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M&A - SOFTWARE SECTOR UPDATE Q2-2022

July 2022

Software sector key takeaways Q2-2022

IT spending sentiment for 2022

- Top 5 CIO priorities are cloud computing, security, DW/BI/Analytics, digital transformation, AI/ML
- Cybersecurity spending remains resilient as the heightened threat environment coupled with expanding attacks drives TAM expansion since business operations continue to shift to the cloud

Did SaaS valuation levels arrive at a through level?

- SaaS valuation levels have compressed approx. 35% YTD. However, capital markets seem not to believe that implied valuation levels can expand again in the short term
- Even if implied multiples seem to be “de-risked”, continued concerns over earnings estimates remain – or in other words – estimates still appear to be too optimistic and investors seem to wait for a further (significant) reset
- This might be prudent since Morgan Stanley equity research lately reported on elongating sales cycles, concerns on sales pipeline building, and CIOs expect software spending to grow by 4.1% y/y in 2022 (down from earlier 2022 growth expectations of 4.8% in Q1-2022)
- In addition, equity analysts finally tend to see a (global) recession scenario within the next 12 months with a substantial probability rate
- In general, SaaS valuation levels are not expected to elevate within short term since there is too much uncertainty over the magnitude of headwinds
- While high growth stocks will still face further substantial valuation downside risks, equity markets will favour such software companies with defensible operating margins, sustainable FCF levels and a lower sales growth profile

Software sector key takeaways Q2-2022 (ctd.)

Consumption based model is on the rise

- In the current economic environment, consumption based pricing models become increasingly popular since shrinking software spending budgets make companies more cost-conscious than before
- Popular software companies which operate for all or part of their businesses under a consumption based pricing model incl. Datadog, Snowflake, Splunk, and many others
- Under a consumption based model customers only pay for what they use, or, equivalently, what they derive value from. This helps customers not to end up with a software that is not being used (“shelf-ware”)
- While the usual fixed-subscription and seat/user-based SaaS model certainly provides benefits to the software provider in terms of revenue predictability and client stickiness (even in times of an economic downturn), customers might find this model “unfair” over time as it does not reflect the extracted value from a SaaS tool

Key positive characteristics of a consumption based model are:

- Better alignment of incentives between software providers and customers as sales is focused more on driving usage which (ideally) is a function of customer value
- Less churn compared to traditional subscription models where sales is usually focused to maximize the subscription contract value but not on customer value which may lead to unused software
- Net new consumption (equals revenue) probably needs less sales efforts which saves sales & marketing expenses (at the software vendor level)

However, there are also some negative aspects of a consumption based model worth to mention:

- Consumption based revenue is less predictable and displays more volatility than subscription based revenues
- Less resilience in an economic downturn when customers’ spending budgets are cut back
- Increasing usage drives costs in case that software usage significantly scales-up enterprise wide

M&A sentiment & KPIs Q2-2022

M&A sentiment software sector – the “big picture”



Global



No. of deals

955 in Q2-2022
1,116 in Q2-2021



Transaction Volume

€183bn in Q2-2022
€193bn in Q2-2021



EV/Sales (x)
(median-based)

5.2x in LTM
4.2x in 2021



Germany



No. of deals with German targets

44 in Q2-2022
45 in Q2-2021



Private Equity involvement

43% in Q2-2022
48% global in Q2-2022

Implied software sector trading multiples* & KPIs (median-based)

Subsector	EV/Sales 22E	EV/EBITDA 22E	Sales growth 22E	EBITDA-margin 22E
SaaS	7.9x	26.5x	26.5%	13.4%
SCM	9.5x	31.0x	14.7%	28.7%
PLM & Engineering	8.8x	25.1x	11.4%	35.1%
HCM	7.4x	24.5x	19.0%	26.3%
ERP	5.8x	24.5x	20.5%	24.3%
Cyber-security	6.9x	14.8x	21.6%	21.4%
Large platforms	4.6x	11.9x	10.8%	38.9%

Sources: Mergermarket, CapitalIQ, BDO analysis

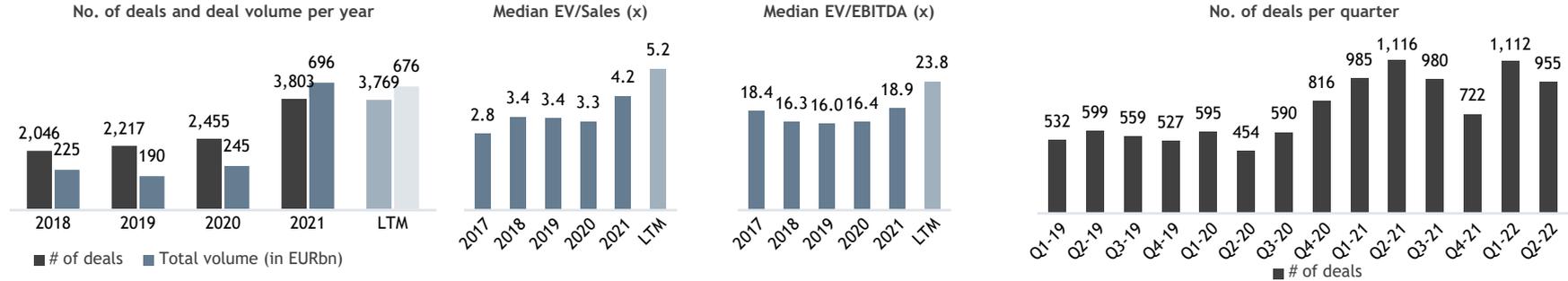
Note: M&A sentiment transaction volume based on deals with disclosed figures. EV = Enterprise value (median-based) per 25th July 2022

*) Implied multiples in excess of 25x (EV/Sales) or 50x (EV/EBITDA) have been excluded

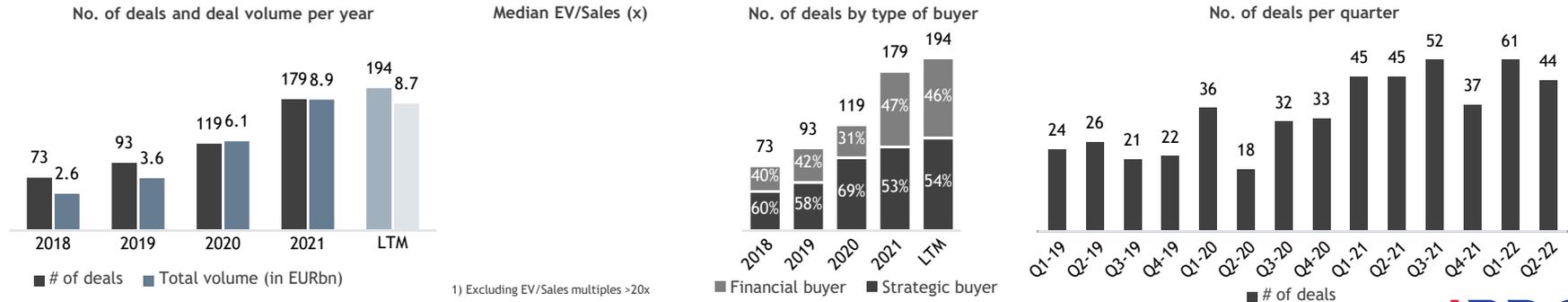
M&A activity over time

Recent global and German deal activity remains on an elevated level compared to Q2-2021

Global M&A activity (based on announced deals)



German M&A activity (based on announced deals, German targets)



1) Excluding EV/Sales multiples >20x

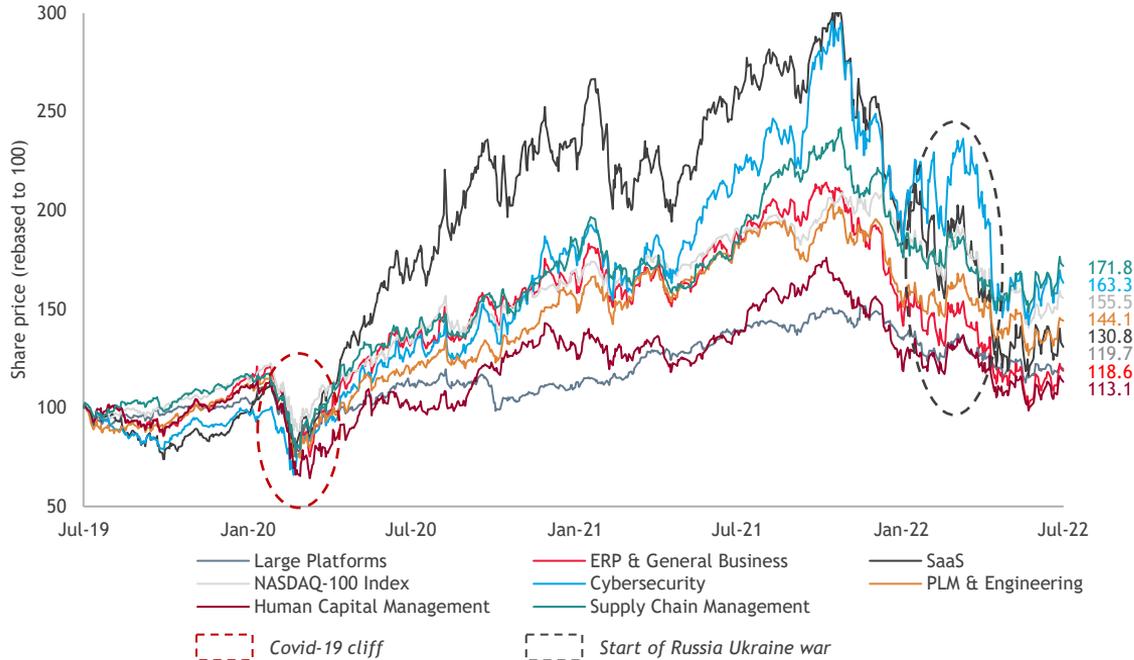
Sources: Mergermarket, BDO analysis

Note: Figures are subject to limited disclosed deal information; nm = not meaningful

Recent software sector share price performance

Since beginning of 2022, sector share prices have strongly derated – last 4W price trend signals a potential trough level (except for SaaS)

Share price performance over time (by selected software subsector)



Software subsector	Change (%)		
	3-year	1-Year	4-week
Cybersecurity	63.3%	(26.1%)	1.5%
Supply Chain Management	71.8%	(6.4%)	2.8%
NASDAQ-100 Index	55.5%	(18.5%)	2.7%
SaaS	30.8%	(49.9%)	(5.9%)
PLM & Engineering	44.1%	(21.1%)	4.6%
Large Platforms	19.7%	(14.0%)	(1.7%)
ERP & General Business	18.6%	(36.6%)	2.7%
Human Capital Management	13.1%	(18.1%)	2.2%

Sources: CapitalIQ, Equity Research, BDO analysis

Note: Market data as of 25th July 2022. Subsector constituents limited to top 10 companies by market capitalization

Full peer group constituents are listed on pages 11-26



Appendix

Selected M&A transactions & implied trading multiples

Selected M&A transactions Q2-2022 (1/3)



Germany

Date	Buyer	Target	Target activity	EV (€m)	EV/Sales(x)	EV/EBITDA(x)
Jun-2022	GREENOAKS Accel	<i>Personio</i> (2,35% stake)	Provider of HR and recruiting software	na	na	na
Jun-2022	ResMed	MEDIFOX DAN	Developer of software for care facilities and providing solutions for servicing elderly outpatients	959	na	na
Jun-2022	CleverConnect	talentry.	Company engaged in providing social job recommendation services	na	na	na
Jun-2022	3i	xSuite	Provider of invoice automation solutions in the SAP environment globally	na	na	na
May-2022	HORNETSECURITY	IT-SEAL Social Engineering Analysis Lab	Provider of cyber security services	na	na	na
May-2022	securnet	SysEleven	Provider of cloud infrastructure, managed security and managed services	65	na	na
May-2022	Telefónica	BEterna enterprise software	Provider of business software solutions for enterprise resource planning, business intelligence and customer relationship management	350	na	na
Apr-2022	BERTELSMANN	aplike	Developer of software applications for the marketing of software of other software publishers	na	na	na
Apr-2022	ptc	INTLAND SOFTWARE	Developer and vendor of leading software tools to support the development of safety-critical technology	258	na	na
Apr-2022	VIA equity Bregal Unternehmerkapital	SEMA SOFTWARE	Software company that develops timber construction software	na	na	na
Apr-2022	Hg	LucaNet	Developer of enterprise resource software	na	na	na

Selected M&A transactions Q2-2022 (2/3)



Date	Buyer	Target	Target activity	EV (€m)	EV/Sales(x)	EV/EBITDA(x)
Jun-2022	HELLMAN & FRIEDMAN PERMITA ADIA GIC	Zendesk	Provider of software-as-a-service products related to customer support, sales and other customer communications	9,849	7.3x	na
Jun-2022	Hg TA ASSOCIATES GIC	access <i>(undisclosed stake)</i>	Company engaged in developing business management software solutions	na	na	na
Jun-2022	Spotify	SONANTIC	Provider of expressive and realistic artificial voices for the entertainment industry	na	na	na
Jun-2022	Microsoft	SaferPass	Company that provides secure online identity solutions for both consumers and businesses	na	na	na
May-2022	KROLL	COTOP	Provider of online community management software	na	na	na
May-2022	BROADCOM	vmware	Company engaged in providing virtualization and cloud infrastructure solutions	66,889	5.6x	23.5x
May-2022	THOMABRAVO	MERCELL	Provider of e-tendering Software as a Service solutions	460	6.1x	57.8x
May-2022	Hg	Ideagen	Company engaged in the development and sale of information management software	1,277	14.5x	136.2x
May-2022	TIGA	Grindr	Company engaged in operation of a social networking and dating platform	1,736	na	na
May-2022	shopify	Deliverr	Provider of e-commerce fulfillment platform that enables sellers to optimally warehouse their inventory and ship it efficiently to their customer	1,987	na	na
May-2022	ice	BLACK KNIGHT	Provider of integrated software, data and analytics solutions that facilitate and automate many of the business processes across the homeownership life cycle	14,656	10.5x	23.1x

Sources: Mergermarket, CapitalIQ, BDO analysis
“na” = not available

Selected M&A transactions Q2-2022 (3/3)



Global

Date	Buyer	Target	Target activity	EV (€m)	EV/Sales(x)	EV/EBITDA(x)
Apr-2022	tes global	Orovia Education	Provider of budget planning, payroll and HR software for the education sector	na	na	na
Apr-2022	TA ASSOCIATES CLEARBANK CAPITAL	KOFAX	Provider of smart process applications software and related maintenance and professional services	na	na	na
Apr-2022	2100PHARMAC	ONEMEDNET	Software-Medical technology company engaged with providing solutions for clinical image archives of healthcare providers.	295	na	na
Apr-2022	AKKR LONG PATH PARTNERS BCM	basware	Developer of business and financial software products for financial processes	673	4.4x	29.5x
Apr-2022	Si	EUDA HEALTH	Software-Medical technology company engaged with providing digital health platform.	589	na	na
Apr-2022	KKR	Barracuda.	Provider of security, application delivery and data protection solutions	3,500	na	na
Apr-2022	THOMABRAVO	SailPoint	Provider of enterprise identity governance solutions	6,271	15.6x	na
Apr-2022	Brookfield Business Partners	CDKGlobal.	Company which provides integrated computing solutions to auto, truck, motorcycle, marine, recreational vehicle, and heavy equipment dealers	7,489	4.7x	14.4x
Apr-2022	TURN RIVER	tufin	Company engaged in providing security policy management solutions	405	4x	na
Apr-2022	HEXAGON	Accelerator KMS	Provider of SaaS-based digitalization solutions that transform operations and modernize fieldwork in the manufacturing and process industries	na	na	na

Implied multiples

SaaS players (1/2)

Companies	Market cap	EV	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
	(EURm)	(EURm)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
SaaS														
Salesforce	172,752	173,606	5.7x	4.8x	4.1x	22.7x	19.1x	16.1x	29.6x	22.4x	18.4x	38.8x	29.3x	24.0x
ServiceNow	86,377	84,607	11.7x	9.4x	7.5x	37.5x	29.6x	23.1x	46.9x	36.0x	27.8x	59.3x	45.5x	34.4x
Atlassian	48,944	48,977	16.0x	12.5x	9.4x	nm	nm	na	nm	70.9x	46.6x	nm	nm	60.0x
Shopify	45,348	39,422	7.0x	5.4x	4.1x	nm	nm	nm	nm	nm	nm	nm	nm	85.1x
Snowflake	43,691	40,157	20.9x	13.6x	9.2x	nm	nm	nm	nm	nm	nm	nm	nm	nm
CrowdStrike	41,504	40,166	19.1x	14.0x	10.7x	nm	nm	nm	nm	nm	58.0x	nm	nm	66.6x
Block	40,947	41,340	2.4x	2.0x	1.7x	nm	35.5x	23.8x	nm	nm	nm	86.0x	42.4x	26.1x
Workday	36,177	34,344	5.7x	4.8x	4.1x	24.5x	18.0x	14.1x	33.4x	24.0x	18.3x	44.3x	31.2x	22.8x
Veeva	32,083	29,356	14.0x	11.9x	10.1x	35.8x	30.0x	25.2x	37.1x	31.1x	26.3x	50.4x	42.5x	35.6x
Zoom	31,003	25,494	5.8x	5.1x	4.6x	17.4x	15.6x	14.4x	17.7x	16.1x	15.1x	26.3x	25.4x	24.7x
Datadog	27,916	27,071	17.0x	12.3x	8.7x	nm	nm	45.8x	nm	74.1x	43.7x	nm	76.5x	43.8x
Roblox	23,144	21,356	8.0x	6.7x	5.7x	nm	48.0x	41.1x	nm	nm	nm	nm	nm	nm
Zscaler	21,685	21,046	17.3x	12.9x	9.9x	nm	nm	na	nm	nm	68.8x	nm	nm	77.7x
Palantir	19,401	17,193	8.8x	6.9x	5.3x	32.0x	24.0x	18.2x	33.1x	25.0x	18.7x	54.0x	35.2x	24.6x
MongoDB	19,306	18,729	16.4x	12.6x	9.6x	nm	nm	nm	nm	nm	nm	nm	nm	nm
Paycom	18,021	17,768	13.6x	11.1x	9.1x	34.0x	27.3x	22.1x	40.8x	32.5x	26.2x	56.9x	45.1x	35.8x
Splunk	16,290	18,868	5.9x	4.8x	3.9x	nm	45.5x	22.8x	nm	nm	31.4x	nm	nm	32.9x
DiDi Global	16,067	10,875	0.5x	0.4x	na	na	na	na	na	na	na	nm	nm	na
Check Point	16,019	14,342	6.4x	6.1x	5.9x	13.9x	13.3x	13.0x	14.3x	13.5x	13.2x	17.8x	16.8x	16.5x
Cloudflare	15,907	15,760	16.8x	12.3x	9.0x	nm	nm	nm	nm	nm	nm	nm	nm	nm

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022, “na” = not available

“nm” refers to implied multiples in excess of 25x (EV/Sales), 50x (EV/EBITDA), 75x (EV/EBIT) or 100x (P/E)

Implied multiples

SaaS players (2/2)

Companies	Market cap	EV	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
	(EURm)	(EURm)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
SaaS														
Twilio	15,404	11,538	3.1x	2.4x	1.8x	nm	31.8x	22.1x	nm	nm	58.3x	nm	nm	nm
Okta	15,318	15,220	8.8x	6.6x	5.0x	nm	nm	na	nm	nm	nm	nm	nm	nm
HubSpot	13,611	13,167	7.8x	6.2x	5.0x	nm	44.7x	34.5x	nm	61.7x	42.6x	nm	78.8x	56.3x
AppLovin	13,017	14,866	4.5x	3.7x	3.3x	12.9x	10.1x	8.4x	56.3x	21.1x	14.3x	18.3x	12.0x	8.8x
Bill.com	12,840	11,946	16.3x	11.9x	9.2x	nm								
DocuSign	12,414	12,320	5.2x	4.6x	4.1x	28.0x	23.5x	18.2x	32.9x	26.4x	21.5x	39.5x	31.2x	25.1x
Dynatrace	10,383	10,262	9.6x	7.7x	6.3x	44.6x	31.8x	24.5x	48.5x	32.6x	24.8x	59.1x	39.2x	29.6x
Unity	10,375	10,391	7.7x	6.0x	4.6x	nm								
Paylocity Holding	10,354	10,337	11.3x	9.2x	7.7x	40.8x	32.7x	25.7x	50.1x	39.8x	32.0x	60.4x	51.7x	39.4x
UiPath	9,645	7,935	7.6x	5.9x	4.7x	nm								
Xero Limited	9,201	9,254	11.3x	9.3x	7.8x	nm	40.2x	30.2x	nm	nm	73.4x	nm	nm	nm
Zendesk	9,084	9,345	5.6x	4.5x	3.7x	nm	36.5x	24.6x	nm	48.5x	30.9x	92.3x	59.2x	38.7x
Dropbox	8,305	9,154	4.0x	3.8x	3.6x	11.1x	10.3x	9.5x	13.7x	12.6x	11.7x	15.0x	13.8x	12.8x
GitLab	8,036	7,156	18.7x	13.2x	9.1x	nm								
Ceridian	7,978	8,890	7.4x	6.4x	5.4x	45.7x	36.6x	29.0x	71.2x	55.4x	48.0x	nm	73.5x	53.0x
Qualtrics	6,976	6,486	4.7x	3.9x	3.2x	nm	47.5x	30.9x	nm	nm	42.5x	nm	nm	88.6x
Confluent	6,684	5,831	10.6x	7.8x	5.7x	nm								
HashiCorp	6,262	4,952	12.1x	9.4x	7.3x	nm								
RingCentral	5,036	6,583	3.3x	2.7x	2.2x	24.9x	20.1x	13.1x	29.0x	22.0x	16.3x	28.7x	21.7x	16.0x
Sinch	2,064	3,075	1.2x	1.0x	0.9x	10.9x	7.7x	6.4x	23.7x	12.5x	9.4x	61.4x	9.7x	7.4x
		Median	7.9x	6.5x	5.4x	26.5x	29.8x	22.8x	33.3x	28.8x	27.0x	50.4x	37.2x	33.6x
		Average	9.5x	7.4x	6.0x	27.3x	28.3x	22.3x	36.1x	33.9x	32.2x	47.6x	39.0x	37.9x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022, "na" = not available

"nm" refers to implied multiples in excess of 25x (EV/Sales), 50x (EV/EBITDA), 75x (EV/EBIT) or 100x (P/E)

Sales growth rates & operating margins

SaaS players (1/2)

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			CAGR 22E-24E			
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
SaaS																
Salesforce	20.3%	17.6%	16.6%	24.9%	25.1%	25.6%	19.1%	21.5%	22.4%	14.5%	16.3%	17.1%	17.1%	18.7%	26.8%	27.1%
ServiceNow	25.5%	24.6%	24.1%	31.1%	31.6%	32.6%	24.9%	26.0%	27.2%	20.1%	21.0%	22.4%	24.3%	27.3%	30.0%	31.3%
Atlassian	29.0%	27.9%	33.4%	20.8%	18.5%	na	19.4%	17.6%	20.1%	13.2%	12.0%	15.6%	30.6%	na	32.8%	41.7%
Shopify	24.8%	30.6%	31.4%	2.3%	5.9%	8.1%	1.5%	2.8%	5.3%	1.8%	3.7%	5.5%	31.0%	144.6%	148.1%	130.7%
Snowflake	67.7%	54.2%	47.0%	0.9%	7.2%	9.7%	(2.0%)	4.2%	7.4%	(0.6%)	4.3%	6.8%	50.6%	381.0%	na	na
CrowdStrike	52.7%	36.7%	30.8%	16.2%	19.8%	18.2%	13.1%	15.9%	18.4%	11.5%	14.2%	16.6%	33.7%	41.6%	58.6%	60.8%
Block	0.0%	19.8%	18.1%	3.9%	5.6%	7.1%	(4.0%)	(1.0%)	0.5%	2.8%	4.7%	6.4%	18.9%	59.9%	na	81.4%
Workday	20.5%	19.3%	18.5%	23.4%	26.8%	28.8%	17.2%	20.0%	22.1%	13.6%	16.3%	18.8%	18.9%	32.0%	35.0%	39.4%
Veeva	17.9%	17.0%	17.8%	39.1%	39.8%	40.3%	37.7%	38.4%	38.5%	30.3%	30.7%	31.1%	17.4%	19.2%	18.7%	19.0%
Zoom	13.3%	12.9%	11.3%	33.2%	32.9%	32.0%	32.7%	31.9%	30.5%	26.7%	24.4%	22.6%	12.1%	10.1%	8.3%	3.3%
Datadog	57.9%	38.2%	42.0%	17.6%	17.9%	18.9%	16.1%	16.6%	19.8%	16.0%	16.6%	20.4%	40.1%	45.5%	55.7%	57.9%
Roblox	42.0%	19.6%	16.4%	13.1%	13.9%	14.0%	(22.8%)	(22.2%)	(20.1%)	(24.5%)	(24.4%)	(22.1%)	18.0%	21.9%	10.9%	12.0%
Zscaler	47.6%	34.0%	30.1%	14.5%	16.1%	na	10.8%	12.6%	14.4%	9.7%	11.5%	13.2%	32.0%	na	52.4%	53.8%
Palantir	28.7%	28.1%	29.3%	27.6%	28.8%	29.4%	26.7%	27.6%	28.6%	18.5%	22.2%	24.5%	28.7%	32.8%	33.1%	48.0%
MongoDB	37.1%	30.7%	30.6%	(0.6%)	3.9%	7.6%	(2.2%)	1.9%	5.6%	(3.5%)	1.0%	4.3%	30.6%	na	na	na
Paycom	26.4%	22.7%	21.5%	40.0%	40.5%	41.3%	33.3%	34.1%	34.8%	24.2%	24.9%	25.8%	22.1%	24.0%	24.7%	26.0%
Splunk	24.3%	21.7%	25.2%	2.0%	10.6%	16.9%	(0.8%)	5.7%	12.3%	(2.3%)	4.2%	10.1%	23.4%	259.4%	na	na
DiDi Global	(23.8%)	23.3%	na	na	na	na	na	na	na	(15.1%)	(1.0%)	na	na	na	na	na
Check Point	6.3%	4.9%	2.7%	45.8%	45.5%	45.3%	44.4%	44.9%	44.7%	39.9%	40.3%	40.0%	3.8%	3.2%	4.1%	3.8%
Cloudflare	46.1%	36.2%	36.3%	11.0%	12.5%	13.6%	1.4%	2.7%	4.2%	0.9%	2.3%	3.9%	36.3%	51.5%	139.4%	178.1%

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Sales growth rates & operating margins

SaaS players (2/2)

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			CAGR 22E-24E			
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
SaaS																
Twilio	35.9%	28.7%	29.4%	6.0%	7.5%	8.3%	(1.5%)	1.2%	3.1%	(2.0%)	0.5%	2.2%	29.0%	51.9%	na	na
Okta	40.7%	33.1%	32.7%	(10.0%)	(1.3%)	na	(11.8%)	(4.0%)	2.4%	(13.0%)	(4.2%)	2.0%	32.9%	na	na	na
HubSpot	32.3%	26.1%	23.7%	12.4%	13.9%	14.5%	8.9%	10.0%	11.8%	7.1%	8.1%	9.2%	24.9%	34.9%	43.8%	42.3%
AppLovin	19.7%	22.2%	13.2%	35.3%	36.6%	39.0%	8.1%	17.6%	23.0%	21.7%	27.0%	32.6%	17.6%	23.7%	98.6%	44.1%
Bill.com	74.0%	37.2%	28.3%	(1.0%)	1.4%	4.8%	(3.1%)	(0.2%)	3.4%	(4.7%)	(1.3%)	2.4%	32.7%	na	na	na
DocuSign	19.0%	11.9%	13.0%	18.4%	19.6%	22.4%	15.7%	17.4%	19.0%	13.1%	14.9%	16.3%	12.4%	24.2%	23.8%	25.3%
Dynatrace	25.5%	23.9%	22.7%	21.4%	24.3%	25.7%	19.7%	23.7%	25.4%	16.4%	19.9%	21.5%	23.3%	34.9%	39.8%	41.3%
Unity	23.4%	29.6%	28.5%	(2.1%)	4.8%	8.0%	(6.2%)	1.6%	5.3%	(7.6%)	(0.3%)	2.5%	29.1%	na	na	na
Paylocity Holding	26.9%	22.0%	19.8%	27.6%	28.2%	30.0%	22.5%	23.2%	24.0%	18.7%	17.9%	19.6%	20.9%	26.1%	25.0%	23.8%
UiPath	23.5%	27.0%	26.4%	(1.4%)	6.0%	9.0%	(2.7%)	4.4%	5.9%	(4.9%)	2.8%	4.2%	26.7%	na	na	na
Xero Limited	25.7%	22.0%	18.8%	18.5%	23.0%	25.8%	6.1%	8.1%	10.6%	2.1%	5.1%	7.7%	20.4%	42.3%	59.2%	132.2%
Zendesk	26.7%	24.2%	23.2%	10.4%	12.4%	15.0%	7.4%	9.3%	11.9%	5.9%	7.4%	9.2%	23.7%	48.7%	56.6%	54.4%
Dropbox	7.7%	6.5%	6.3%	36.1%	36.7%	37.3%	29.3%	29.9%	30.4%	24.4%	24.9%	25.2%	6.4%	8.2%	8.5%	8.3%
GitLab	59.9%	41.6%	45.6%	(29.0%)	(19.9%)	(4.3%)	(32.4%)	(20.2%)	(5.8%)	(34.5%)	(21.2%)	(5.9%)	43.6%	(44.5%)	(39.0%)	(40.6%)
Ceridian	19.0%	16.7%	17.9%	16.3%	17.4%	18.7%	10.5%	11.5%	11.3%	5.6%	7.8%	9.2%	17.3%	25.5%	21.8%	49.8%
Qualtrics	32.4%	19.3%	20.7%	6.0%	8.2%	10.4%	2.0%	4.3%	7.6%	(3.1%)	0.4%	3.9%	20.0%	58.5%	131.1%	na
Confluent	44.3%	35.6%	36.8%	(36.1%)	(20.6%)	(3.4%)	(37.9%)	(22.5%)	(6.5%)	(38.2%)	(22.6%)	(6.5%)	36.2%	(58.0%)	(43.7%)	(43.8%)
HashiCorp	34.6%	28.9%	27.3%	(52.6%)	(46.3%)	(32.0%)	(53.1%)	(46.2%)	(35.6%)	(53.3%)	(46.3%)	(36.1%)	28.1%	(0.0%)	4.9%	5.5%
RingCentral	25.9%	23.7%	22.5%	13.4%	13.5%	16.8%	11.5%	12.3%	13.5%	8.9%	9.5%	10.6%	23.1%	37.7%	33.3%	34.2%
Sinch	70.4%	15.7%	14.9%	10.6%	13.0%	13.6%	4.9%	8.0%	9.2%	1.3%	6.9%	7.9%	15.3%	30.4%	58.9%	188.3%
Median	26.5%	24.0%	23.7%	13.4%	13.9%	16.9%	8.1%	10.0%	11.9%	5.8%	7.6%	9.2%	23.7%	31.2%	33.0%	40.3%
Average	30.8%	25.4%	24.5%	12.0%	14.9%	18.0%	6.8%	10.0%	13.0%	4.0%	7.6%	10.8%	25.0%	47.4%	40.0%	46.0%

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Implied multiples

Supply chain management

Companies	Market cap	EV	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
	(EURm)	(EURm)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Supplychain & Logistics														
Dassault Systèmes	51,303	51,803	9.5x	8.7x	8.0x	25.2x	23.1x	20.8x	28.1x	25.8x	23.2x	36.1x	33.5x	29.8x
Aspen	11,489	11,513	13.3x	9.8x	na	26.0x	na	na	26.2x	21.4x	na	30.5x	26.7x	na
WiseTech Global	10,671	10,440	22.2x	18.4x	15.2x	45.2x	36.9x	31.6x	56.8x	44.7x	38.6x	77.8x	61.1x	54.8x
Manhattan Associates	7,353	7,162	10.1x	9.1x	na	39.4x	34.4x	na	41.2x	35.6x	na	53.5x	46.7x	na
Descartes	5,439	5,242	11.3x	10.1x	8.5x	25.7x	22.7x	19.3x	41.9x	34.0x	29.1x	43.8x	41.3x	39.8x
SPS Commerce	4,102	3,884	8.9x	7.7x	6.7x	31.0x	25.9x	21.8x	35.8x	29.9x	25.6x	53.3x	44.8x	38.1x
Kinaxis	3,206	3,024	8.8x	7.7x	6.7x	45.9x	39.8x	28.0x	nm	nm	60.7x	95.4x	77.2x	na
American Software	566	442	3.4x	3.2x	na	28.4x	21.1x	na	31.0x	21.2x	na	46.8x	36.3x	na
Tecsys	387	365	3.3x	3.0x	na	50.0x	30.8x	na	72.1x	41.1x	na	nm	63.0x	na
		Median	9.5x	8.7x	8.0x	31.0x	28.3x	21.8x	38.5x	31.9x	29.1x	50.1x	44.8x	39.0x
		Average	10.1x	8.6x	9.0x	35.2x	29.3x	24.3x	41.6x	31.7x	35.4x	54.7x	47.8x	40.7x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022, “na” = not available

“nm” refers to implied multiples in excess of 25x (EV/Sales), 50x (EV/EBITDA), 75x (EV/EBIT) or 100x (P/E)

Sales growth rates & operating margins

Supply chain management

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			CAGR 22E-24E			
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
Supplychain & Logistics																
Dassault Systèmes	12.5%	9.0%	8.8%	37.6%	37.7%	38.4%	33.7%	33.7%	34.5%	26.0%	25.7%	26.5%	8.9%	10.1%	10.1%	10.0%
Aspen	109.1%	35.4%	na	51.3%	na	na	50.9%	45.8%	na	43.5%	36.7%	na	na	na	na	na
WiseTech Global	22.4%	20.5%	21.1%	49.1%	49.9%	48.0%	39.1%	41.2%	39.4%	29.2%	30.8%	28.3%	20.8%	19.5%	21.3%	19.1%
Manhattan Associates	9.1%	11.3%	na	25.6%	26.4%	na	24.5%	25.5%	na	19.4%	20.0%	na	na	na	na	na
Descartes	14.7%	11.1%	19.3%	43.7%	44.6%	44.0%	26.9%	29.8%	29.2%	26.7%	25.4%	22.1%	15.1%	15.5%	20.0%	4.9%
SPS Commerce	15.8%	15.6%	14.6%	28.7%	29.7%	30.8%	24.8%	25.7%	26.2%	17.6%	18.1%	18.6%	15.1%	19.3%	18.2%	18.2%
Kinaxis	42.4%	14.0%	14.4%	19.1%	19.3%	24.0%	5.5%	3.6%	11.1%	9.8%	10.6%	na	14.2%	28.0%	62.1%	na
American Software	7.5%	8.0%	na	12.1%	15.1%	na	11.1%	15.0%	na	9.4%	11.2%	na	na	na	na	na
Tecsys	8.9%	10.4%	na	6.6%	9.8%	na	4.6%	7.3%	na	3.0%	5.1%	na	na	na	na	na
Median	14.7%	11.3%	14.6%	28.7%	28.1%	38.4%	24.8%	25.7%	29.2%	19.4%	20.0%	24.3%	15.1%	19.3%	20.0%	14.1%
Average	26.9%	15.0%	15.6%	30.4%	29.1%	37.1%	24.6%	25.3%	28.1%	20.5%	20.4%	23.9%	14.8%	18.5%	26.4%	13.0%

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Implied multiples

PLM & Engineering

Companies	Market cap	EV	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
	(EURm)	(EURm)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
PLM & Engineering														
Dassault Systèmes	51,303	51,803	9.5x	8.7x	8.0x	25.2x	23.1x	20.8x	28.1x	25.8x	23.2x	36.1x	33.5x	29.8x
Cadence Design	44,967	44,299	12.1x	11.0x	9.8x	27.7x	23.6x	na	30.1x	25.8x	na	37.3x	32.2x	29.1x
Autodesk	41,642	43,080	8.9x	7.8x	6.8x	24.5x	20.0x	16.9x	25.7x	20.7x	16.8x	31.3x	25.2x	20.8x
Hexagon	29,853	33,672	6.7x	6.2x	5.8x	17.9x	16.3x	14.8x	23.5x	21.5x	19.4x	25.4x	23.6x	21.6x
ANSYS	21,972	22,200	11.1x	10.1x	9.2x	25.0x	22.4x	20.0x	26.8x	24.2x	21.2x	32.6x	29.5x	26.4x
Trimble	15,722	16,764	4.4x	4.1x	3.9x	17.6x	15.6x	13.5x	18.9x	16.7x	15.4x	22.6x	19.8x	18.7x
PTC	12,736	13,875	7.1x	6.4x	5.9x	20.9x	19.2x	18.1x	19.0x	16.9x	na	23.2x	20.4x	18.4x
Bentley Systems	11,201	12,962	11.8x	10.7x	9.8x	35.4x	30.9x	28.1x	38.2x	33.0x	28.9x	42.2x	37.4x	32.2x
Nemetschek	6,875	6,876	8.8x	8.0x	7.1x	26.8x	25.1x	21.6x	33.4x	30.3x	25.4x	41.0x	38.1x	32.4x
Altair Engineering	4,248	4,116	7.3x	6.7x	6.5x	41.2x	35.7x	31.9x	45.0x	39.0x	34.6x	61.9x	50.2x	42.9x
		Median	8.8x	7.9x	7.0x	25.1x	22.7x	20.0x	27.4x	25.0x	22.2x	34.4x	30.9x	27.7x
		Average	8.8x	8.0x	7.3x	26.2x	23.2x	20.6x	28.9x	25.4x	23.1x	35.4x	31.0x	27.2x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022, “na” = not available

“nm” refers to implied multiples in excess of 25x (EV/Sales), 50x (EV/EBITDA), 75x (EV/EBIT) or 100x (P/E)

Sales growth rates & operating margins

PLM & Engineering

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			Sales	CAGR 22E-24E		
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E		EBITDA	EBIT	N.I.
PLM & Engineering																
Dassault Systèmes	12.5%	9.0%	8.8%	37.6%	37.7%	38.4%	33.7%	33.7%	34.5%	26.0%	25.7%	26.5%	8.9%	10.1%	10.1%	10.0%
Cadence Design	10.2%	10.2%	12.6%	43.9%	46.7%	na	40.4%	42.7%	na	33.0%	34.7%	34.1%	11.4%	na	na	13.3%
Autodesk	14.4%	14.0%	13.9%	36.2%	38.8%	40.4%	34.5%	37.6%	40.5%	27.4%	29.9%	31.7%	13.9%	20.3%	23.5%	22.6%
Hexagon	18.1%	6.5%	7.8%	37.2%	38.4%	39.1%	28.3%	29.0%	29.8%	23.2%	23.4%	23.8%	7.2%	10.0%	9.9%	8.6%
ANSYS	7.4%	9.5%	9.7%	44.3%	45.2%	46.1%	41.4%	41.9%	43.5%	33.6%	33.9%	34.6%	9.6%	11.8%	12.3%	11.3%
Trimble	5.4%	7.8%	5.2%	25.3%	26.4%	29.0%	23.5%	24.7%	25.4%	18.4%	19.5%	19.6%	6.5%	14.0%	10.8%	9.8%
PTC	8.4%	10.9%	8.8%	34.0%	33.4%	32.5%	37.4%	37.8%	na	28.1%	28.7%	29.3%	9.9%	7.4%	na	12.1%
Bentley Systems	16.5%	10.4%	8.8%	33.3%	34.5%	34.9%	30.8%	32.3%	33.9%	24.1%	24.6%	26.3%	9.6%	12.2%	14.9%	14.5%
Nemetschek	14.9%	9.8%	12.7%	32.7%	31.9%	32.9%	26.3%	26.4%	27.9%	21.4%	21.0%	21.9%	11.2%	11.5%	14.6%	12.6%
Altair Engineering	8.1%	8.7%	2.8%	17.7%	18.8%	20.5%	16.2%	17.2%	18.9%	12.2%	13.8%	15.7%	5.7%	13.6%	14.0%	20.0%
Median	11.4%	9.6%	8.8%	35.1%	36.1%	34.9%	32.3%	33.0%	31.8%	25.0%	25.2%	26.4%	9.6%	11.8%	13.2%	12.3%
Average	11.6%	9.7%	9.1%	34.2%	35.2%	34.9%	31.3%	32.3%	31.8%	24.7%	25.5%	26.4%	9.4%	12.3%	13.8%	13.5%

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Implied multiples

Human Capital Management

Companies	Market cap	EV	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
	(EURm)	(EURm)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Human Capital Management														
Automatic Data Processing	89,339	91,079	5.5x	5.1x	4.8x	20.7x	18.9x	17.6x	23.2x	21.0x	19.5x	29.6x	26.9x	25.2x
Paychex	42,831	42,520	9.0x	8.4x	7.9x	20.2x	18.7x	17.3x	22.4x	20.7x	19.2x	30.0x	27.8x	25.7x
Workday	36,177	34,344	5.7x	4.8x	4.1x	24.5x	18.0x	14.1x	33.4x	24.0x	18.3x	44.3x	31.2x	22.8x
Paycom	18,021	17,768	13.6x	11.1x	9.1x	34.0x	27.3x	22.1x	40.8x	32.5x	26.2x	56.9x	45.1x	35.8x
Paylocity	10,354	10,337	11.3x	9.2x	7.7x	40.8x	32.7x	25.7x	50.1x	39.8x	32.0x	60.4x	51.7x	39.4x
Ceridian	7,978	8,890	7.4x	6.4x	5.4x	45.7x	36.6x	29.0x	71.2x	55.4x	48.0x	nm	73.5x	53.0x
Benefitfocus	272	488	2.0x	1.9x	na	10.8x	10.3x	na	25.2x	24.2x	na	nm	nm	na
		Median	7.4x	6.4x	6.6x	24.5x	18.9x	19.9x	33.4x	24.2x	22.9x	44.3x	38.2x	30.8x
		Average	7.8x	6.7x	6.5x	28.1x	23.2x	21.0x	38.0x	31.1x	27.2x	44.2x	42.7x	33.7x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022, “na” = not available

“nm” refers to implied multiples in excess of 25x (EV/Sales), 50x (EV/EBITDA), 75x (EV/EBIT) or 100x (P/E)

Sales growth rates & operating margins

Human Capital Management

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			CAGR 22E-24E				
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.	
Human Capital Management																	
Automatic Data Processing	8.3%	7.5%	6.6%	26.3%	26.9%	27.0%	23.5%	24.2%	24.5%	18.1%	18.5%	18.5%	7.0%	8.4%	9.2%	8.4%	
Paychex	10.0%	7.0%	6.6%	44.5%	44.9%	45.7%	40.2%	40.7%	41.2%	30.2%	30.5%	30.9%	6.8%	8.2%	8.1%	7.9%	
Workday	20.5%	19.3%	18.5%	23.4%	26.8%	28.8%	17.2%	20.0%	22.1%	13.6%	16.3%	18.8%	18.9%	32.0%	35.0%	39.4%	
Paycom	26.4%	22.7%	21.5%	40.0%	40.5%	41.3%	33.3%	34.1%	34.8%	24.2%	24.9%	25.8%	22.1%	24.0%	24.7%	26.0%	
Paylocity	26.9%	22.0%	19.8%	27.6%	28.2%	30.0%	22.5%	23.2%	24.0%	18.7%	17.9%	19.6%	20.9%	26.1%	25.0%	23.8%	
Ceridian	19.0%	16.7%	17.9%	16.3%	17.4%	18.7%	10.5%	11.5%	11.3%	5.6%	7.8%	9.2%	17.3%	25.5%	21.8%	49.8%	
Benefitfocus	(3.3%)	2.9%	na	18.2%	18.5%	na	7.8%	7.9%	na	(0.2%)	0.6%	na	na	na	na	na	
Median	19.0%	16.7%	18.2%	26.3%	26.9%	29.4%	22.5%	23.2%	24.2%	18.1%	17.9%	19.2%	18.1%	24.8%	23.2%	24.9%	
Average	15.4%	14.0%	15.1%	28.0%	29.1%	31.9%	22.1%	23.1%	26.3%	15.8%	16.6%	20.5%	15.5%	20.7%	20.6%	25.9%	

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Implied multiples

ERP & General Business

Companies	Market cap	EV	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
	(EURm)	(EURm)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
ERP & General Business														
Salesforce	172,752	173,606	5.7x	4.8x	4.1x	22.7x	19.1x	16.1x	29.6x	22.4x	18.4x	38.8x	29.3x	24.0x
Shopify	45,348	39,422	7.0x	5.4x	4.1x	nm	85.1x							
Workday	36,177	34,344	5.7x	4.8x	4.1x	24.5x	18.0x	14.1x	33.4x	24.0x	18.3x	44.3x	31.2x	22.8x
Constellation	33,469	34,075	5.4x	4.5x	na	19.7x	16.2x	na	35.8x	25.4x	na	30.2x	24.5x	na
Paycom	18,021	17,768	13.6x	11.1x	9.1x	34.0x	27.3x	22.1x	40.8x	32.5x	26.2x	56.9x	45.1x	35.8x
Paylocity	10,354	10,337	11.3x	9.2x	7.7x	40.8x	32.7x	25.7x	50.1x	39.8x	32.0x	60.4x	51.7x	39.4x
Zendesk	9,084	9,345	5.6x	4.5x	3.7x	nm	36.5x	24.6x	nm	48.5x	30.9x	92.3x	59.2x	38.7x
Sage Group	8,345	9,138	3.9x	3.7x	3.4x	16.6x	15.2x	14.1x	19.6x	17.5x	15.6x	25.0x	22.3x	19.7x
Ceridian	7,978	8,890	7.4x	6.4x	5.4x	45.7x	36.6x	29.0x	71.2x	55.4x	48.0x	nm	73.5x	53.0x
Manhattan Associates	7,353	7,162	10.1x	9.1x	na	39.4x	34.4x	na	41.2x	35.6x	na	53.5x	46.7x	na
Descartes Systems	5,439	5,242	11.3x	10.1x	8.5x	25.7x	22.7x	19.3x	41.9x	34.0x	29.1x	43.8x	41.3x	39.8x
Monday.com	4,397	3,625	7.5x	5.6x	3.8x	nm								
SPS Commerce	4,102	3,884	8.9x	7.7x	6.7x	31.0x	25.9x	21.8x	35.8x	29.9x	25.6x	53.3x	44.8x	38.1x
Smartsheet	3,853	3,490	4.8x	3.7x	2.8x	nm								
Ziff Davis	3,740	4,065	2.8x	2.5x	2.3x	7.6x	6.9x	6.2x	8.7x	8.0x	na	11.6x	10.4x	9.4x
Workiva	3,238	3,094	5.9x	5.0x	4.1x	nm	nm	nm	nm	nm	60.6x	nm	nm	61.6x
Technology One	2,578	2,522	10.0x	9.0x	8.0x	24.5x	21.2x	18.5x	32.3x	28.2x	24.5x	44.0x	38.3x	33.3x
C3.ai	1,924	1,014	3.5x	2.8x	2.1x	nm								
Enghouse Systems	1,331	1,173	3.5x	na	na	10.6x	na	na	16.2x	na	na	21.1x	na	na
Big Commerce	1,158	1,133	4.1x	3.4x	2.8x	nm								
		Median	5.8x	5.0x	4.1x	24.5x	22.7x	19.3x	35.8x	29.9x	26.2x	44.0x	41.3x	38.1x
		Average	6.9x	6.0x	4.9x	26.4x	24.1x	19.2x	35.1x	30.9x	30.0x	44.2x	39.9x	38.5x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022, "na" = not available

"nm" refers to implied multiples in excess of 25x (EV/Sales), 50x (EV/EBITDA), 75x (EV/EBIT) or 100x (P/E)

Sales growth rates & operating margins

ERP & General Business

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			CAGR 22E-24E			
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
ERP & General Business																
Salesforce	20.3%	17.6%	16.6%	24.9%	25.1%	25.6%	19.1%	21.5%	22.4%	14.5%	16.3%	17.1%	17.1%	18.7%	26.8%	27.1%
Shopify	24.8%	30.6%	31.4%	2.3%	5.9%	8.1%	1.5%	2.8%	5.3%	1.8%	3.7%	5.5%	31.0%	144.6%	148.1%	130.7%
Workday	20.5%	19.3%	18.5%	23.4%	26.8%	28.8%	17.2%	20.0%	22.1%	13.6%	16.3%	18.8%	18.9%	32.0%	35.0%	39.4%
Constellation	28.8%	18.2%	na	27.3%	28.1%	na	15.0%	17.9%	na	17.5%	18.2%	na	na	na	na	na
Paycom	26.4%	22.7%	21.5%	40.0%	40.5%	41.3%	33.3%	34.1%	34.8%	24.2%	24.9%	25.8%	22.1%	24.0%	24.7%	26.0%
Paylocity	26.9%	22.0%	19.8%	27.6%	28.2%	30.0%	22.5%	23.2%	24.0%	18.7%	17.9%	19.6%	20.9%	26.1%	25.0%	23.8%
Zendesk	26.7%	24.2%	23.2%	10.4%	12.4%	15.0%	7.4%	9.3%	11.9%	5.9%	7.4%	9.2%	23.7%	48.7%	56.6%	54.4%
Sage Group	5.3%	7.7%	8.3%	23.8%	24.1%	24.0%	20.1%	21.0%	21.7%	14.4%	15.0%	15.6%	8.0%	8.5%	12.1%	12.5%
Ceridian	19.0%	16.7%	17.9%	16.3%	17.4%	18.7%	10.5%	11.5%	11.3%	5.6%	7.8%	9.2%	17.3%	25.5%	21.8%	49.8%
Manhattan Associates	9.1%	11.3%	na	25.6%	26.4%	na	24.5%	25.5%	na	19.4%	20.0%	na	na	na	na	na
Descartes Systems	14.7%	11.1%	19.3%	43.7%	44.6%	44.0%	26.9%	29.8%	29.2%	26.7%	25.4%	22.1%	15.1%	15.5%	20.0%	4.9%
Monday.com	59.4%	34.8%	46.1%	(26.4%)	(13.8%)	(5.2%)	(27.9%)	(15.3%)	(6.4%)	(27.9%)	(15.4%)	(6.2%)	40.4%	(37.8%)	(32.7%)	(34.0%)
SPS Commerce	15.8%	15.6%	14.6%	28.7%	29.7%	30.8%	24.8%	25.7%	26.2%	17.6%	18.1%	18.6%	15.1%	19.3%	18.2%	18.2%
Smartsheet	37.6%	31.9%	29.7%	(9.0%)	(2.2%)	3.2%	(11.9%)	(5.9%)	(1.7%)	(12.0%)	(5.8%)	(1.5%)	30.8%	na	(51.2%)	(54.3%)
Ziff Davis	6.3%	8.4%	12.2%	36.2%	36.8%	36.6%	31.7%	31.7%	na	21.9%	22.5%	22.1%	10.3%	10.9%	na	10.7%
Workiva	20.4%	19.5%	21.8%	(5.0%)	(0.4%)	7.5%	(5.9%)	(1.1%)	6.7%	(6.8%)	(1.4%)	6.9%	20.6%	na	na	na
Technology One	14.4%	11.8%	11.5%	40.9%	42.4%	43.5%	31.0%	31.8%	32.8%	23.2%	23.9%	24.6%	11.6%	15.1%	14.8%	14.9%
C3.ai	27.1%	25.7%	31.4%	(38.6%)	(16.8%)	(0.4%)	(41.4%)	(19.6%)	(4.7%)	(41.1%)	(19.4%)	(2.8%)	28.5%	(86.4%)	(56.9%)	(66.4%)
Enghouse Systems	(4.8%)	na	na	33.0%	na	na	21.6%	na	na	18.8%	na	na	na	na	na	na
BigCommerce	28.4%	21.6%	21.7%	(16.3%)	(9.7%)	(1.7%)	(17.6%)	(11.0%)	(3.7%)	(18.8%)	(11.4%)	(3.6%)	21.7%	(60.7%)	(44.2%)	(46.6%)
Median	20.5%	19.3%	19.8%	24.3%	25.1%	24.0%	18.1%	20.0%	16.8%	14.5%	16.3%	15.6%	20.6%	18.7%	20.0%	16.6%
Average	21.4%	19.5%	21.5%	15.4%	18.2%	20.6%	10.1%	13.3%	14.5%	6.9%	9.7%	11.8%	20.8%	13.6%	14.5%	13.2%

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Implied multiples Cybersecurity

Companies	Market cap (EURm)	EV (EURm)	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
			2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Cybersecurity														
Palo Alto Networks	49,301	49,376	8.4x	6.9x	5.6x	34.2x	28.2x	na	43.6x	34.3x	26.9x	56.7x	44.4x	36.6x
Fortinet	47,947	46,834	10.9x	9.0x	7.3x	39.4x	32.2x	26.8x	43.4x	35.1x	28.4x	57.2x	46.1x	36.9x
Vmware	46,832	55,965	4.2x	3.9x	3.6x	11.8x	10.8x	11.0x	15.8x	14.0x	12.7x	17.6x	15.1x	13.5x
CrowdStrike Holdings	41,504	40,166	19.1x	14.0x	10.7x	nm	nm	nm	nm	nm	58.0x	nm	nm	66.6x
Zscaler	21,685	21,046	17.3x	12.9x	9.9x	nm	nm	na	nm	nm	68.8x	nm	nm	77.7x
Splunk	16,290	18,868	5.9x	4.8x	3.9x	nm	45.5x	22.8x	nm	nm	31.4x	nm	nm	32.9x
Check Point	16,019	14,342	6.4x	6.1x	5.9x	13.9x	13.3x	13.0x	14.3x	13.5x	13.2x	17.8x	16.8x	16.5x
Cloudflare	15,907	15,760	16.8x	12.3x	9.0x	nm								
OKTA	15,318	15,220	8.8x	6.6x	5.0x	nm	nm	na	nm	nm	nm	nm	nm	nm
NortonLifeLock	13,860	15,758	5.6x	5.3x	5.2x	10.9x	10.1x	9.7x	11.3x	10.2x	9.8x	14.3x	12.7x	12.0x
Nice	12,910	12,283	5.8x	5.2x	4.5x	18.0x	16.4x	15.5x	20.4x	17.9x	15.0x	26.7x	23.8x	20.5x
Citrix Systems	12,551	15,091	4.6x	4.4x	4.4x	14.8x	13.6x	12.8x	17.8x	16.1x	16.2x	19.5x	17.7x	16.6x
DocuSign	12,414	12,320	5.2x	4.6x	4.1x	28.0x	23.5x	18.2x	32.9x	26.4x	21.5x	39.5x	31.2x	25.1x
Trend Micro	7,568	5,784	3.8x	3.6x	3.3x	13.2x	12.4x	11.8x	18.4x	17.0x	15.5x	na	na	na
Avast	6,119	6,475	6.8x	6.5x	6.4x	13.6x	12.5x	12.2x	14.7x	13.9x	12.8x	17.7x	16.5x	15.6x
CyberArk	5,476	5,090	8.8x	7.2x	5.9x	nm								
Tenable	5,214	5,126	7.7x	6.4x	5.3x	nm	nm	34.7x	nm	68.2x	42.7x	nm	nm	52.3x
Qualys	4,940	4,536	9.5x	8.2x	7.2x	23.7x	21.1x	18.6x	28.2x	25.1x	21.1x	40.2x	36.2x	30.9x
Rapid7	4,039	4,709	7.0x	5.7x	4.7x	nm	nm	36.0x	nm	nm	58.3x	nm	nm	72.9x
Blackberry	3,304	3,191	4.7x	4.3x	1.9x	nm	nm	22.2x	nm	nm	43.1x	nm	nm	40.4x
		Median	6.9x	6.2x	5.2x	14.8x	15.0x	16.8x	18.4x	17.5x	21.5x	23.1x	20.7x	31.9x
		Average	8.4x	6.9x	5.7x	20.1x	20.0x	19.0x	23.7x	24.3x	29.1x	30.7x	26.0x	35.4x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022, “na” = not available

“nm” refers to implied multiples in excess of 25x (EV/Sales), 50x (EV/EBITDA), 75x (EV/EBIT) or 100x (P/E)

Sales growth rates & operating margins

Cybersecurity

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			CAGR 22E-24E			
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
Cybersecurity																
Palo Alto Networks	26.0%	22.2%	22.7%	24.5%	24.3%	na	19.2%	20.0%	20.8%	14.8%	15.4%	15.2%	22.4%	na	27.2%	24.4%
Fortinet	31.2%	21.0%	22.7%	27.7%	28.0%	27.4%	25.1%	25.7%	25.9%	19.5%	20.0%	20.4%	21.8%	21.2%	23.8%	24.6%
Vmware	5.8%	7.7%	10.0%	35.9%	36.4%	32.5%	26.8%	28.1%	28.2%	20.1%	21.8%	22.2%	8.8%	3.6%	11.7%	14.5%
CrowdStrike Holdings	52.7%	36.7%	30.8%	16.2%	19.8%	18.2%	13.1%	15.9%	18.4%	11.5%	14.2%	16.6%	33.7%	41.6%	58.6%	60.8%
Zscaler	47.6%	34.0%	30.1%	14.5%	16.1%	na	10.8%	12.6%	14.4%	9.7%	11.5%	13.2%	32.0%	na	52.4%	53.8%
Splunk	24.3%	21.7%	25.2%	2.0%	10.6%	16.9%	(0.8%)	5.7%	12.3%	(2.3%)	4.2%	10.1%	23.4%	259.4%	na	na
Check Point	6.3%	4.9%	2.7%	45.8%	45.5%	45.3%	44.4%	44.9%	44.7%	39.9%	40.3%	40.0%	3.8%	3.2%	4.1%	3.8%
Cloudflare	46.1%	36.2%	36.3%	11.0%	12.5%	13.6%	1.4%	2.7%	4.2%	0.9%	2.3%	3.9%	36.3%	51.5%	139.4%	178.1%
OKTA	40.7%	33.1%	32.7%	(10.0%)	(1.3%)	na	(11.8%)	(4.0%)	2.4%	(13.0%)	(4.2%)	2.0%	32.9%	na	na	na
NortonLifeLock	6.2%	5.1%	3.1%	51.2%	52.6%	52.9%	49.3%	52.1%	52.5%	34.4%	36.8%	37.7%	4.1%	5.9%	7.4%	8.9%
Nice	24.7%	11.7%	13.8%	32.1%	31.6%	29.4%	28.4%	28.9%	30.3%	22.7%	22.9%	23.4%	12.8%	8.0%	16.5%	14.3%
Citrix Systems	3.6%	4.7%	0.6%	31.3%	32.4%	34.2%	26.0%	27.3%	27.1%	19.8%	20.8%	22.0%	2.6%	7.3%	4.8%	8.2%
DocuSign	19.0%	11.9%	13.0%	18.4%	19.6%	22.4%	15.7%	17.4%	19.0%	13.1%	14.9%	16.3%	12.4%	24.2%	23.8%	25.3%
Trend Micro	10.6%	7.7%	8.6%	29.1%	28.8%	27.8%	20.9%	20.9%	21.2%	na	na	na	8.2%	5.7%	9.1%	na
Avast	15.9%	4.8%	1.9%	50.3%	51.9%	52.2%	46.2%	46.8%	49.8%	36.3%	37.3%	38.7%	3.3%	5.3%	7.2%	6.6%
CyberArk	17.6%	21.8%	23.2%	(1.7%)	2.6%	8.5%	(4.6%)	(0.0%)	6.1%	(5.0%)	(0.4%)	5.0%	22.5%	na	na	na
Tenable	25.1%	20.3%	21.0%	8.7%	11.8%	15.3%	6.8%	9.4%	12.4%	3.2%	6.1%	10.3%	20.6%	59.8%	63.7%	118.4%
Qualys	18.0%	16.7%	12.9%	40.2%	38.8%	39.0%	33.9%	32.5%	34.4%	25.9%	24.6%	25.5%	14.8%	13.0%	15.5%	14.0%
Rapid7	28.7%	21.4%	22.7%	6.0%	7.7%	13.0%	3.0%	5.5%	8.0%	1.0%	3.7%	5.5%	22.0%	80.2%	100.6%	188.8%
Blackberry	(6.0%)	8.7%	127.0%	(10.7%)	(5.3%)	8.6%	(23.0%)	(15.4%)	4.4%	(16.8%)	(16.3%)	4.9%	57.1%	na	na	na
Median	21.6%	18.5%	21.8%	21.4%	22.1%	27.4%	17.5%	18.7%	19.9%	13.1%	14.9%	16.3%	21.2%	13.0%	20.1%	24.4%
Average	22.2%	17.6%	23.0%	21.1%	23.2%	26.9%	16.5%	18.9%	21.8%	12.4%	14.5%	17.5%	19.8%	39.3%	35.3%	49.6%

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Implied multiples

Large Platforms

Companies	Market cap (EURm)	EV (EURm)	EV / Sales			EV / EBITDA			EV / EBIT			P / E		
			2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Large platforms														
Microsoft	1,895,727	1,853,140.3	8.9x	7.8x	6.8x	17.9x	15.5x	na	21.1x	18.3x	15.7x	25.8x	22.6x	19.9x
Oracle	195,367	252,201	5.5x	5.0x	4.7x	12.1x	10.6x	10.0x	13.7x	11.8x	10.9x	17.9x	13.2x	11.8x
IBM	113,692	171,472	2.9x	2.8x	2.7x	11.2x	10.3x	9.8x	16.8x	14.7x	14.0x	13.5x	12.5x	11.8x
SAP	105,359	113,655	3.7x	3.5x	3.2x	11.6x	10.6x	9.4x	14.2x	12.5x	11.0x	18.6x	15.9x	14.1x
		Median	4.6x	4.2x	4.0x	11.9x	10.6x	9.8x	15.5x	13.6x	12.5x	18.3x	14.5x	13.0x
		Average	5.3x	4.8x	4.4x	13.2x	11.8x	9.8x	16.4x	14.3x	12.9x	19.0x	16.0x	14.4x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

Sales growth rates & operating margins

Large Platforms

Companies	Sales growth			EBITDA margin			EBIT margin			Net income margin			CAGR 22E-24E				
	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.	
Large platforms																	
Microsoft	15.7%	13.8%	14.5%	50.0%	50.7%	na	42.3%	42.8%	43.5%	35.4%	35.5%	35.2%	14.2%	na	15.8%	13.9%	
Oracle	12.3%	10.2%	6.0%	45.6%	47.0%	47.1%	40.2%	42.4%	43.3%	23.8%	29.4%	30.9%	8.1%	9.9%	12.2%	23.2%	
IBM	5.1%	3.3%	5.7%	25.8%	27.2%	27.0%	17.3%	19.1%	19.0%	14.2%	14.9%	14.9%	4.5%	6.9%	9.5%	7.0%	
SAP	9.3%	6.8%	7.9%	32.2%	33.1%	34.4%	26.3%	27.9%	29.6%	18.6%	20.5%	21.3%	7.3%	10.9%	13.8%	14.9%	
Median	10.8%	8.5%	6.9%	38.9%	40.1%	34.4%	33.2%	35.1%	36.4%	21.2%	24.9%	26.1%	7.7%	9.9%	13.0%	14.4%	
Average	10.6%	8.5%	8.5%	38.4%	39.5%	36.2%	31.5%	33.0%	33.8%	23.0%	25.1%	25.6%	8.5%	9.2%	12.8%	14.7%	

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 25th July 2022

“na” = not available

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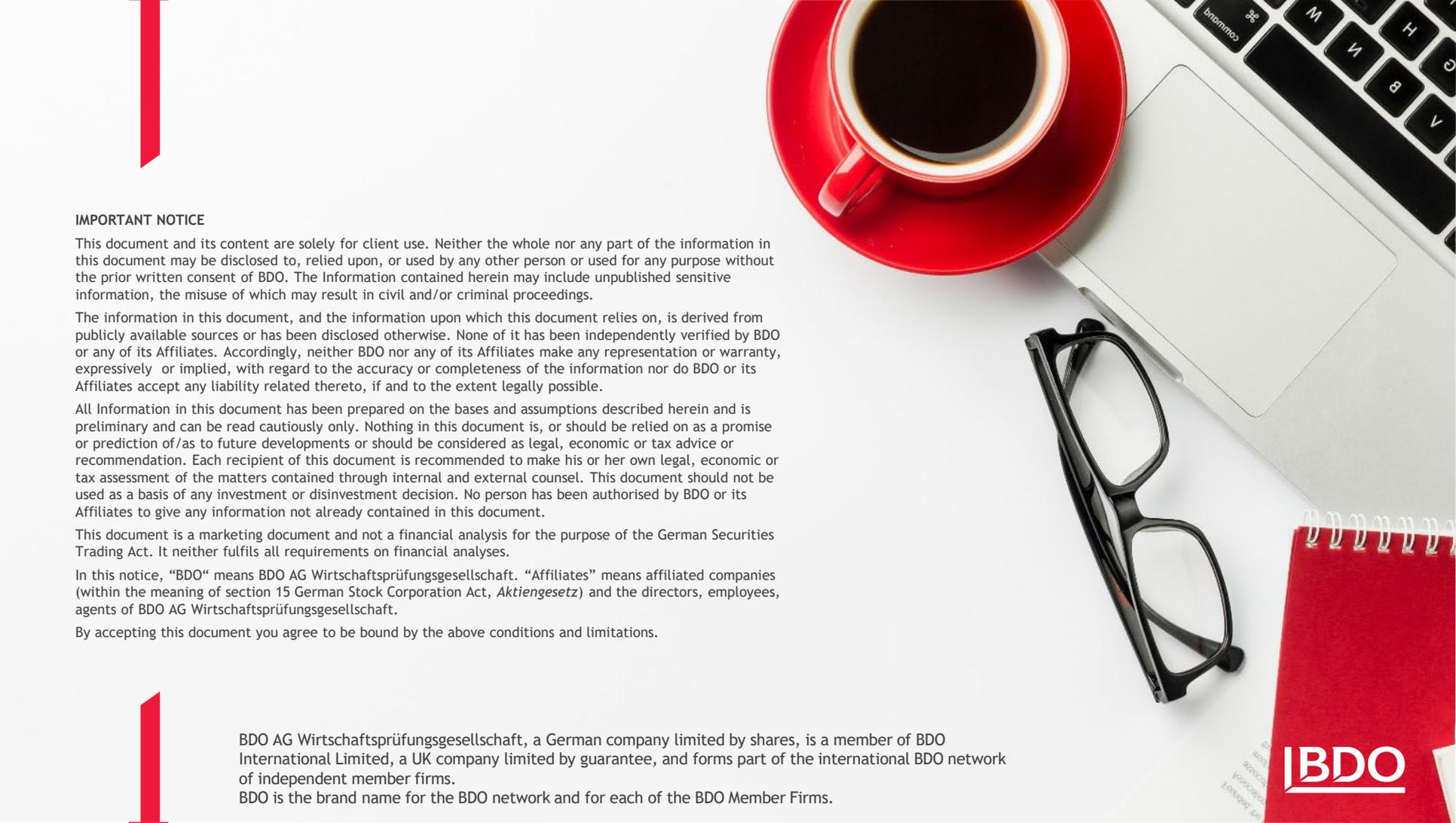
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