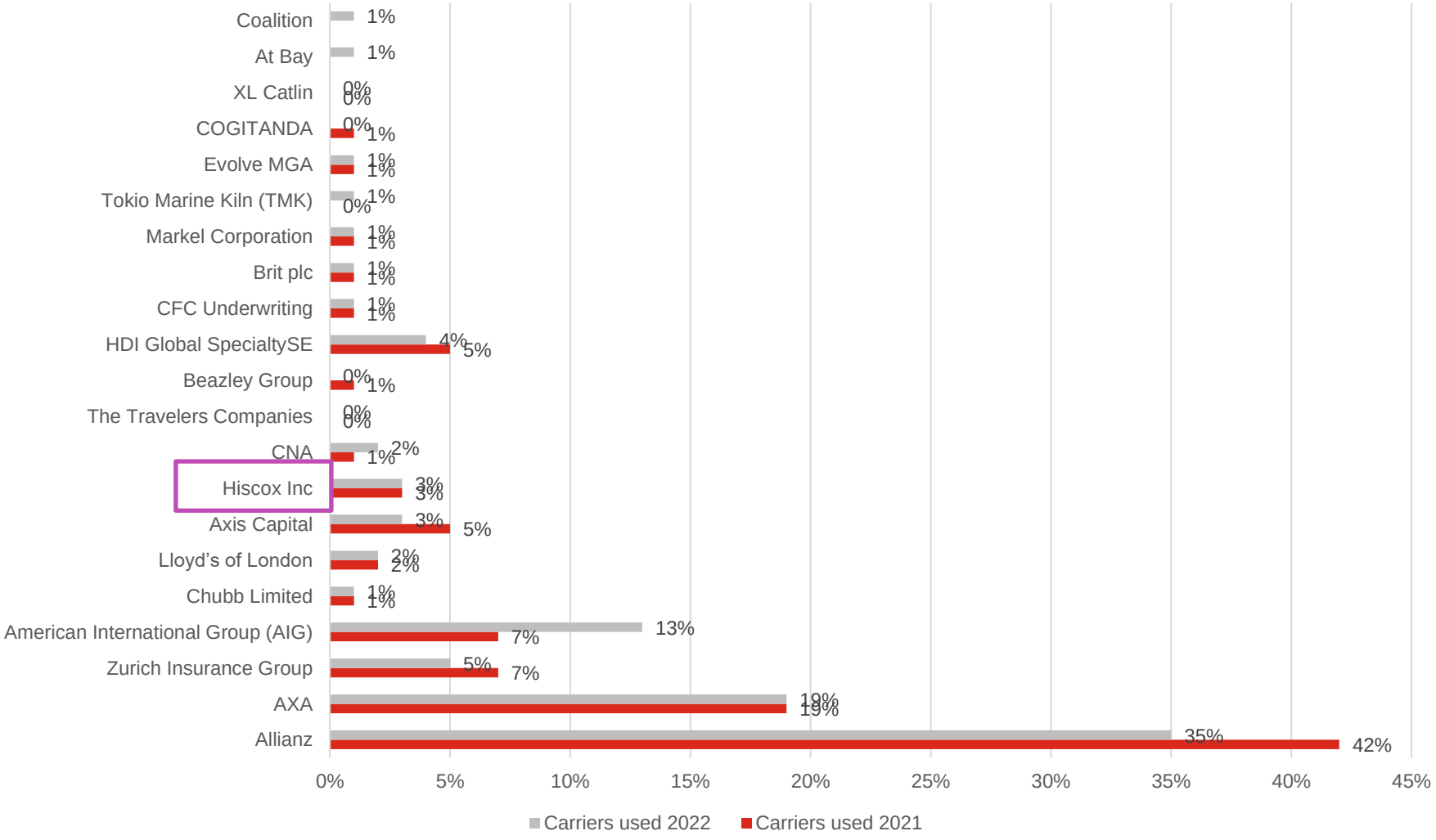
Hiscox Germany – why purchase insurance

This year customers mainly purchase insurance for financial fraud, but historically, it's purchased because the cost of a breach is so high.



Response base: Germany 2020 - 282; Germany 2021 – 293; Germany 2022 - 332

Hiscox Germany – carriers for cyber insurance



Response base: Germany 2022 – 458; Germany 2021 - 464

When it comes to cyber insurance, Hiscox delivers expertise. We have over 20 years' experience in privacy and cyber insurance, and in the last five years have underwritten over 360,000 policies and managed nearly 4,000 claims worldwide. Understanding the cyber risks and challenges businesses face is paramount to our success. In 2017, Hiscox built a global, central cyber team to provide product consistency, coordinated insight and collaborative services.

The new generation insurance product includes a suite of tools and services to manage risk. Beyond the classic risk transfer in the cyber crisis, Hiscox cyber insurance offers you direct support and help from real experts - crisis managers, IT specialists, data protection lawyers and PR consultants. Since 2018, Hiscox has offered free employee training to all small and mid-sized insureds around the globe through the Hiscox CyberClear Academy where we have nearly 30,000 users.

But sharing our expertise and building awareness goes beyond our insureds. We've built open-source tools like the Hiscox Cyber Exposure Calculator, which helps companies understand the financial impact of a cyber attack. In 2021, we introduced an online cyber maturity self-assessment model to help companies understand their cyber security strengths and weaknesses. Compare your performance to over 11,000 other companies for free.

For the sixth year running, we've produced the international Hiscox Cyber Readiness Report, which provides an up-to-the-minute picture of the cyber readiness of businesses and offers a blueprint for best practice in the fight to counter an ever-evolving threat. Drawn from a representative sample of 5,181 organisations across eight countries by size and sector, this reflects the direct experience of those on the front line of the business battle against cyber crime.