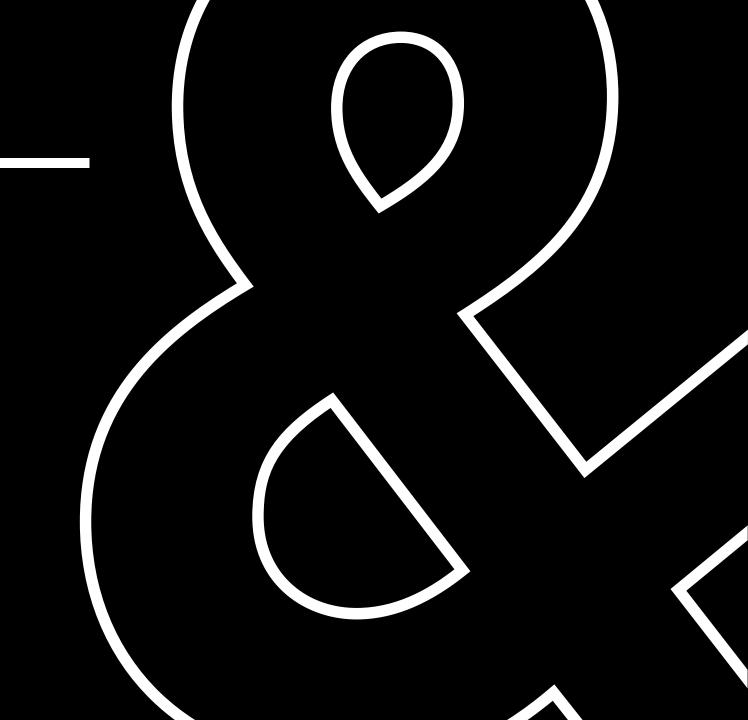


The 2019 Chief Digital Officer Study Global Findings

PwC Strategy&

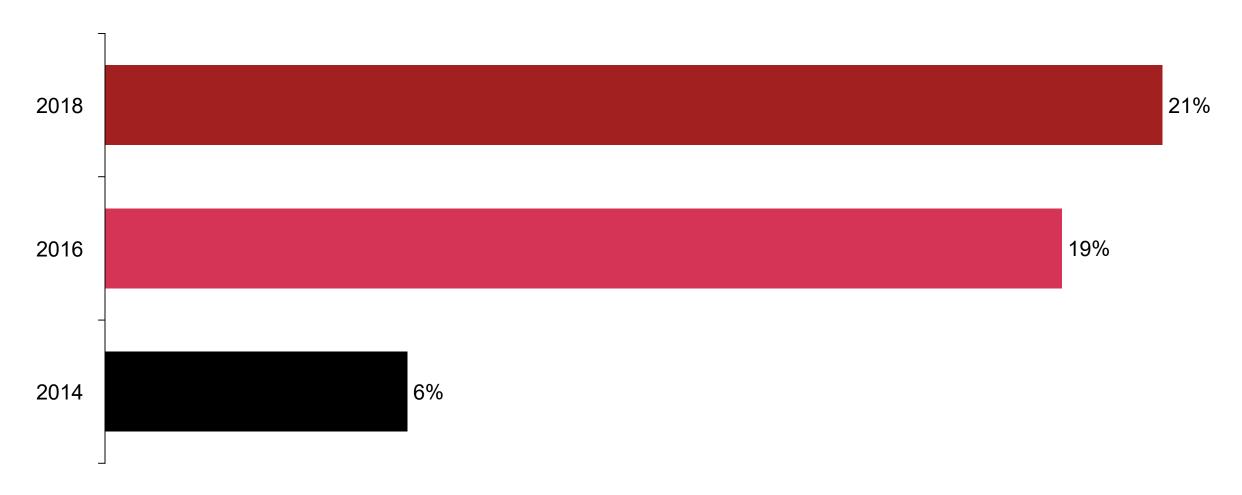
March 2019



Company demographics

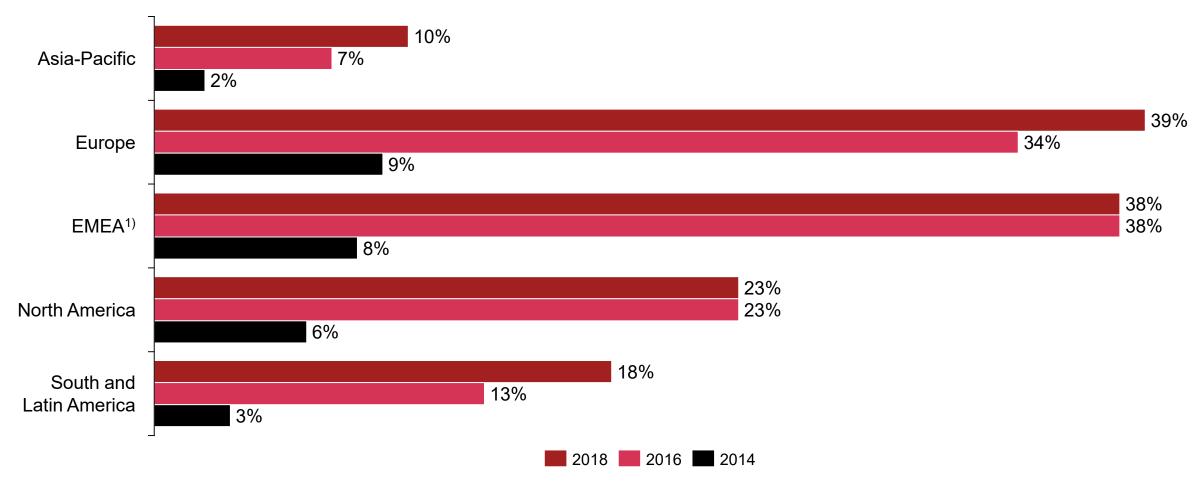
CDO growth slowed down: 21% of all companies have a CDO in place

Percentage of CDOs¹⁾

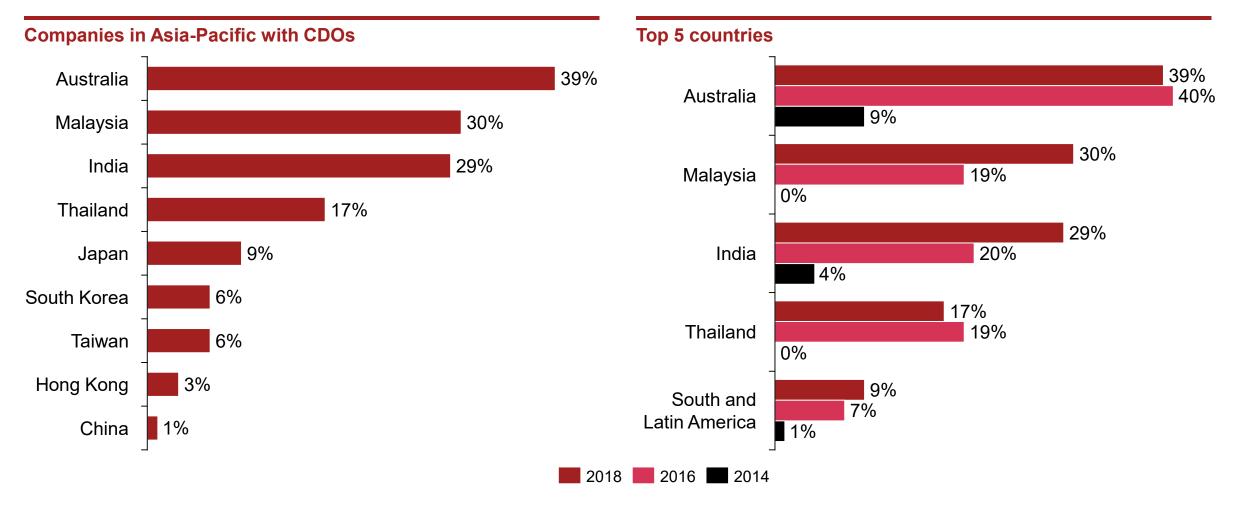


Following the global trend, CDO growth slowed down in all regions

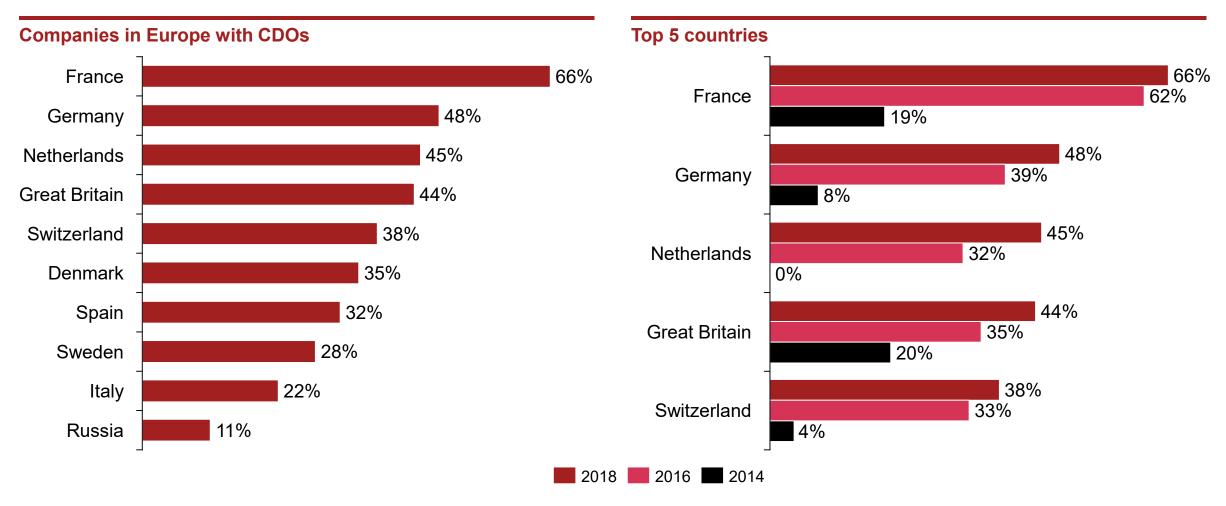
Companies with CDOs by region



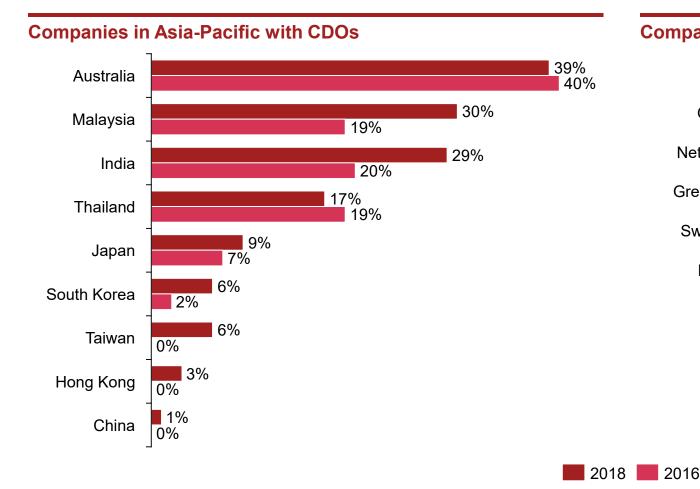
In the Asia-Pacific region, Australia has the highest CDO ratio¹⁾



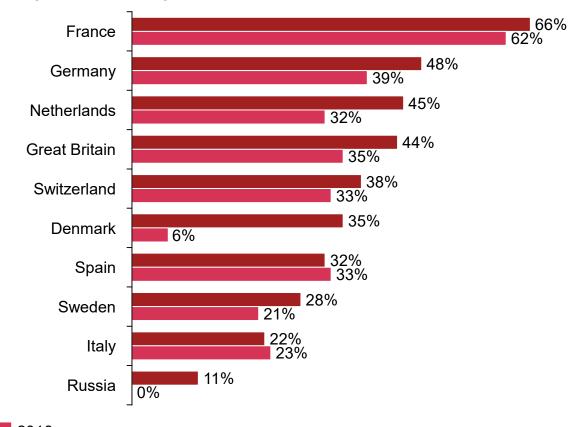
All European countries record a growth in CDOs¹⁾



European countries are leading the pack¹⁾



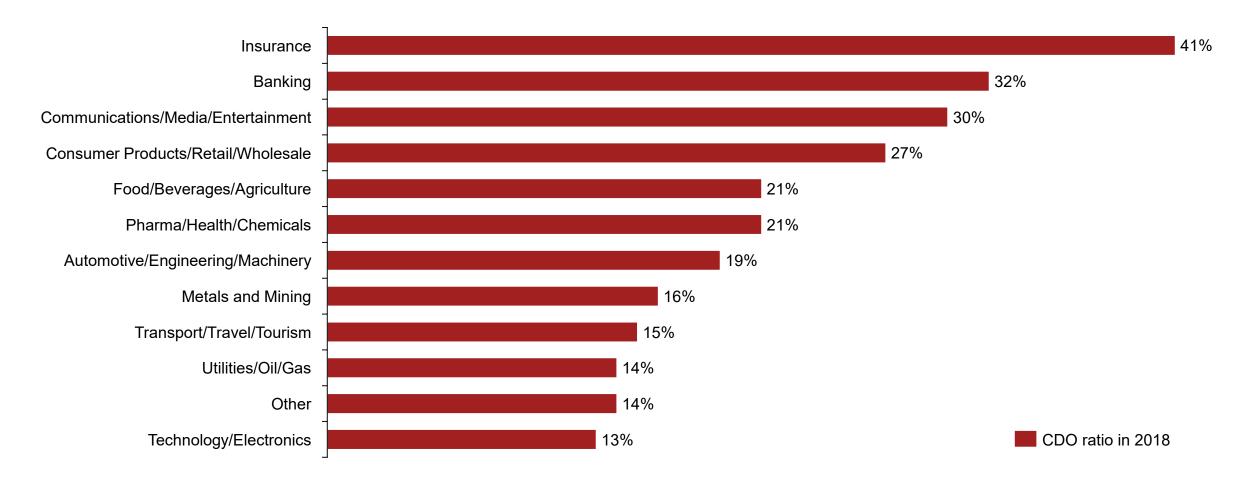
Companies in Europe with CDOs



¹⁾ Only countries with a sample size of ≥ 20 companies are considered. Source: Strategy& 2019 CDO Study

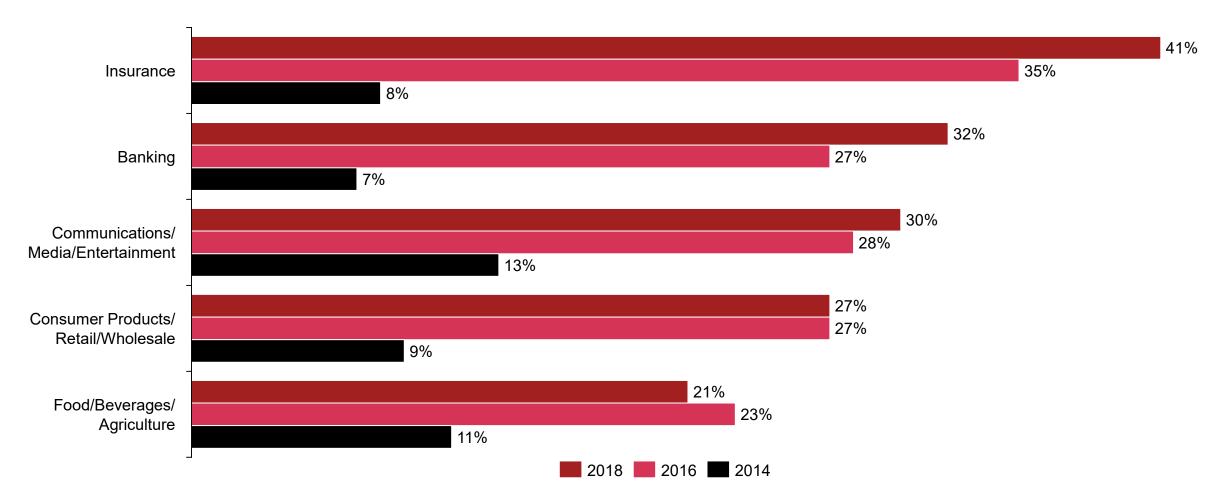
Companies in financial services and entertainment industries have the highest CDO ratio

Percentage of companies with CDOs by industry¹⁾



This trend didn't change when looking at 3 years of data

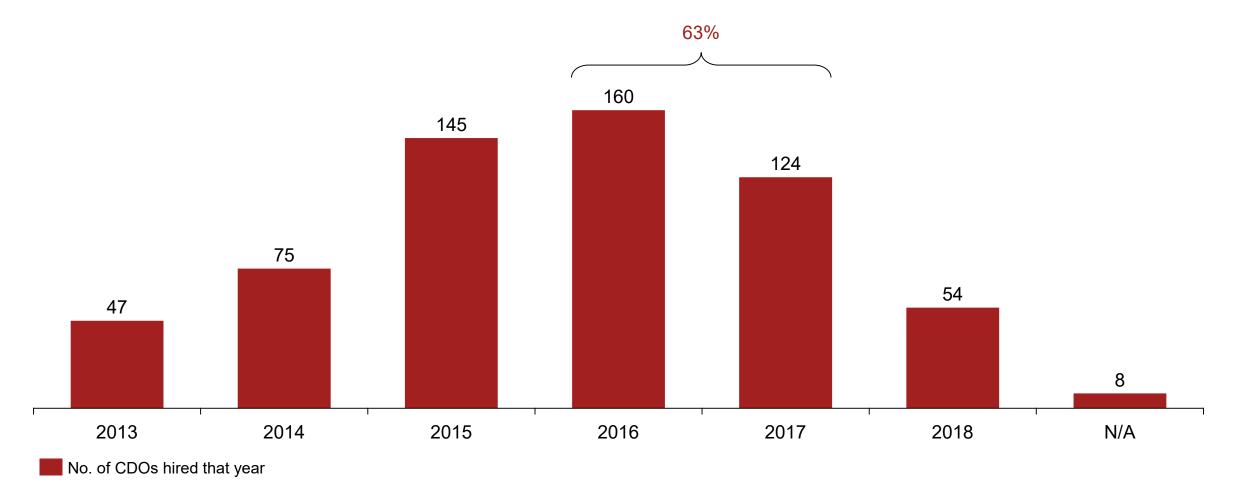
Percentage of companies with CDOs by industry¹⁾



¹⁾ Sample size of all companies = 2,500. For further information on sample sizes see the methodology section. Source: Strategy& 2019 CDO Study

In 2016, hiring CDOs reached the peak

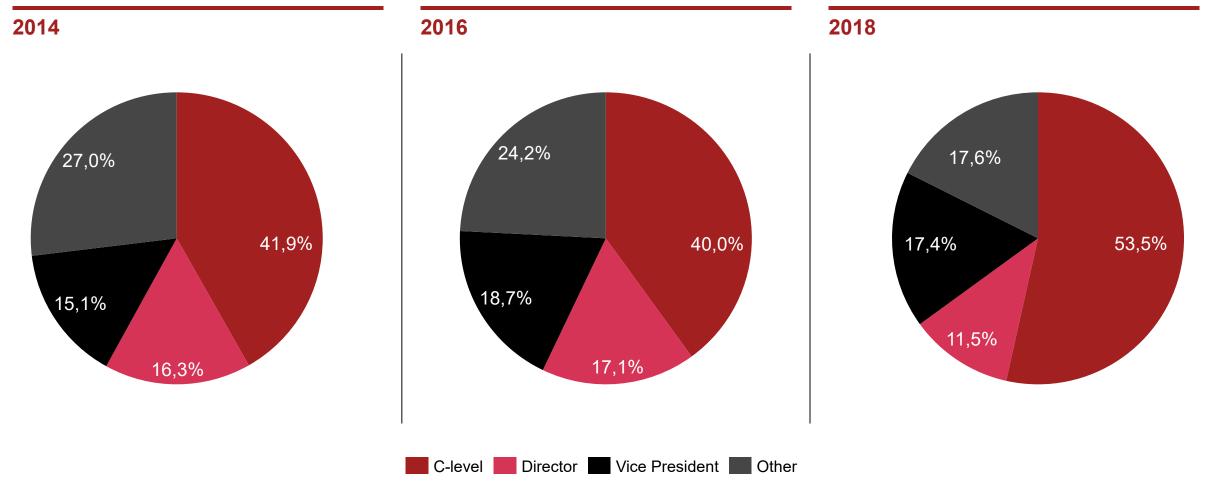
Number of CDOs hired over time



Strategy& Source: Strategy& 2019 CDO Study

Individual CDO demographics

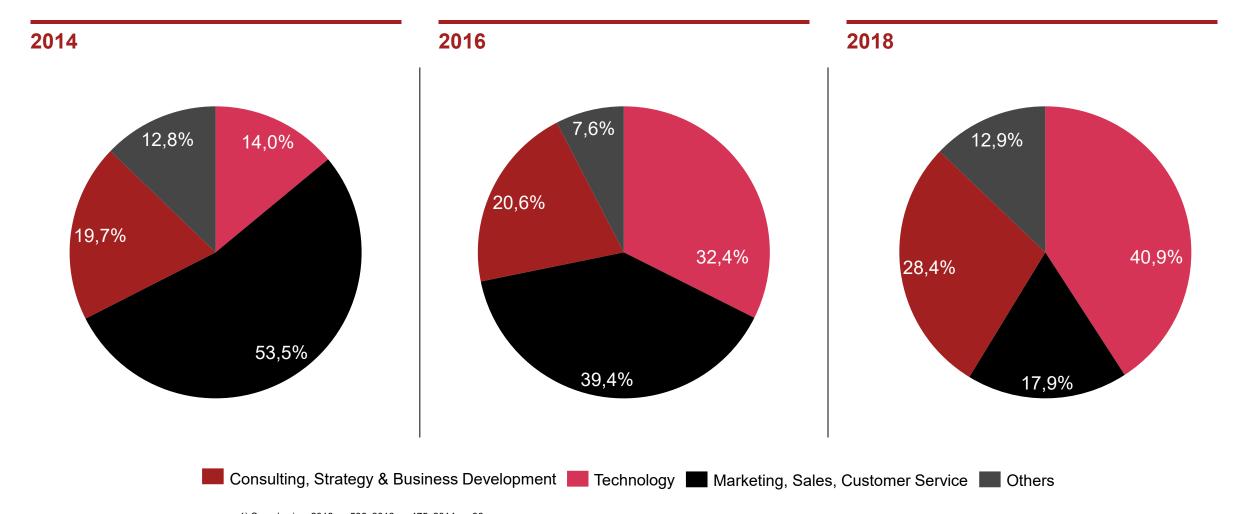
54% of CDOs are C-Suite members: Digital transformation becomes an integral part of the business strategy¹⁾²⁾



¹⁾ Sample size: 2018 n=536; 2016: n=475; 2014: n= 86.

²⁾ Titles vary based on company. Source: Strategy& 2019 CDO Study

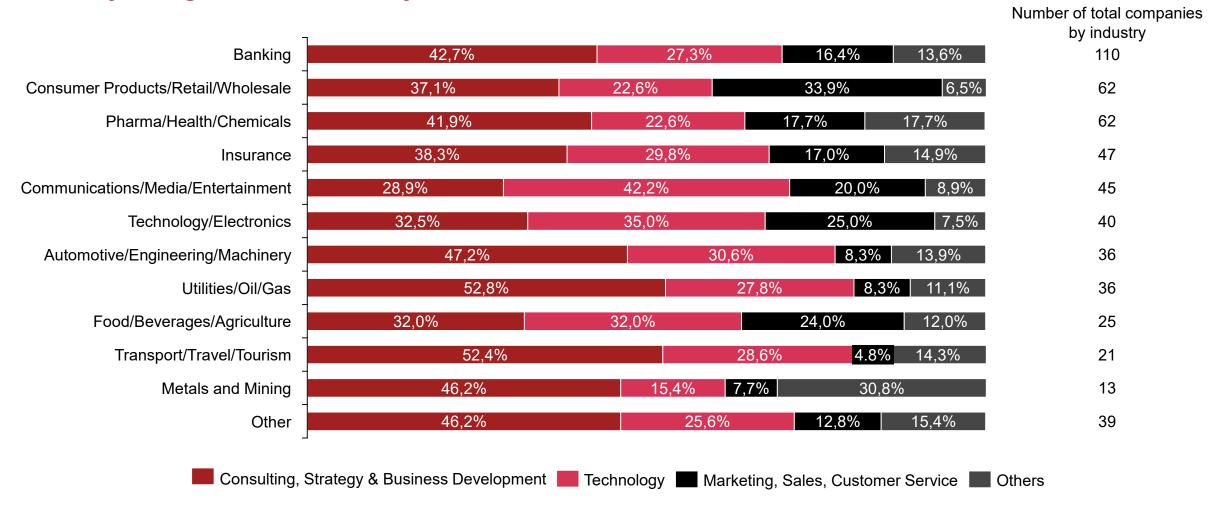
The number of CDOs with technology background has significantly increased in $2018^{\scriptscriptstyle 1)}$



Strategy&

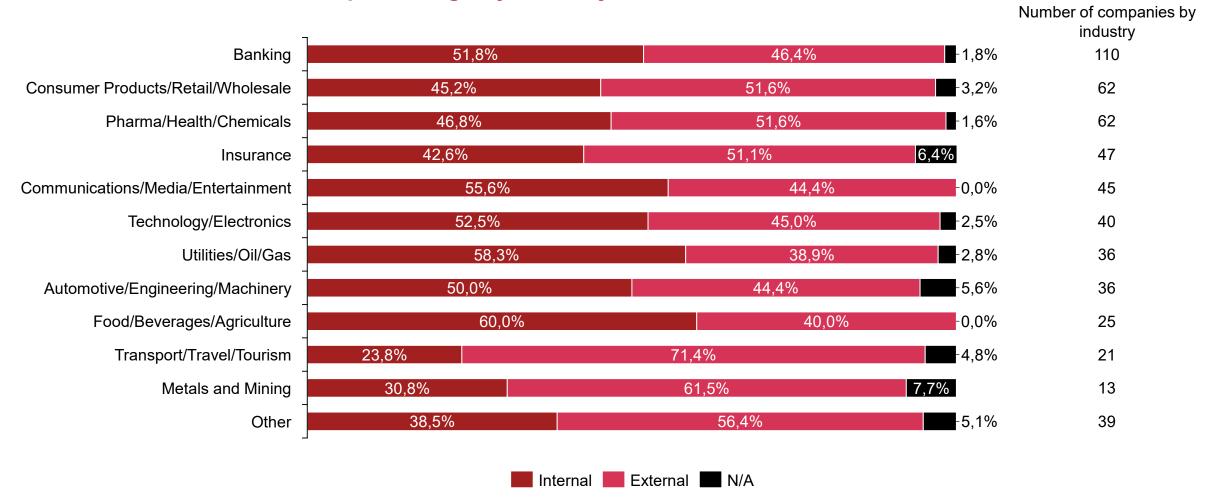
Technology and Consulting, Strategy & Business Development backgrounds are dominant throughout the industries

CDOs by background and industry¹⁾

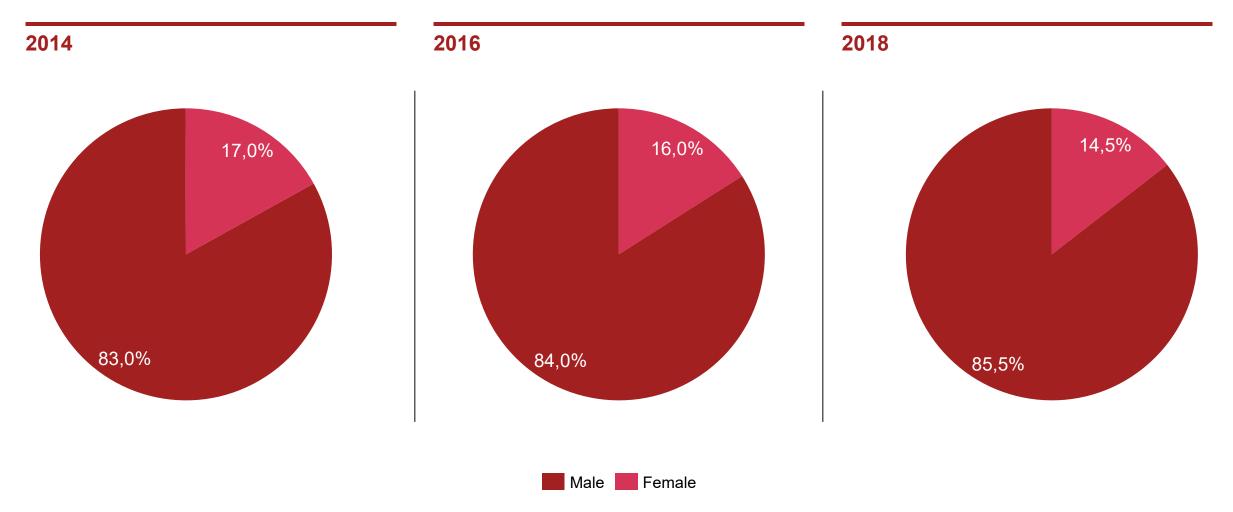


External and internal hires vary by industry

External vs. internal hires in percentage by industry¹⁾



Compared to the last 4 years, less women are in C-Level CDO positions¹⁾



¹⁾ Sample size: 2018 n=536; 2016: n=475; 2014: n=86. Source: Strategy& 2019 CDO Study

Methodology

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Methodology

Definition of a Chief Digital Officer

In this study, the Chief Digital Officer (CDO) is defined as an executive, whose responsibility is to develop and implement the company's digital strategy. Independent of the title set by the firm, the function of a CDO is to lead the company throughout its cross-functional transformation to a digital enabled enterprise.

Population (n = 2,500)

- Global top 2,500 listed companies by market cap as of March 31st, 2018
- Holding companies without operating business excluded

Source for ranking

Bloomberg

Sources to identify CDOs or equivalents

- Company/ Executive directories: Thomson Reuters, BoardEx
- Corporate homepages
- Business network platforms: LinkedIn, Xing
- Press databases: Factiva
- Internet search

Customized Strategy& classifications for

- Industry segments
- · Geographic region
- CDO background
- Company market cap

Structure and characteristics of companies observed

Industry	Count	%
Banking	348	13,9
Technology	249	10,0
Pharma and Health	195	7,8
Oil and Gas	126	5,0
Utilities	124	5,0
Insurance	114	4,6
Retail	112	4,5
Food and Beverages	112	4,5
Consumer Products	108	4,3
Chemicals	96	3,8
Transportation	92	3,7
Real Estate	82	3,3
Machinery	82	3,3
Metals and Mining	81	3,2
Communications	81	3,2
Automotive	81	3,2
Professional Services	71	2,8
Media and Entertainment	67	2,7
Electronics	61	2,4
Other	57	2,3
Building Construction	55	2,2
Travel and Tourism	45	1,8
Engineering	28	1,1
Pulp and Paper	20	0,8
Wholesale	7	0,3
Agriculture	6	0,2
Grand total	2,500	100

Region	Count	%
Asia-Pacific	977	39
EMEA	641	26
North America	806	32
South & Latin America	76	3
Grand total	2,500	100

Quartile	Market Cap	Count
4	\$24B – \$850B	625
3	\$12B - \$24B	625
2	\$8B - \$12B	625
1	\$5B - \$8B	625

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