2021 Global Chief Information Security Officer (CISO) Survey



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A message from the authors

Welcome to our 2021 Global Chief Information Security Officer (CISO) Survey, which examines both organizational structure and compensation for this increasingly critical role.

For this year's report, we expanded the survey from North America to countries around the world, with the goal of offering a more comprehensive and comparative look at how these roles have developed in different countries.

For this report, Heidrick & Struggles compiled demographic, organizational, and compensation data from a survey fielded in March and April of 2021 of 354 CISOs around the world. Most carried the title of chief information security officer, but respondents also include deputy chief information security officers, chief security officers, and senior information security executives.

The numbers of respondents varied significantly in different countries. This report includes organizational data from respondents in the United States, Europe, and Asia Pacific, and compensation data for respondents in the United States and the United Kingdom. We expect to be able to report more fully on additional countries in future years.

We hope you enjoy reading the report, which remains the only one of its kind. As always, suggestions are welcome, so please feel free to contact us—or your Heidrick & Struggles representative—with questions and comments.

With warmest regards,

Mooto Ainthe

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On confidentiality

The global chief information security officer (CISO) survey, 2021, has been conducted on an anonymous basis. All data is reported anonymously and in aggregate.

Acknowledgments

The authors wish to thank Mohd Arsalan for his contributions to this report.

Methodology

In an online survey, we asked participants to provide information on how their role is structured, to whom they report and who reports to them, and data on compensation including current base salary, bonus for the most recent fiscal year, and annualized equity or long-term incentive pay, as well as joining bonuses. All data collected was self-reported by information security professionals and has been aggregated.

Where are the CISOs?

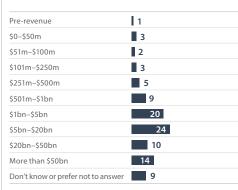
The chief information security officers (CISOs) who responded to the survey came predominantly from the United States. Australia, France, Germany, Singapore, and the United Kingdom were also represented.

Nearly half of the CISOs were at companies with an annual revenue of \$5 billion or more.

The CISOs worked across a range of industries, most often financial services and technology.

Company information

Company revenue (%)



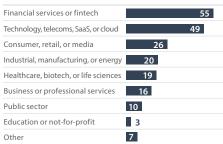
Company industry (%)

Financial services or fintech	31
Technology, telecoms, SaaS, or cloud	29
Consumer, retail, or media	10
Industrial, manufacturing, or energy	10
Healthcare, biotech, or life sciences	8
Business or professional services	6
Education or not-for-profit	0
Public sector	0
Other	5

In terms of experience, it's not surprising that they also most often had recent experience in financial services and technology. In the United Kingdom, the share with financial services experience rose to 86%; in European countries, half had financial services expertise. In terms of background, most come from IT, though we are seeing other types of functional expertise emerging.

General experience

Sector experience in past two years (%)



Main function of career (%)

IT	6
Software engineering	7
No function has comprised the majority of my career	6
Finance	2
Compliance	1
Legal	1
Other	15

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals

Note: Numbers may not sum to 100%, because of rounding. Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals

Most respondents were male and white, with little variation across regions. However, so far this year we are seeing greater diversity among people taking the CISO role, and greater focus from companies on hiring diverse CISOs (as is true for most executive roles). We expect companies to increasingly think outside the traditional industry- and IT-specific criteria for CISOs to find the best executives for the role, including people who are diverse in terms of gender and race or ethnicity, as well as industry and functional expertise.

Demographics Gender (%) Male Female Prefer not to answer

Ethnicity (%)

White/Caucasian	84
Asian/Asian American	9
Hispanic/Latinx	5
Black/African American	4
Mixed	3
Native American/Alaska Native	1
Malay	0.3
Indian	0.3
Arab/Arab American/Middle Eastern	0.3
Castilian/Basque/Catalan/Galician	0.3
Other	2
Prefer not to answer	8

Note: Numbers total more than 100% because respondents could choose more than one answer.

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals

What CISOs do all day

The CISO role has become even more important in the past year, as digital technologies became ever more prevalent and remote working became the norm in many industries. CISOs were among the many IT professionals who scrambled early in 2020 and made significant contributions to the success of their companies through the pandemic. That was on top of CISOs' already large portfolios, which cover everything from securing systems from attack to simultaneously managing increased regulatory scrutiny and use of the data these systems contain.

In the context of remote working and online customer interactions, it's little surprise that CISOs this year most often said that they are focused on network/cloud security and identity management. This is a shift from a focus on endpoint security, which was a significant focus for CISOs for many years. This is likely the result of companies moving ever more activity to the cloud, leading to a focus on platform security rather than traditional endpoints. In addition, there were some notable regional differences in CISO focus.

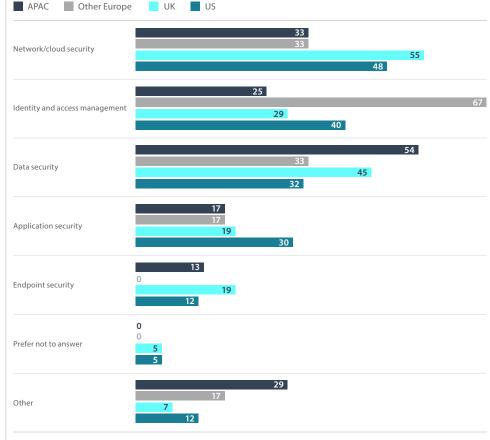
CISO focus

2021 security program focus: Overall (%)



Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals Note: Respondents may have chosen more than one focus area.

2021 security program focus: By region (%)



Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 337 information security professionals

There are five functions that most CISOs said report to them, which are, on the whole, consistent with their overall focus. The strong presence of application/product security as a regular part of the CISO's mandate is an increasingly important function.

Areas that report to CISO (%)

Penetration testing		90
Security architecture		90
Security operations		90
Governance, risk, and compliance		88
Product and/or application security		85
Business continuity planning or disaster recovery	37	
Trust	28	
Enterprise crisis management	28	
Physical security	28	
Privacy or chief privacy officer	21	
Fraud	18	
Safety	18	
Other	12	

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals

CISO reporting lines: Up and down

Most of the CISOs who responded to our survey, 86%, were in global roles (ranging from a high of 90% in the United Kingdom to a low of 63% in Asia Pacific). More than a quarter, 28%, have been in their role for more than five years. Indeed, though there is a perception of fast turnover and low tenure in CISO roles, this survey shows that 56% of these CISOs have been in their role at least three years, with little variation across regions.

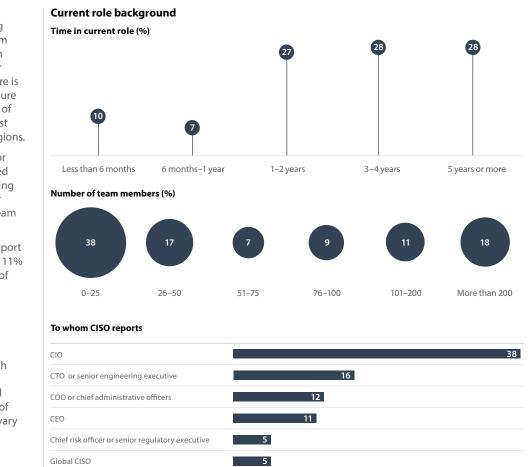
CISOs reported either fairly small teams or fairly large ones: 38% of all CISOs surveyed said they have 25 or fewer people reporting to them, while 29% said they have 101 or more direct reports. (For detail on how team size varies by CISO remit, see page 8.)

Looking upward, the majority of CISOs report to someone other than the CIO. Globally, 11% report directly to the CEO, and a quarter of CISOs in Europe said they do so (many respondents from Europe are at smaller companies, where this structure is more common).

Despite the low share of CISOs who have corporate board seats, CISOs do have high visibility with the board: 90% said they present directly to their company's board and/or audit committee, three- quarters of them on a quarterly basis. These figures vary little regionally.

Almost half of all CISOs said they sit on an advisory board, not necessarily at their own company—and two-thirds of CISOs in Asia Pacific said they do so. However, globally, only 4% said they sit on a corporate board. This low figure is consistent with Heidrick & Struggles' annual Board Monitor reports, which show that only 6% of directors added to boards

in Europe in 2020['] and 8% of those in the United States² had cybersecurity expertise of any kind. Given the increasing strategic and operational importance of cybersecurity for all organizations, we hope to see many more companies bringing this expertise onto their main board rather than relying on advisors.



Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals

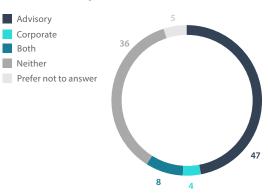
11

2

Current board experience (%)

General counsel

Other



1 Board Monitor Europe 2021, Heidrick & Struggles, on heidrick.com. 2 Board Monitor US 2021, Heidrick & Struggles, on heidrick.com.

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 349 information security professionals

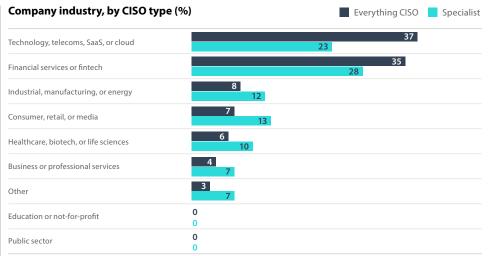
Two types of CISOs

Last year, we identified three basic types of CISO roles in North America: a traditional security leader, a Risk/Trust leader, and a role we called CISO Plus, which has a wider remit.³ With this year's global scope, two types of roles came into clear focus: an Everything CISO role, made up of 45% of respondents—those who have responsibility across all three areas of security, risk, and trust; and a Specialist role, made up of 55% of respondents—those who have responsibility across only one or two of those three areas. These roles are about equally distributed by region, as well as by years in the role.

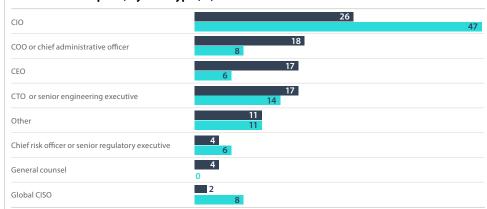
Everything CISOs are more common in technology and financial services than are Specialist CISOs. This may be because, in both of these industries, many CISOs have specialists reporting to them, in our experience.

More of the Specialist CISOs had an IT background: 74%, compared with 59% of the Everything CISOs. And Specialists far more often said identity and access management was a core focus: 44% compared with 31%.

Everything CISOs more often report to business leaders, and 17% report directly to the CEO, while almost half of Specialists have the more traditional reporting pattern to the CIO.



Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals



Note: Numbers may not sum to 100%, because of rounding.

Number of team members, by CISO type (%)

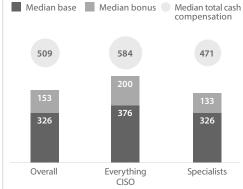
Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals

Everything CISOs said they have larger teams, on the whole, than Specialists.

Given the wider scope of the Everything CISO role, it is no surprise that these CISOs are, on the whole, paid more than specialists. In the United States, for example, the difference in median cash compensation is \$113,000.



Median compensation: United States, by CISO type (USD, thousands)



Note: Numbers may not sum to 100%, because of rounding. Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 354 information security professionals

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n=259 information security professionals

To whom CISO reports, by CISO type (%)

3 Matt Aiello and Scott Thompson, 2020 North American Chief Information Security Officer (CISO) Survey, Heidrick & Struggles, on heidrick.com.

What's next for CISOs?

Given that the CISO role is relatively new in the context of other C-suite roles, we also asked where CISOs want to go next. Nearly half of respondents want to be board members, which seems achievable given how many are already sitting at least on advisory boards and that cybersecurity will continue to increase in importance as more elements of operations go entirely digital.

Outside of board roles, CISO career progression remains tricky. Though 38% report to the CIO today, only 12% see that as an ideal next role. The wide range of next roles CISOs are interested in highlights that this is an evolving role, one where the next move isn't clear. In this context, Everything CISOs may be able to develop more options to move up in their current company, since they more often report to business leaders, which gives them more exposure to their companies' broader strategic interests.

In addition, more than half of CISOs don't want to move geographically for that next role, though that share may well change in future surveys as post-pandemic conditions become clearer. In general, we found that CISOs' teams are geographically distributed, and CISOs themselves are often not co-located with the rest of the executive team, though this varies widely from company to company.

Future career plans

Ideal next role (%) 47 44 18 16 12 9 ** Chief risk officer CIO Board Chief security Entrepreneur/ Retirement member officer (physical consultant and information security) 5 8 3 3 2 0 000 <u>eee</u> Private equity CEO Prefer not to Developer of General counsel Other new tools at a executive answer security firm

Potential future geographies (%)

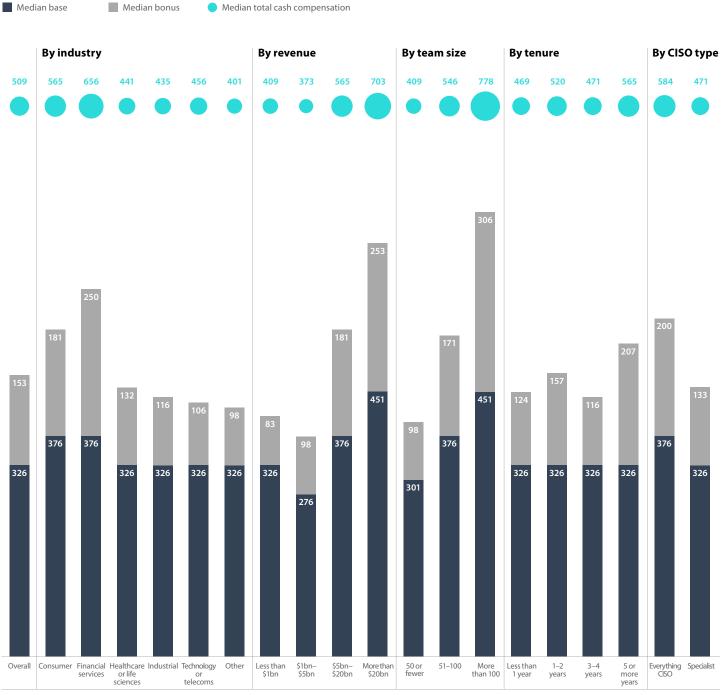
I prefer to stay where I live now in my native country	54
I would be open to working in another country	41
I would be open to working in another location in my native country	36
I prefer to stay where I live now in another country	4
Prefer not to answer	1
Other	1

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 349 information security professionals

CISO compensation: United States

Since last year's survey, reported median cash compensation for CISOs in the United States has risen to \$509,000, from \$473,000 last year.

Median compensation: United States (USD, thousands)



Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 259 information security professionals

Median total compensation, including any annualized equity grants or long-term incentives, also increased, to \$936,000, from \$784,000.

Median base, bonus, and equity: United States

		ledian ba D, thousa		Med	ian bonu	ıs (%)		edian bor D, thousa		cash (USE	compens D, thousa							ion ands)
	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th
Overall (n = 259)	276	326	451	26	46	68	83	153	306	373	509	757	175	376	851	603	936	1,448
By industry																		
Consumer (n = 35)	276	376	451	36	46	56	98	181	296	373	565	757	175	376	551	548	984	1,387
Financial services (n = 66)	326	376	451	46	62	113	153	250	424	430	656	960	175	376	551	722	1,134	1,468
Healthcare or life sciences $(n = 26)$	276	326	376	36	41	88	98	132	368	379	441	693	175	200	226	699	729	868
Industrial (n = 21)	276	326	326	36	36	46	84	116	152	333	435	474	175	175	376	514	632	1,130
Technology or telecoms (n = 88)	276	326	376	26	36	56	70	106	250	373	456	612	226	851	1,600	658	1,060	2,295
Other $(n = 23)$	226	326	551	26	36	46	80	98	195	306	401	746	175	175	376	481	551	926
By revenue				1			1											
Less than \$1bn (n = 56)	276	326	376	26	26	36	58	83	116	346	409	441	175	326	951	600	728	1,266
\$1bn-\$5bn (n = 46)	276	276	376	36	36	56	80	98	171	346	373	518	175	226	776	526	740	1,342
\$5bn-\$20bn (n = 70)	276	376	451	36	46	68	98	181	306	401	565	757	175	326	451	667	882	1,387
More than \$20bn (n = 68)	326	451	551	36	56	88	153	253	396	509	703	960	226	413	951	772	1,191	1,586
By team size							1											
50 or fewer (n = 138)	276	301	326	26	36	46	70	98	153	328	409	518	175	226	451	522	684	1,061
51–100 (n = 45)	276	376	451	36	46	56	125	171	250	428	546	701	175	376	651	671	882	1,407
More than 100 (n = 76)	376	451	551	46	68	113	205	306	484	610	778	1,012	376	501	1,600	1,081	1,443	2,471
By tenure							1											
Less than 1 year $(n = 46)$	276	326	451	36	36	56	83	124	205	373	469	655	175	376	1,200	616	969	1,407
1–2 years (n = 75)	276	326	451	26	46	88	70	157	364	384	520	801	175	376	951	772	975	1,491
3-4 years (n = 64)	276	326	451	26	36	56	86	116	243	373	471	755	175	226	551	551	727	1,305
5 or more years (n = 73)	276	326	451	36	56	68	103	207	368	373	565	847	175	376	751	548	1,006	1,548
By CISO type																		
Everything CISO (n = 118)	276	376	451	26	46	68	86	200	330	409	584	813	226	351	951	759	1,196	1,656
Specialist (n = 141)	276	326	451	36	36	56	83	133	250	373	471	701	175	226	451	549	771	1,272

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 259 information security professionals

Regionally

As in last year's report, we see some variation in compensation across US regions. For cash compensation, CISOs in the Midwest report the highest figure, \$668,000. When annualized equity is added in, West Coast CISOs top the list, at \$1,196,000.

Median base, bonus, and equity: US regions

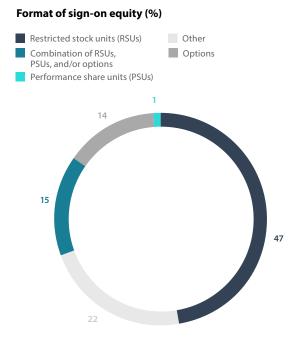
		Median base (USD, thousands)			Median bonus (%)			diam of the			Median equity (USD, thousands)		cor (USD	edian to npensat), thousa e, bonus, ed	ion ands)			
	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th
Overall (n = 259)	276	326	451	26	46	68	83	153	306	373	509	757	175	376	851	603	936	1,448
By region																		
Northeast (n = 61)	276	326	451	36	46	68	98	160	341	373	546	801	175	326	451	603	881	1,342
Mid-Atlantic (n = 20)	226	351	451	26	36	53	84	102	338	311	509	800	175	200	1,613	486	646	979
Southeast (n = 26)	276	326	451	36	46	56	80	153	250	373	506	706	175	376	451	548	796	1,081
Midwest (n = 32)	326	376	451	36	68	88	116	296	396	441	668	960	175	376	551	667	1,133	1,410
Southwest (n = 21)	276	276	451	28	36	83	68	107	292	332	407	689	175	326	451	548	696	1,193
West Coast (n = 96)	276	326	451	26	36	56	83	116	242	409	471	655	175	451	1,400	684	1,196	2,200

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 259 information security professionals

	(excludes	In cash the 25% th	nat said 0)		In equity (excludes the 34% that said 0			
	25th	Median	75th	25th	Median	75th		
Overall (n = 129 cash/87 equity)	50	100	300	150	350	1,000		
By industry								
Consumer (n = 18/14)	100	255	300	150	450	1,000		
Financial services $(n = 30/21)$	100	150	250	170	500	1,000		
Healthcare or life sciences $(n = 16/11)$	25	75	188	100	200	250		
Industrial (n = 13/6)	30	50	50	150	250	350		
Technology or telecoms (n = 42/29)	50	100	400	200	500	1,600		
Other (n = 10/6)	50	225	400	400	400	500		
By revenue								
Less than \$1bn (n = 23/13)	25	30	50	100	500	1,000		
\$1bn-\$5bn (n = 19/17)	50	75	225	150	200	400		
\$5bn-\$20bn (n = 39/27)	50	100	300	150	300	1,000		
More than \$20bn (n = 39/25)	100	200	500	250	700	1,000		
By team size								
50 or fewer (n = 56/37)	25	50	115	100	170	500		
51–100 (n = 27/17)	50	100	400	200	280	500		
More than 100 (n = 46/33)	150	250	500	300	750	1,400		
By tenure								
Less than 1 year ($n = 29/17$)	50	120	400	200	400	600		
1–2 years (n = 37/24)	50	100	300	150	550	1,563		
3–4 years (n = 30/22)	50	125	300	103	290	750		
5 or more years (n = 32/24)	50	100	200	163	250	1,000		
By region								
Northeast (n = $27/26$)	40	105	300	100	185	400		
Mid-Atlantic (n = 11/6)	50	75	250	150	675	1,400		
Southeast (n = $11/10$)	50	50	300	280	400	1,000		
Midwest (n = $21/16$)	75	150	450	250	500	775		
Southwest (n = $13/7$)	50	10	150	150	150	2,200		
West Coast (n = $44/22$)	50	100	300	200	800	1,750		

Median joining bonus: United States (USD, thousands)

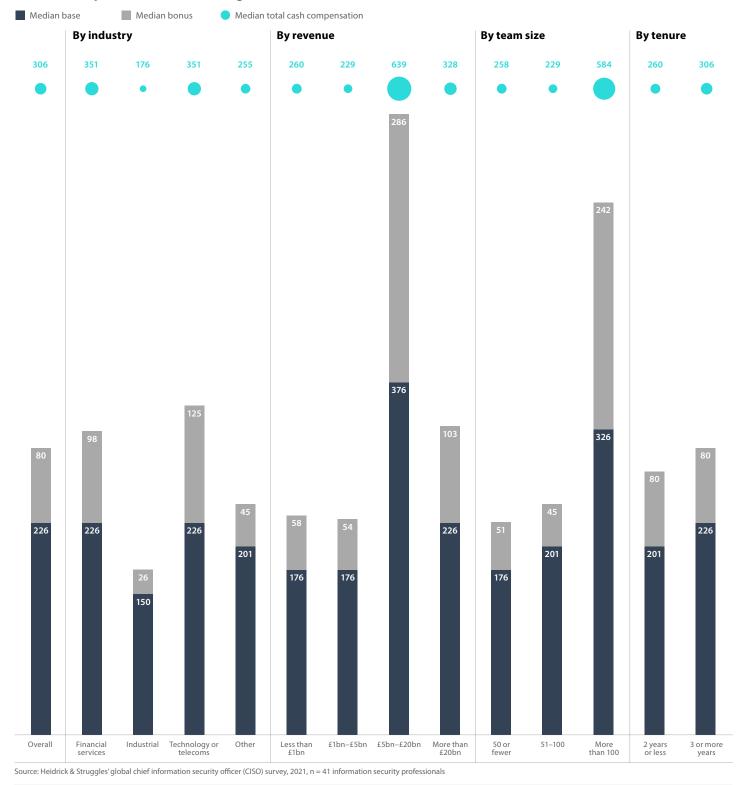
Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 129 information security professionals



Note: Numbers may not sum to 100%, because of rounding.

CISO compensation: United Kingdom

Median compensation: United Kingdom (GBP, thousands)



	Median base (GBP, thousands)			Med	Median bonus (%)			Median bonus (GBP, thousands)			Median total cash compensation (GBP, thousands) (base and bonus)			Median equity (GBP, thousands)			Median total compensation (GBP, thousands) (base, bonus, equity)		
	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th	25th	Median	75th	
Overall (n = 41)	176	226	276	26	36	56	45	80	153	220	306	463	175	175	226	395	523	699	
By industry																			
Financial services (n = 19)	176	226	276	26	36	56	45	98	187	220	351	463	175	175	226	413	526	638	
Industrial (n = 4)	125	150	288	б	16	91	7	26	287	132	176	575	175	175	325	307	351	900	
Technology or telecoms (n = 8)	188	226	263	36	56	88	80	125	242	306	351	518	175	200	301	526	531	831	
Other $(n = 10)$	176	201	226	16	26	36	35	45	80	220	255	260	175	175	175	400	433	622	
By revenue																			
Less than £1bn (n = 13)	125	176	226	26	26	36	35	58	80	220	260	346	175	175	175	395	435	521	
£1bn-£5bn (n = 10)	176	176	226	26	31	56	45	54	125	220	229	351	175	175	175	395	446	526	
£5bn-£20bn (n = 6)	326	376	376	56	88	113	208	286	368	518	639	706	226	301	376	809	959	1,069	
More than $\pounds 20bn$ (n = 8)	138	226	276	26	46	65	35	103	179	173	328	454	175	175	213	348	528	629	
By team size																			
50 or fewer (n = 24)	125	176	226	26	26	43	35	51	93	220	258	349	175	175	175	395	435	526	
51–100 (n = 8)	176	201	338	11	26	51	20	45	131	220	229	469	175	175	175	395	429	644	
More than 100 $(n = 9)$	276	326	376	68	88	88	187	242	368	463	584	706	226	226	376	704	893	1,069	
By tenure																			
2 years or less (n = 21)	176	226	276	26	31	56	45	66	153	220	272	428	175	175	226	413	452	638	
3 or more years $(n = 20)$	138	226	351	26	36	88	32	80	330	220	306	656	175	175	226	395	526	831	

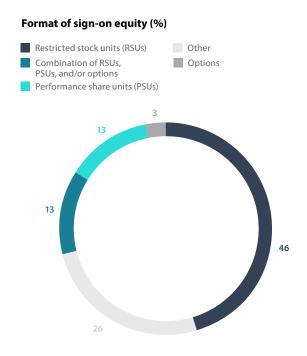
Median base, bonus, and equity: United Kingdom

Note: One person receives compensation in USD. Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 41 information security professionals

Median joining bonus: United Kingdom (GBP, thousands)

	(excludes	In cash the 25% th	at said 0)		n equity the 34% th	
	25th	Median	75th	25th	Median	75th
Overall (n = 8 cash/8 equity)	31	63	100	26	55	375

Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n=8 information security professionals



Note: Numbers may not sum to 100%, because of rounding. Source: Heidrick & Struggles' global chief information security officer (CISO) survey, 2021, n = 8 information security professionals

Specialty Practices

Heidrick & Struggles' Specialty Practices provide expertise on emerging technologies.

These practices include:

- Artificial Intelligence, Data, and Analytics
- Blockchain/Distributed Ledger Technology
- Cybersecurity
- Digital Innovation
- Internet of Things

Leader of Heidrick & Struggles' Specialty Practices

Global

Sam Burman Managing Partner

Technology Officers Practice

The world is currently experiencing a revolution. With technology constantly advancing, the contemporary business landscape is now defined by rapid innovation. Advances in cloud computing, artificial intelligence, machine learning, and the Internet of Things have enabled companies to become lean, agile, and efficient competitors in the global market. Indeed, the promise of a digital future has convinced organizations across all industry segments to adopt more technology-focused business strategies.

At Heidrick & Struggles, we believe that leadership plays an essential role in this transformation. That is why our Technology Officers Practice is committed to helping our clients find the nextgeneration technology talent necessary to take their organizations to the next level. Our executive search consultants bring unparalleled experience, having successfully placed more than 1,000 information and technology functional officers with some of the best-known and most-admired companies around the world.

Leader of Heidrick & Struggles' Technology Officers Practice

Global

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WE HELP OUR CLIENTS CHANGE THE WORLD, ONE LEADERSHIP TEAM AT A TIME®

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