

## Key observations — Software sector Q4-2021

Jan-2022 stock market sell-off cuts back SaaS valuation premium, M&A sentiment remains robust

#### January 2022 stock market sell-off



- Global stock markets experience a massive sell-off in January 2022 due to a toxic cocktail that includes (i) FED expected to pursue four interest rate hikes in 2022 on the back of steeply raising US inflation rates, (ii) the Russia Ukraine conflict, and (iii) Corona pandemic still ongoing
- By YTD 19<sup>th</sup> Jan-22, NASDAQ-100 is down by 8.8%, Dow Jones decreased by 4.3%, while DAX-40 fell by 1.3%
- Fast growing SaaS stocks have sky-rocketed after the first Covid wave in Mar-2020. Stock markets translated high sales growth rates into a steep SaaS valuation premium compared to (non-SaaS) software companies with lower sales growth but high operating margins. Most of the SaaS valuation premium has been erased in Jan-2022
- SaaS stocks fell by 16.5% since 1<sup>st</sup> Jan 2022 while large platform incumbents (with much lower sales growth but strong operating margins) decreased by 3.8% only

#### **M&A** sentiment



- Software has been and still is one of the most active sectors in M&A terms
- 2021 saw a 5 years high in transaction numbers with over 3,800 deals globally (+55% y/y)
- In Germany, a strong increase in transaction activity has been observed as well: 179 transactions happened in 2021 which is an increase of 50% over 2021
- Key driver of raising sector M&A activity are Private Equity funds which contributed 47% (85 deals) to domestic software deal flow compared to 37 deals in 2020
- While transaction activity may cool down short-term, the software sector remains a "structural winner" given its
  combination of resilient business models with promising growth rates and high operating margins



### M&A sentiment & KPIs Q4-2021

#### M&A sentiment software sector — the "big picture"

#### **Global 722** in 04-2021 No. of deals 816 in Q4-2020 €177bn in 04-2021 Transaction Volume €92bn in O4-2020 4.2x in 2021 EV/Sales (x) (median-based) 3.3x in 2020 Germany No. of deals with **37** in 04-2021 German targets 33 in O4-2020 Private Equity 47% in 2021 involvement 40% global in 2021 4.0x in 2021\* EV/Sales (x) (median-based) 4.0x in 2020

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

Subsector	EV/Sales 22E	EV/EBITDA 22E	Sales growth 22E	EBITDA-margin 22E
SaaS	12.3x	36.5x	27.5%	13.8%
SCM	11.4x	34.3x	13.5%	28.5%
PLM & Engineering	11.4x	30.1x	10.4%	37.1%
НСМ	10.1x	29.3x	17.2%	26.2%
ERP	9.8x	25.4x	20.0%	24.7%
Cyber- security	7.9x	19.3x	14.6%	25.6%
Large platforms	5.8x	14.0x	4.8%	42.0%

Sources: Mergermarket, CapitalIQ, BDO analysis

Note: M&A sentiment transaction volume based on deals with disclosed figures. EV = Enterprise value (median-based) per 19th January 2022

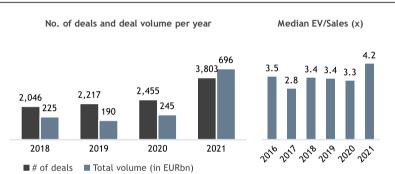


<sup>\*)</sup> Adjusted Germany EV/Sales(x) 2021: 2.5x

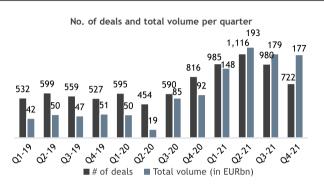
<sup>\*\*)</sup> Implied multiples in excess of 25x (EV/Sales) or 50x (EV/EBITDA) have been excluded

### M&A activity over time

2021 has seen an unprecedented level of deal activity in the software sector which rose both globally and domestic to new highs Global M&A activity (based on announced deals)

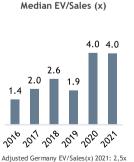




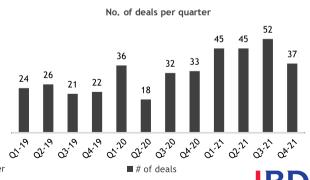


German M&A activity (based on announced deals, German targets)









Sources: Mergermarket, BDO analysis

Note: Figures are subject to limited disclosed deal information

### Recent software sector share price performance

January 2022 stock market sell-off has led to a significant re-rating

#### Share price performance over time (by selected software subsector)



Software subsector		Change (%)	
Software subsector	3-year	1-Year	4-weeks
SaaS	226.9%	1.7%	-16.5%
Cybersecurity	199.9%	0.5%	-14.4%
ERP & General Business	152.3%	-5.0%	-15.9%
Supply Chain Management	137.4%	4.8%	-10.7%
NASDAQ-100 Index	124.0%	15.8%	-3.7%
PLM & Engineering	111.2%	4.0%	-13.0%
Human Capital Management	82.1%	-0.5%	-11.5%
Large Platforms	74.8%	27.0%	-3.8%





## Selected M&A transactions Q4-2021 (1/4)

#### Global

Date	Buyer	Target	Target activity	EV (€m)	EV/Sales(x)	EV/EBITDA(x)	TX-Vol. (€m)
Dec 2021	IN THOMSON PRECRUIT  IN STORES  Tricked @ Methods  GEOGSTC  Tricked  Tricke	PARADOX (13,3% stake)	Conversational AI assistant platform for HR and talent acquisition	1,325	na	na	177
Dec 2021	L&F ACQUISITION	<b>⊚</b> ZEROFOX	Cyber security intelligence company aiming to disrupt phishing, impersonations, malicious domains and data leakage	1,037	23.8x	na	1,037
Dec 2021	THOMABRAVO	Septembline Septembline	Global payment automation software	2,315	5.6x	55.9x	2,315
Dec 2021	** Five Arrows **Perception.com/c rts	kidskonnect	Library of high-quality, printable worksheets for teachers and homeschoolers	na	na	na	na
Dec 2021	NORTH MOUNTAIN MERGER CORP.	corcentric	Cloud-based financial process automation solutions	835	na	na	835
Dec 2021	PERMIRA	mimecast <sup>e</sup>	Cloud-based email management solutions	5,029	11.3x	81.7x	5,131
Dec 2021	<b>⊘</b> FORTIVE	pro <b>v</b> ation	Software solutions that streamline procedural documentation in hospitals	1,261	na	na	1,261
Dec 2021	The Blackstone Group	rthSolutions	Enterprise cloud solutions in the utility, energy and telecom industries	na	na	na	na
Nov 2021	Clearlake Capital	Quest Where Next Meets Now.	Enterprise IT infrastructure software solutions	4,788	na	na	4,788
Nov 2021	MARLIN EQUITY	Technology Partners  (undisclosed stake)	Billing automation software and revenue cycle management applications	na	na	na	na



## Selected M&A transactions Q4-2021 (2/4)

#### Global

Date	Buyer	Target	Target activity	EV (€m)	EV/Sales(x)	EV/EBITDA(x)	TX-Vol. (€m)
Nov 2021	COFRA Bregal Unternehmerkapital	isah BUSINESS SOFTWARE	ERP (Enterprise Resource Planning) software	na	na	na	na
Nov 2021	STREET GENERAL & CARAYST X THEORY CONTROL OF THE STREET CONTROL OF	Lacework (15,66% stake)	Cloud security platform	7,317	na	na	1,146
Nov 2021	workday.	VNDLY	Cloud-based work management systems	450	na	na	450
Nov 2021	THE CARLYLE GROUP	<b>AUTOFORM</b> Forming Reality	Automotive industry software solutions	1,768	na	na	1,768
Nov 2021	Bentley* Advancing infrastructure	<b>POWER LINE</b>	Software for the design of overhead electric power transmission, distribution, and communication lines and their structures	617	na	na	617
Nov 2021	materialise Innovators you can count on	LINK3D Additive MES Software	Manufacturing execution systems (MES) workflow software	29	na	na	29
Nov 2021	SPECTRUM EQUITY	ZENW <b>¢</b> RK	Digital tax compliance and regulatory reporting software	na	na	na	141
Nov 2021	PERMIRA Advise December ADIA  GIC  COP INVESTMENT CHAPTERS  GOARD	<b>™</b> McAfee	Computer security solutions	20,752	5.3x	23.9x	20,752
Nov 2021	opentext*	zix	E-mail protection and transaction services	na	na	na	723
Nov 2021	MAIN CAPITAL PARTNERS	Ziq	Software solutions for housing corporations, student accommodation and commercial property management	na	na	na	na



## Selected M&A transactions Q4-2021 (3/4)

#### **Global**

Date	Buyer	Target	Target activity	EV (€m)	EV/Sales(x)	EV/EBITDA(x)	TX-Vol. (€m)
Nov 2021	LEA MATTHER'S	basenet. (majority stake)	Credit and mortgage management software	na	na	na	na
Nov 2021	BainCapital BainCapital	(undisclosed stake)	SaaS employee scheduling, time-tracking and team messaging platform	na	na	na	173
Oct 2021	Investment Partners	(minority stake)	Cyber security software solutions	na	na	na	15
Oct 2021	Balderton. LEFT LANE	yokoy (undisclosed stake)	Al platform for travel expenses management	na	na	na	22
Oct 2021	Gilde Buy Out Advisory	o tas group an owl campany (73,2% stake)	Software for electronic money, payment systems, capital markets and $\ensuremath{ERP}$	185	2.9x	23.9x	185
Oct 2021	SilverLake SoftBank Vision Fund SoftBank	360Learning (undisclosed stake)	E-learning and MOOC (Massive Open Online Courses) platform	na	na	na	172
Oct 2021	STAR COMPLIANCE	ideagen	Solutions, products and services in the areas of compliance, risk management, information security and financial crime prevention	18	na	na	18
Oct 2021	EMERSON.	aspentech	Enterprise asset performance management, monitoring and asset optimization solutions	9,499	15.5x	29.5x	9,526
Oct 2021	TPG	nintex (majority stake)	Process management and automation software solutions	na	na	na	1,724
Oct 2021	PROVIDENCEEQUITY	tenstreet	Web-based provider of driver recruiting software and workflow solutions for the trucking and transportation industry	na	na	na	na



## Selected M&A transactions Q4-2021 (4/4)

#### Germany

Date	Buyer	Target	Target activity	EV (€m)	EV/Sales(x)	EV/EBITDA(x)	TX-Vol. (€m)
Dec 2021	KKR	(minority stake)	Supply chain software business of Koerber AG	1,500	na	na	1,500
Dec 2021	EQT	MAMBU (minority stake)	Microfinance software	490	na	na	235
Dec 2021	Doutsche Beteiligungs AG	freiheit.com technologies	Software using AI, machine learning and VR	na	na	na	na
Dec 2021	Gilde Buy Out Partners	]init[	Telematics and electronic fare collection systems for public transport	na	na	na	na
Nov 2021	Elvaston	SOFTWARE	Integrated and modular ERP software solutions	na	na	na	na
Nov 2021	revalize	TENADO <sup>®</sup>	Computer-aided design (CAD) software for both 2D and 3D technical drawings	na	na	na	na
Nov 2021	revalize	PRO.FILE	Software platform solutions for digitization	na	na	na	na
Nov 2021	fındosinvestor	UNICON	End device operating system for VDI, DaaS, cloud environments	na	na	na	na
Nov 2021	THE CARLYLE GROUP	(majority stake)	Software with a focus on accounting, controlling, human resources (HR) and adjacent software	na	na	na	na
Oct 2021	PROVIDENCEEQUITY	<b>ORAPID</b> DATA the Erfolg iss unser Programme	Funeral home software	na	na	na	na
Oct 2021	Bridgepoint	PTV GROUP (60% stake)	Software, consulting and research for travel, traffic and transportation planning in the business to business field	na	na	na	na
Oct 2021	All activations.	<u>, o</u> fficeBots	Cloud-based robotic process automation software platform	na	na	na	na
Oct 2021	LEA	b+m Informatik	Innovative software for banks and insurance companies, a full-service provider to the German financial sector	na	na	na	na



SaaS players (1/2)

	Market cap	EV		EV / Sales			EV / EBITD	A		EV / EBIT			P/E	
Companies	(€m)	(€m)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
SaaS														
Adobe	216,564	215,573	13.6x	11.9x	10.7x	27.8x	24.2x	21.1x	30.4x	26.2x	22.7x	37.2x	31.8x	28.0x
Salesforce	196,376	200,735	7.3x	6.2x	5.2x	23.7x	20.0x	na	36.4x	29.5x	23.1x	46.1x	37.3x	30.1x
Shopify	114,092	108,436	20.2x	15.0x	10.5x	nm	nm	nm	nm	nm	68.6x	nm	nm	30.5x
ServiceNow	91,400	90,692	13.9x	11.2x	9.1x	43.7x	34.7x	29.1x	56.5x	43.6x	34.7x	70.4x	53.5x	37.6x
Snowflake	76,258	73,009	nm	nm	19.3x	nm	nm	na	nm	nm	nm	nm	nm	nm
Atlassian	65,353	65,050	nm	20.2x	15.1x	nm	nm	na	nm	nm	51.7x	nm	nm	75.2x
Workday	54,950	53,698	10.1x	8.4x	7.3x	40.8x	32.7x	21.7x	54.3x	42.1x	29.8x	65.7x	51.4x	37.9x
Datadog	35,989	35,408	nm	21.1x	14.6x	nm	nm	na	nm	nm	68.1x	nm	nm	na
Twilio	32,005	28,388	8.8x	6.8x	4.7x	nm	nm	na	nm	nm	na	nm	nm	43.3x
Zscaler	31,240	30,706	nm	22.8x	15.2x	nm	nm	na	nm	nm	na	nm	nm	nm
Veeva Systems	29,824	27,801	14.7x	12.6x	na	37.4x	31.8x	na	38.4x	32.7x	na	51.7x	43.8x	31.7x
Unity Software	29,115	28,094	21.9x	16.8x	11.9x	nm	nm	47.9x	nm	nm	60.8x	nm	nm	na
Okta	27,056	26,647	17.6x	13.1x	9.5x	nm	nm	na	nm	nm	nm	nm	nm	nm
Cloudflare	26,739	26,240	nm	nm	16.1x	nm	nm	na	nm	nm	nm	nm	nm	nm
Palantir	25,719	23,719	13.5x	10.5x	na	48.7x	35.6x	na	50.8x	36.7x	na	60.8x	41.8x	na
DocuSign	22,141	22,214	9.8x	7.9x	6.6x	46.7x	37.4x	28.8x	53.2x	40.0x	na	55.6x	42.8x	37.9x
HubSpot	18,858	18,456	12.6x	10.0x	na	nm	nm	na	nm	nm	na	nm	nm	na
NetApp	17,511	16,058	2.8x	2.6x	2.6x	10.5x	9.7x	na	11.6x	10.7x	na	16.2x	14.3x	11.3x
Zoominfo	17,398	18,389	21.3x	16.3x	11.7x	49.1x	36.4x	na	51.5x	38.5x	26.6x	70.4x	50.9x	36.1x
Splunk	16,618	18,110	6.9x	5.7x	4.6x	nm	nm	na	nm	nm	nm	nm	nm	76.7x

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 19th January 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)



SaaS players (2/2)

	Market cap	EV		EV / Sales		1	EV / EBITD	A		EV / EBIT			P/E	
Companies	(€m)	(€m)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
SaaS														
Paycom	16,851	16,737	14.6x	11.8x	9.8x	36.5x	28.9x	23.7x	43.0x	33.9x	27.7x	58.3x	46.0x	35.7x
UiPath	16,318	14,710	14.5x	11.0x	8.3x	nm	nm	nm	nm	nm	nm	nm	nm	nm
Bill.com	15,175	14,322	nm	18.5x	14.1x	nm	nm	na	nm	nm	na	nm	nm	na
Confluent	14,289	13,419	nm	21.8x	15.5x	nm	nm	nm	nm	nm	nm	nm	nm	nm
RingCentral	13,895	14,854	8.5x	6.8x	5.3x	nm	46.9x	na	nm	60.1x	46.7x	97.5x	71.2x	35.8x
Qualtrics	13,365	13,499	11.3x	9.3x	na	nm	nm	na	nm	nm	na	nm	nm	na
Dynatrace	12,697	12,722	13.2x	10.6x	8.3x	nm	38.8x	na	53.1x	40.6x	30.3x	62.8x	48.7x	na
Bentley Systems	10,546	11,601	12.1x	11.0x	10.3x	36.0x	30.9x	29.1x	39.0x	33.2x	na	45.2x	38.5x	na
Zendesk	10,393	10,603	7.1x	5.7x	4.5x	nm	49.2x	na	nm	59.6x	36.1x	nm	67.6x	44.8x
SentinelOne	9,732	8,290	nm	17.1x	11.8x	nm	nm	na	nm	nm	na	nm	nm	na
Paylocity	9,448	9,453	11.9x	9.9x	8.0x	43.7x	34.6x	26.7x	54.0x	42.2x	na	71.5x	61.2x	48.1x
Asana	8,719	8,641	19.8x	14.9x	11.1x	nm	nm	na	nm	nm	na	nm	nm	na
Coupa	8,757	9,610	12.6x	10.1x	7.8x	nm	48.5x	na	nm	nm	64.8x	nm	nm	86.7x
Dropbox	8,200	8,705	4.2x	3.9x	3.5x	11.8x	10.8x	9.3x	14.4x	13.2x	12.0x	15.1x	13.8x	11.7x
monday.com	8,184	7,412	19.0x	14.0x	9.4x	nm	nm	nm	nm	nm	nm	nm	nm	na
Upstart	7,655	7,373	7.1x	5.5x	3.6x	31.9x	25.0x	21.8x	71.5x	42.9x	32.9x	37.3x	32.1x	na
Procore	7,711	6,845	10.5x	na	na	nm	na	na	nm	na	na	nm	na	na
Five9	7,670	8,033	12.2x	9.8x	7.9x	nm	nm	na	nm	73.6x	61.8x	nm	72.5x	61.2x
Pure Storage	6,673	6,276	2.9x	2.5x	na	21.9x	16.3x	na	29.6x	21.5x	na	35.0x	26.0x	na
Smartsheet	6,584	6,266	9.9x	7.5x	5.6x	nm	nm	nm	nm	nm	nm	nm	nm	na
		Median	12.3x	10.6x	9.3x	36.5x	32.7x	25.2x	46.9x	38.5x	34.7x	55.6x	43.8x	37.6x
		Average	12.1x	11.3x	9.4x	34.0x	31.2x	25.9x	43.0x	37.9x	41.1x	52.7x	44.5x	42.1x

Source: CapitalIQ



Note: Financials calendarised to 31st December, market data as of 19th January 2022, "na" = not available

<sup>&</sup>quot;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)

	S	ales growth		EE	BITDA marg	gin	Е	BIT margi	in	Net i	ncome m	argin		CAGR 2	2E-24E	
Companies	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
SaaS																
Adobe	13.8%	14.8%	11.4%	49.0%	49.1%	50.4%	44.8%	45.3%	46.9%	36.8%	37.4%	38.2%	13.1%	14.7%	15.6%	15.3%
Salesforce	20.7%	18.0%	17.9%	30.7%	30.8%	na	19.9%	20.9%	22.6%	15.4%	16.2%	17.0%	17.9%	na	25.5%	23.8%
Shopify	33.4%	34.7%	42.6%	13.7%	13.8%	14.7%	12.3%	13.5%	15.3%	14.7%	15.3%	36.2%	38.6%	43.6%	54.6%	117.3%
ServiceNow	25.6%	24.4%	22.5%	31.9%	32.3%	31.4%	24.7%	25.7%	26.3%	19.9%	21.1%	24.5%	23.5%	22.4%	27.5%	36.8%
Snowflake	67.8%	56.5%	41.7%	3.0%	7.3%	na	(0.1%)	3.6%	5.7%	0.7%	4.1%	1.0%	48.9%	na	na	79.4%
Atlassian	24.2%	25.8%	33.6%	25.5%	26.9%	na	23.9%	25.8%	29.2%	16.6%	18.0%	20.2%	29.7%	na	43.2%	42.9%
Workday	19.3%	19.8%	16.1%	24.7%	25.8%	33.5%	18.6%	20.0%	24.4%	15.7%	16.8%	19.6%	17.9%	37.1%	35.1%	31.7%
Datadog	41.5%	35.4%	44.9%	15.3%	16.3%	na	13.9%	15.3%	21.4%	13.6%	14.8%	na	40.1%	na	73.8%	na
Twilio	32.3%	30.2%	43.1%	8.7%	9.6%	na	0.5%	2.1%	na	(0.2%)	1.4%	12.3%	36.5%	na	na	na
Zscaler	41.7%	33.2%	49.3%	13.9%	15.4%	na	10.4%	12.5%	na	9.2%	11.7%	11.6%	41.0%	na	na	58.4%
Veeva Systems	18.1%	17.2%	na	39.4%	39.5%	na	38.3%	38.4%	na	30.6%	30.8%	na	na	na	na	27.7%
Unity Software	33.3%	30.8%	40.7%	2.0%	7.9%	24.9%	(1.8%)	4.4%	19.6%	(2.1%)	3.3%	na	35.7%	374.2%	na	na
Okta	38.2%	34.7%	38.2%	(1.6%)	4.3%	na	(4.7%)	1.4%	8.7%	(4.5%)	1.3%	6.7%	36.5%	na	na	na
Cloudflare	37.0%	33.1%	56.5%	10.7%	11.8%	na	0.9%	2.9%	4.8%	0.6%	2.6%	4.6%	44.3%	na	226.5%	292.1%
Palantir	30.1%	28.4%	na	27.8%	29.6%	na	26.7%	28.7%	na	24.2%	27.4%	na	na	na	na	na
DocuSign	26.4%	24.1%	19.7%	21.0%	21.1%	22.9%	18.4%	19.7%	na	17.6%	18.4%	17.3%	21.9%	27.4%	na	21.0%
HubSpot	29.1%	25.3%	na	12.8%	13.4%	na	9.2%	10.5%	na	7.5%	8.7%	na	na	na	na	na
NetApp	7.1%	5.3%	0.3%	26.4%	27.4%	na	24.0%	24.6%	na	18.7%	20.1%	25.4%	2.8%	na	na	19.8%
Zoominfo	33.5%	30.8%	38.7%	43.3%	44.7%	na	41.3%	42.2%	44.1%	28.6%	30.2%	30.7%	34.7%	na	39.2%	39.6%
Splunk	18.0%	21.6%	23.0%	(4.6%)	5.3%	na	(9.6%)	(2.8%)	2.5%	(8.4%)	(2.3%)	5.5%	22.3%	na	na	na

Source: CapitalIQ Note: Financials cale "na" = not available



# Sales growth rates & operating margins SaaS players (2/2)

		Sa	les growth	1	E	BITDA marg	gin	Е	BIT margi	in	Net	income m	argin		CAGR 2	2E-24E	
Companies		2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
SaaS																	
Paycom		24.1%	23.5%	20.9%	40.1%	41.0%	41.4%	34.0%	34.9%	35.4%	25.2%	25.9%	27.6%	22.2%	24.1%	24.6%	27.8%
UiPath		34.0%	31.3%	33.2%	1.9%	5.9%	6.6%	2.4%	4.5%	5.8%	1.1%	3.4%	4.2%	32.2%	144.5%	104.8%	161.6%
Bill.com		64.7%	37.2%	31.2%	(9.4%)	(4.5%)	na	(10.7%)	(5.3%)	na	(11.9%)	(7.1%)	na	34.2%	na	na	na
Confluent		37.2%	34.6%	41.1%	(38.8%)	(20.8%)	(18.7%)	(41.7%)	(23.3%)	(19.9%)	(41.5%)	(22.8%)	(19.8%)	37.8%	(4.3%)	(4.8%)	(5.0%)
RingCentral		25.1%	24.8%	30.1%	13.5%	14.6%	na	10.6%	11.4%	11.2%	8.2%	9.0%	13.7%	27.4%	na	31.4%	64.9%
Qualtrics		28.3%	21.8%	na	5.6%	8.8%	na	2.4%	4.7%	na	(0.3%)	2.7%	na	na	na	na	na
Dynatrace		26.2%	24.6%	28.6%	26.2%	27.4%	na	24.9%	26.2%	27.3%	21.0%	21.8%	na	26.6%	na	32.4%	na
Bentley Systems		13.8%	10.0%	6.3%	33.5%	35.5%	35.4%	30.9%	33.0%	na	24.3%	25.9%	na	8.1%	11.1%	na	na
Zendesk		26.8%	25.1%	25.9%	9.8%	11.6%	na	7.7%	9.6%	12.5%	6.7%	8.3%	9.9%	25.5%	na	59.6%	52.8%
SentinelOne		74.1%	65.9%	45.1%	(48.9%)	(11.2%)	na	(58.8%)	(20.6%)	na	(59.6%)	(21.5%)	na	55.1%	na	na	na
Paylocity		24.6%	20.7%	23.8%	27.2%	28.4%	29.8%	22.0%	23.3%	na	16.6%	16.1%	16.5%	22.3%	27.9%	na	21.9%
Asana		37.8%	33.1%	33.6%	(36.3%)	(23.8%)	na	(38.0%)	(24.2%)	na	(37.3%)	(24.4%)	na	33.4%	na	na	na
Coupa		23.0%	24.7%	29.0%	21.5%	20.8%	na	8.4%	10.7%	12.1%	7.0%	9.2%	8.2%	26.8%	na	52.2%	37.4%
Dropbox		9.8%	8.4%	10.8%	35.4%	35.7%	37.6%	29.0%	29.2%	29.1%	26.0%	26.3%	28.0%	9.6%	12.9%	9.9%	13.6%
monday.com		47.2%	35.9%	49.1%	(29.5%)	(18.4%)	(2.7%)	(26.3%)	(12.7%)	(3.6%)	(27.0%)	(12.9%)	na	42.4%	(57.1%)	(47.6%)	na
Upstart		45.9%	28.7%	55.5%	22.3%	22.1%	16.3%	9.9%	12.9%	10.8%	19.8%	17.9%	na	41.4%	20.7%	47.3%	na
Procore		47.8%	na	na	(3.4%)	na	na	(10.0%)	na	na	(10.5%)	na	na	na	na	na	na
Five9		23.8%	24.6%	23.7%	15.8%	17.1%	na	11.6%	13.4%	12.9%	11.1%	12.9%	12.4%	24.1%	na	30.8%	31.4%
Pure Storage		18.2%	16.4%	na	13.3%	15.4%	na	9.9%	11.7%	na	8.9%	10.2%	na	na	na	na	na
Smartsheet		34.6%	33.2%	34.0%	(1.6%)	1.3%	1.2%	(4.8%)	(1.2%)	0.5%	(4.7%)	(1.1%)	na	33.6%	na	na	na
	Median	27.5%	25.2%	32.2%	13.8%	15.4%	24.9%	10.2%	12.1%	12.9%	9.0%	10.9%	15.1%	30.9%	23.2%	33.8%	34.3%
	Average	30.8%	27.3%	31.3%	12.2%	15.9%	21.6%	8.0%	12.1%	16.2%	5.9%	9.7%	15.5%	29.6%	49.9%	43.8%	54.5%

Source: CapitalIQ



#### Supply chain management

	Market cap	EV		EV / Sales			EV / EBITDA			EV / EBIT			P/E	
Companies	(€m)	(€m)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Supply chain managemen	t													
Dassault Systémes	60,259	61,462	11.4x	10.4x	9.1x	31.4x	28.3x	na	35.1x	31.4x	30.4x	45.5x	40.7x	34.3x
WiseTech Global	49,298	50,406	24.0x	20.1x	17.2x	nm	42.7x	31.1x	67.6x	52.0x	43.6x	91.1x	71.0x	48.9x
Aspen	37,402	36,815	13.5x	12.2x	10.9x	25.1x	21.3x	18.2x	25.6x	22.9x	20.4x	28.9x	26.0x	23.2x
Manhatten Associates	32,902	34,948	11.5x	10.4x	9.2x	46.7x	40.4x	30.9x	49.0x	42.3x	na	63.7x	54.8x	33.1x
Descartes	25,916	25,738	11.8x	10.3x	8.8x	27.1x	23.2x	20.0x	44.5x	34.4x	28.6x	36.9x	33.3x	28.5x
SPS Commerce	16,353	17,179	9.0x	7.7x	na	31.6x	26.0x	na	36.6x	29.9x	na	54.9x	45.3x	na
Kinaxis	12,189	13,285	10.1x	8.7x	7.2x	48.7x	39.8x	na	nm	nm	51.9x	87.2x	68.7x	na
American Software	10,546	11,601	5.2x	4.9x	na	37.0x	29.2x	na	52.9x	na	na	56.3x	43.8x	na
Tecsys	9,679	9,654	3.7x	3.4x	na	37.4x	24.6x	na	58.1x	na	na	78.3x	na	na
		Median	11.4x	10.3x	9.1x	34.3x	28.3x	25.4x	46.7x	32.9x	30.4x	56.3x	44.6x	33.1x
		Average	11.1x	9.8x	10.4x	35.6x	30.6x	25.0x	46.2x	35.5x	35.0x	60.3x	48.0x	33.6x







Supply chain management

	Sa	ales growth	1	E	BITDA marg	in	Е	BIT margi	in	1	et income	margin		CAGR 2	22E-24E	
Companies	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	202	E 2023E	2024E	Sales	EBITDA	EBIT	N.I.
Supply chain management																
Dassault Systémes	10.8%	10.0%	14.3%	36.4%	36.7%	na	32.6%	33.1%	30.0%	24.	% 25.1%	26.0%	12.1%	na	7.5%	15.2%
WiseTech Global	22.2%	19.3%	16.9%	44.9%	47.1%	55.4%	35.5%	38.7%	39.4%	26.	% 28.8%	35.8%	18.1%	31.2%	24.5%	36.5%
Aspen	4.6%	10.7%	11.2%	53.5%	57.1%	60.1%	52.5%	53.1%	53.4%	46.	% 46.3%	46.8%	11.0%	17.5%	11.9%	11.7%
Manhatten Associates	8.1%	10.7%	13.2%	24.7%	25.8%	29.8%	23.5%	24.6%	na	18.	% 19.5%	28.5%	11.9%	23.0%	na	38.8%
Descartes	13.5%	14.6%	16.9%	43.5%	44.3%	44.0%	26.5%	29.9%	30.7%	32.	% 31.7%	31.7%	15.8%	16.4%	24.7%	13.8%
SPS Commerce	15.4%	16.3%	na	28.5%	29.8%	na	24.6%	25.9%	na	17.	% 18.1%	na	na	na	na	na
Kinaxis	24.8%	16.4%	21.6%	20.8%	21.9%	na	4.7%	6.1%	13.8%	12.	% 13.4%	na	18.9%	na	103.6%	na
American Software	8.5%	7.3%	na	14.1%	16.6%	na	9.9%	na	na	10.	% 12.9%	na	na	na	na	na
Tecsys	13.7%	10.9%	na	10.0%	13.6%	na	6.4%	na	na	4.	% na	na	na	na	na	na
Median	13.5%	10.9%	15.6%	28.5%	29.8%	49.7%	24.6%	29.9%	30.7%	18.	% 22.3%	31.7%	13.9%	20.3%	24.5%	15.2%
Average	13.5%	12.9%	15.7%	30.7%	32.5%	47.3%	24.0%	30.2%	33.5%	21.	% 24.5%	33.8%	14.6%	22.0%	34.4%	23.2%

Source: CapitalIQ



#### PLM & Engineering

	Market cap	EV		EV / Sales		1	EV / EBITDA	A		EV / EBIT			P/E	
Companies	(€m)	(€m)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
PLM & Engineering														
Dassault Systémes	60,259	61,462	11.4x	10.4x	9.1x	31.4x	28.3x	na	35.1x	31.4x	30.4x	45.5x	40.7x	34.3x
Autodesk	49,298	50,406	11.3x	9.8x	8.6x	28.9x	23.7x	19.1x	30.9x	25.0x	20.0x	37.7x	30.0x	27.0x
Cadence Design	37,402	36,815	12.0x	11.4x	10.1x	28.5x	na	na	31.2x	na	na	38.4x	36.5x	32.6x
Hexagon	32,902	34,948	7.2x	6.7x	5.8x	19.0x	17.3x	14.0x	25.3x	22.9x	18.5x	29.4x	26.4x	20.1x
ANSYS	25,916	25,738	13.9x	12.8x	11.6x	31.4x	28.8x	na	33.0x	29.8x	na	41.9x	37.5x	34.8x
Trimble	16,353	17,179	4.5x	na	na	17.7x	na	na	18.5x	na	na	22.1x	na	na
PTC	12,189	13,285	7.6x	6.9x	na	20.0x	18.6x	na	21.0x	18.8x	na	25.6x	22.6x	na
Bentley Systems	10,546	11,601	12.1x	11.0x	10.3x	36.0x	30.9x	29.1x	39.0x	33.2x	na	45.2x	38.5x	na
Nemetschek	9,679	9,654	12.8x	11.5x	10.1x	42.7x	37.3x	32.6x	53.1x	44.9x	37.0x	65.8x	56.3x	48.9x
Altair Engineering	4,166	3,979	7.9x	7.2x	7.9x	49.8x	39.2x	na	60.9x	42.5x	nm	79.0x	59.8x	na
		Median	11.4x	10.4x	9.6x	30.1x	28.6x	24.1x	32.1x	30.6x	25.2x	40.2x	37.5x	33.4x
		Average	10.1x	9.7x	9.2x	30.5x	28.0x	23.7x	34.8x	31.1x	26.5x	43.1x	38.7x	33.0x







#### PLM & Engineering

	Sa	ales growth	1	EB	SITDA marg	in	E	BIT margi	n	Net i	income ma	argin		CAGR 2	2E-24E	
Companies	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
PLM & Engineering																
Dassault Systémes	10.8%	10.0%	14.3%	36.4%	36.7%	na	32.6%	33.1%	30.0%	24.6%	25.1%	26.0%	12.1%	na	7.5%	15.2%
Autodesk	17.4%	15.4%	14.0%	39.1%	41.3%	44.9%	36.5%	39.1%	42.9%	29.3%	31.8%	31.0%	14.7%	23.0%	24.4%	18.1%
Cadence Design	8.5%	5.2%	13.3%	42.1%	na	na	38.5%	na	na	31.8%	31.7%	31.4%	9.2%	na	na	8.5%
Hexagon	12.6%	7.7%	14.1%	37.8%	38.5%	41.7%	28.5%	29.2%	31.5%	23.0%	23.8%	27.4%	10.9%	16.4%	16.7%	21.0%
ANSYS	9.8%	8.6%	10.4%	44.3%	44.5%	na	42.1%	43.0%	na	33.4%	34.4%	33.5%	9.5%	na	na	9.7%
Trimble	8.9%	na	na	25.7%	na	na	24.5%	na	na	19.6%	na	na	na	na	na	na
PTC	8.2%	10.2%	na	37.9%	37.0%	na	36.0%	36.5%	na	27.2%	27.9%	na	na	na	na	na
Bentley Systems	13.8%	10.0%	6.3%	33.5%	35.5%	35.4%	30.9%	33.0%	na	24.3%	25.9%	na	8.1%	11.1%	na	na
Nemetschek	11.0%	11.8%	13.6%	30.1%	30.8%	31.0%	24.2%	25.6%	27.3%	19.6%	20.4%	20.7%	12.7%	14.4%	19.7%	16.0%
Altair Engineering	10.1%	10.2%	(8.9%)	15.9%	18.3%	na	13.0%	16.9%	7.2%	10.5%	12.6%	na	0.2%	na	(25.3%)	na
Median	10.4%	10.0%	13.5%	37.1%	36.9%	38.6%	31.8%	33.0%	30.0%	24.5%	25.9%	29.2%	10.2%	15.4%	16.7%	15.6%
Average	11.1%	9.9%	9.6%	34.3%	35.3%	38.3%	30.7%	32.0%	27.8%	24.3%	26.0%	28.3%	9.7%	16.2%	8.6%	14.8%

Source: CapitalIQ Note: Financials cale "na" = not available



#### Human Capital Management

	Market cap	EV		EV / Sales			EV / EBITD	A		EV / EBIT			P/E	
Companies	(€m)	(€m)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Human Capital Management	i .													
Automatic Data Processing	83,475	85,103	5.8x	5.4x	5.1x	22.1x	20.3x	19.0x	24.8x	22.7x	21.4x	31.7x	28.9x	27.0x
Workday	54,950	53,698	10.1x	8.4x	7.3x	40.8x	32.7x	21.7x	54.3x	42.1x	29.8x	65.7x	51.4x	37.9x
Paychex	38,552	38,447	9.3x	8.8x	8.2x	21.3x	19.9x	na	23.6x	21.9x	20.4x	31.7x	29.4x	26.8x
Paycom	16,851	16,737	14.6x	11.8x	9.8x	36.5x	28.9x	23.7x	43.0x	33.9x	27.7x	58.3x	46.0x	35.7x
Ceridian	10,587	11,309	10.8x	9.1x	na	nm	49.8x	na	nm	nm	na	nm	nm	na
Paylocity	9,448	9,453	11.9x	9.9x	8.0x	43.7x	34.6x	26.7x	54.0x	42.2x	na	71.5x	61.2x	48.1x
Benefitfocus	309	463	2.1x	2.0x	na	12.4x	11.6x	na	33.1x	26.8x	na	nm	nm	na
		Median	10.1x	8.8x	8.0x	29.3x	28.9x	22.7x	38.0x	30.4x	24.5x	58.3x	46.0x	35.7x
		Average	9.2x	7.9x	7.7x	29.5x	28.3x	22.8x	38.8x	31.6x	24.8x	51.8x	43.4x	35.1x





Human Capital Management

	S	ales growth	h	E	BITDA marg	gin	I	EBIT marg	in	Net	income m	argin		CAGR 2	22E-24E	
Companies	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
Human Capital Management																
Automatic Data Processing	7.2%	6.9%	5.5%	26.2%	26.6%	27.0%	23.3%	23.8%	24.0%	17.9%	18.4%	18.6%	6.2%	7.9%	7.6%	8.3%
Workday	19.3%	19.8%	16.1%	24.7%	25.8%	33.5%	18.6%	20.0%	24.4%	15.7%	16.8%	19.6%	17.9%	37.1%	35.1%	31.7%
Paychex	8.3%	6.5%	6.4%	43.7%	44.0%	na	39.6%	40.0%	40.4%	29.5%	29.9%	30.9%	6.5%	na	7.5%	8.8%
Paycom	24.1%	23.5%	20.9%	40.1%	41.0%	41.4%	34.0%	34.9%	35.4%	25.2%	25.9%	27.6%	22.2%	24.1%	24.6%	27.8%
Ceridian	17.2%	18.7%	na	15.9%	18.2%	na	9.2%	11.8%	na	4.9%	7.3%	na	na	na	na	na
Paylocity	24.6%	20.7%	23.8%	27.2%	28.4%	29.8%	22.0%	23.3%	na	16.6%	16.1%	16.5%	22.3%	27.9%	na	21.9%
Benefitfocus	(1.6%)	2.9%	na	16.7%	17.3%	na	6.2%	7.5%	na	(4.3%)	0.4%	na	na	na	na	na
Median	17.2%	18.7%	16.1%	26.2%	26.6%	31.6%	22.0%	23.3%	29.9%	16.6%	16.8%	19.6%	17.9%	26.0%	16.1%	21.9%
Average	14.2%	14.1%	14.6%	27.8%	28.8%	32.9%	21.9%	23.0%	31.0%	15.1%	16.4%	22.7%	15.0%	24.3%	18.7%	19.7%

Source: CapitalIQ



# Implied multiples ERP & General Business

	Market cap	EV		EV / Sales			EV / EBITD	A		EV / EBIT			P/E	
Companies	(€m)	(€m)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
EDD & Commel Business														
ERP & General Business	104.274	200 725				22.7	20.0		26.4	20.5	22.4	44.4	27.2	20.4
Salesforce	196,376	200,735	7.3x	6.2x	5.2x	23.7x	20.0x	na	36.4x	29.5x	23.1x	46.1x	37.3x	30.1x
Shopify	114,092	108,436	20.2x	15.0x	10.5x	nm	nm	nm	nm	nm	68.6x	nm	nm	30.5x
Workday	54,950	53,698	10.1x	8.4x	7.3x	40.8x	32.7x	21.7x	54.3x	42.1x	29.8x	65.7x	51.4x	37.9x
Constellation	30,849	31,554	6.0x	5.0x	na	20.8x	17.3x	na	34.8x	30.1x	na	31.3x	25.9x	na
Paycom	16,851	16,737	14.6x	11.8x	9.8x	36.5x	28.9x	23.7x	43.0x	33.9x	27.7x	58.3x	46.0x	35.7x
Ceridian	10,587	11,309	10.8x	9.1x	na	nm	49.8x	na	nm	nm	na	nm	nm	na
Zendesk	10,393	10,603	7.1x	5.7x	4.5x	nm	49.2x	na	nm	59.6x	36.1x	nm	67.6x	44.8x
Sage Group	9,791	10,130	4.3x	4.0x	3.7x	18.5x	16.9x	15.6x	21.3x	19.1x	17.4x	28.5x	25.4x	23.5x
Paylocity	9,448	9,453	11.9x	9.9x	8.0x	43.7x	34.6x	26.7x	54.0x	42.2x	na	71.5x	61.2x	48.1x
Monday.com	8,184	7,412	19.0x	14.0x	9.4x	nm	nm	nm	nm	nm	nm	nm	nm	na
Manhattan Associates	7,373	7,183	11.5x	10.4x	9.2x	46.7x	40.4x	30.9x	49.0x	42.3x	na	63.7x	54.8x	33.1x
Smartsheet	6,584	6,266	9.9x	7.5x	5.6x	nm	nm	nm	nm	nm	nm	nm	nm	na
Anaplan	6,062	5,831	9.2x	7.3x	na	nm	nm	na	nm	nm	na	nm	nm	na
Descartes Systems	5,047	4,908	11.8x	10.3x	8.8x	27.1x	23.2x	20.0x	44.5x	34.4x	28.6x	36.9x	33.3x	28.5x
Workiva	5,097	4,930	10.5x	8.9x	na	nm	nm	na	nm	nm	na	nm	nm	na
Ziff Davis	4,550	5,650	4.2x	3.8x	na	11.9x	10.8x	na	12.8x	11.5x	na	14.4x	12.7x	na
SPS Commerce	3,715	3,512	9.0x	7.7x	na	31.6x	26.0x	na	36.6x	29.9x	na	54.9x	45.3x	na
Datto	3,466	3,319	5.2x	4.4x	3.7x	20.9x	16.8x	14.4x	26.5x	21.1x	15.6x	37.1x	29.5x	24.7x
C3.ai	2,480	1,629	6.1x	4.6x	2.7x	nm	nm	na	nm	nm	na	nm	nm	na
Technology One	2,266	2,194	9.7x	8.7x	7.9x	23.1x	20.0x	17.2x	29.9x	26.4x	23.0x	40.8x	35.8x	31.5x
		Median	9.8x	8.1x	7.6x	25.4x	24.6x	20.8x	36.5x	30,1x	27.7x	43.5x	37.3x	31.5x
		Average	9.9x	8.1x	6.9x	28.8x	27.6x	21.3x	36.9x	32.5x	30.0x	45.8x	40.5x	33.5x
		Avelage	7.78	0.17	0.78	20.00	27.00	Z1.3X	30.78	J2.JX	JU.UX	+J.0X	7U.JX	JJ.JX

Source: CapitalIQ



Note: Financials calendarised to 31st December, market data as of 19th January 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)

#### ERP & General Business

	Sa	ales growth	1	E	BITDA marg	in	I	BIT margi	in	Net	income m	argin		CAGR 2	2E-24E	
Companies	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
EDD 6 6 10 1																
ERP & General Business																
Salesforce	20.7%	18.0%	17.9%	30.7%	30.8%	na	19.9%	20.9%	22.6%	15.4%	16.2%	17.0%	17.9%	na	25.5%	23.8%
Shopify	33.4%	34.7%	42.6%	13.7%	13.8%	14.7%	12.3%	13.5%	15.3%	14.7%	15.3%	36.2%	38.6%	43.6%	54.6%	117.3%
Workday	19.3%	19.8%	16.1%	24.7%	25.8%	33.5%	18.6%	20.0%	24.4%	15.7%	16.8%	19.6%	17.9%	37.1%	35.1%	31.7%
Constellation	16.2%	18.5%	na	28.7%	29.1%	na	17.2%	16.7%	na	18.7%	19.0%	na	na	na	na	na
Paycom	24.1%	23.5%	20.9%	40.1%	41.0%	41.4%	34.0%	34.9%	35.4%	25.2%	25.9%	27.6%	22.2%	24.1%	24.6%	27.8%
Ceridian	17.2%	18.7%	na	15.9%	18.2%	na	9.2%	11.8%	na	4.9%	7.3%	na	na	na	na	na
Zendesk	26.8%	25.1%	25.9%	9.8%	11.6%	na	7.7%	9.6%	12.5%	6.7%	8.3%	9.9%	25.5%	na	59.6%	52.8%
Sage Group	5.1%	7.3%	7.7%	23.2%	23.8%	23.8%	20.2%	21.0%	21.4%	14.6%	15.3%	15.3%	7.5%	8.8%	10.7%	10.2%
Paylocity	24.6%	20.7%	23.8%	27.2%	28.4%	29.8%	22.0%	23.3%	na	16.6%	16.1%	16.5%	22.3%	27.9%	na	21.9%
Monday.com	47.2%	35.9%	49.1%	(29.5%)	(18.4%)	(2.7%)	(26.3%)	(12.7%)	(3.6%)	(27.0%)	(12.9%)	na	42.4%	(57.1%)	(47.6%)	na
Manhattan Associates	8.1%	10.7%	13.2%	24.7%	25.8%	29.8%	23.5%	24.6%	na	18.5%	19.5%	28.5%	11.9%	23.0%	na	38.8%
Smartsheet	34.6%	33.2%	34.0%	(1.6%)	1.3%	1.2%	(4.8%)	(1.2%)	0.5%	(4.7%)	(1.1%)	na	33.6%	na	na	na
Anaplan	25.1%	25.7%	na	(1.1%)	4.8%	na	(5.3%)	(0.3%)	na	(5.7%)	(0.5%)	na	na	na	na	na
Descartes Systems	13.5%	14.6%	16.9%	43.5%	44.3%	44.0%	26.5%	29.9%	30.7%	32.8%	31.7%	31.7%	15.8%	16.4%	24.7%	13.8%
Workiva	20.8%	18.8%	na	(0.8%)	2.9%	na	(1.6%)	1.4%	na	(2.2%)	1.9%	na	na	na	na	na
Ziff Davis	10.1%	10.0%	na	35.4%	35.6%	na	33.0%	33.3%	na	23.7%	24.3%	na	na	na	na	na
SPS Commerce	15.4%	16.3%	na	28.5%	29.8%	na	24.6%	25.9%	na	17.4%	18.1%	na	na	na	na	na
Datto	16.9%	18.4%	20.6%	25.0%	26.2%	25.4%	19.7%	21.0%	23.5%	14.7%	15.6%	15.4%	19.5%	20.4%	30.4%	22.5%
C3.ai	34.1%	33.2%	71.6%	(31.8%)	(19.6%)	na	(34.8%)	(23.2%)	na	(34.9%)	(22.7%)	na	51.2%	na	na	na
Technology One	11.4%	10.4%	10.3%	41.7%	43.7%	46.1%	32.3%	33.2%	34.5%	24.4%	25.2%	26.0%	10.4%	15.9%	14.1%	13.9%
Median	20.0%	18.7%	20.7%	24.7%	25.8%	29.8%	19.2%	20.5%	22.6%	15.1%	15.9%	19.6%	20.8%	21.7%	25.1%	23.8%
Average	21.2%	20.7%	26.5%	17.4%	19.9%	26.1%	12.4%	15.2%	19.7%	9.5%	12.0%	22.2%	24.0%	16.0%	23.2%	34.1%

Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 19th January 2022

"na" = not available



Cybersecurity

	Market cap	EV		EV / Sales			EV / EBITD	A		EV / EBIT			P/E	
Companies	(€m)	(€m)	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E
Calamanantha														
Cybersecurity	44,005	45.000	2 7	2.4	2.4	40.0	0.4		42.0	44.0		47.0	45.0	444
Vmware	46,005	45,298	3.7x	3.4x	3.1x	10.3x	9.6x	na	13.0x	11.8x	na	17.0x	15.3x	14.1x
Fortinet	44,249	42,459	12.1x	10.3x	8.6x	43.7x	36.2x	na	46.7x	38.5x	na	64.1x	52.3x	42.3x
Palo Alto Networks	45,172	45,622	8.8x	7.3x	5.9x	37.8x	31.7x	na	46.1x	36.4x	27.5x	59.5x	46.2x	33.0x
CrowdStrike Holdings	35,506	34,520	20.0x	15.0x	11.5x	nm	nm	na	nm	nm	57.8x	nm	nm	57.6x
Zscaler	31,240	30,706	nm	22.8x	15.2x	nm	nm	na	nm	nm	na	nm	nm	nm
Cloudflare	26,739	26,240	nm	nm	16.1x	nm	nm	na	nm	nm	nm	nm	nm	nm
DocuSign	22,141	22,214	9.8x	7.9x	6.6x	46.7x	37.4x	28.8x	53.2x	40.0x	na	55.6x	42.8x	37.9x
Splunk	16,618	18,110	6.9x	5.7x	4.6x	nm	nm	na	nm	nm	nm	nm	nm	76.7x
Check Point	14,612	13,107	6.7x	6.5x	6.3x	13.8x	13.8x	na	14.0x	13.7x	na	17.5x	17.2x	16.4x
Nice	14,308	13,655	7.4x	6.6x	5.8x	22.3x	20.3x	18.4x	25.5x	22.1x	na	33.4x	29.1x	26.4x
NortonLifeLock	13,514	15,646	5.9x	5.5x	na	11.6x	10.9x	na	11.7x	10.8x	na	14.2x	13.1x	na
Citrix Systems	11,506	14,202	4.8x	4.5x	na	15.5x	14.0x	na	18.4x	16.4x	na	19.8x	17.5x	na
Avast	7,505	7,958	9.0x	8.4x	8.0x	16.3x	15.3x	14.7x	17.1x	16.0x	15.5x	21.0x	19.3x	18.4x
Trend Micro	6,148	4,358	2.8x	2.7x	2.5x	8.9x	8.5x	8.5x	12.1x	11.4x	10.9x	na	na	na
CyberArk	4,967	4,559	9.2x	7.7x	6.2x	nm	nm	na	nm	nm	nm	nm	nm	nm
Mimecast	4,698	4,561	7.9x	6.8x	na	28.0x	23.5x	na	35.6x	29.7x	na	50.2x	41.9x	na
Rapid7	4,619	5,174	9.0x	7.4x	na	nm	nm	na	nm	nm	na	nm	nm	na
Tenable	4,635	4,437	7.9x	6.6x	5.6x	nm	48.4x	33.1x	nm	59.3x	40.0x	nm	83.6x	50.9x
BlackBerry	4,510	4,566	6.5x	5.6x	na	nm	nm	na	nm	nm	na	nm	nm	na
Qualys	4,275	4,014	9.8x	8.7x	na	22.7x	20.4x	na	27.0x	23.9x	na	36.2x	32.4x	na
		Median	7.9x	6.8x	6.2x	19.3x	20.3x	18.4x	22.0x	22.1x	27.5x	33.4x	30.8x	35.5x
		Average	8.2x	7.9x	7.6x	23.1x	22.3x	20.7x	26.7x	25.4x	30.3x	35.3x	34.2x	37.4x

Source: CapitalIQ



Note: Financials calendarised to 31st December, market data as of 19th January 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)

Cybersecurity

	Sa	ales growth	า	EB	BITDA marg	in	ı	EBIT margi	n	Net	income m	argin		CAGR 2	2E-24E	
Companies	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
Cybersecurity																
Vmware	8.0%	8.3%	12.3%	36.3%	35.9%	na	28.7%	29.2%	na	22.3%	22.9%	22.1%	10.3%	na	na	9.9%
Fortinet	18.8%	17.7%	19.6%	27.8%	28.5%	na	26.0%	26.8%	na	19.7%	20.6%	21.3%	18.7%	na	na	23.1%
Palo Alto Networks	24.1%	21.5%	23.3%	23.3%	22.9%	na	19.1%	20.0%	21.4%	14.7%	15.6%	17.7%	22.4%	na	29.5%	34.3%
CrowdStrike Holdings	41.5%	33.3%	30.1%	16.7%	18.9%	na	13.2%	15.5%	19.9%	11.3%	13.9%	20.6%	31.7%	na	62.0%	78.0%
Zscaler	41.7%	33.2%	49.3%	13.9%	15.4%	na	10.4%	12.5%	na	9.2%	11.7%	11.6%	41.0%	na	na	58.4%
Cloudflare	34.2%	32.7%	57.0%	10.7%	11.8%	na	1.0%	3.0%	4.8%	0.7%	2.8%	4.6%	44.3%	na	220.2%	278.8%
DocuSign	26.4%	24.1%	19.7%	21.0%	21.1%	22.9%	18.4%	19.7%	na	17.6%	18.4%	17.3%	21.9%	27.4%	na	21.0%
Splunk	18.0%	21.6%	23.0%	(4.6%)	5.3%	na	(9.6%)	(2.8%)	2.5%	(8.4%)	(2.3%)	5.5%	22.3%	na	na	na
Check Point	3.6%	3.2%	2.1%	48.2%	46.9%	na	47.7%	47.2%	na	42.4%	41.9%	43.0%	2.6%	na	na	3.4%
Nice	10.8%	12.0%	13.7%	33.3%	32.6%	31.6%	29.0%	29.9%	na	23.3%	23.8%	23.1%	12.9%	9.9%	na	12.5%
NortonLifeLock	11.5%	5.9%	na	50.3%	50.8%	na	50.1%	51.0%	na	35.7%	36.6%	na	na	na	na	na
Citrix Systems	4.5%	7.1%	na	31.2%	32.1%	na	26.3%	27.4%	na	19.8%	20.8%	na	na	na	na	na
Avast	5.2%	7.0%	5.4%	55.0%	54.8%	54.1%	52.4%	52.6%	51.4%	40.3%	41.0%	40.8%	6.2%	5.3%	5.1%	6.8%
Trend Micro	6.4%	5.4%	6.0%	31.6%	31.3%	29.6%	23.4%	23.6%	23.1%	na	na	na	5.7%	2.4%	5.2%	na
CyberArk	13.5%	19.9%	24.2%	0.6%	5.9%	na	(1.4%)	2.2%	6.2%	(1.2%)	1.8%	5.4%	22.0%	na	na	na
Mimecast	15.7%	15.4%	na	28.1%	28.9%	na	22.0%	22.9%	na	16.1%	16.7%	na	na	na	na	na
Rapid7	23.1%	21.2%	na	7.9%	8.8%	na	3.5%	6.2%	na	1.6%	4.3%	na	na	na	na	na
Tenable	19.1%	19.3%	17.1%	11.7%	13.6%	17.0%	9.5%	11.1%	14.1%	6.6%	8.2%	11.6%	18.2%	42.6%	44.3%	56.6%
BlackBerry	7.3%	15.2%	na	(0.0%)	1.3%	na	(13.9%)	(10.8%)	na	(6.9%)	(3.8%)	na	na	na	na	na
Qualys	13.4%	12.4%	na	43.2%	42.7%	na	36.3%	36.5%	na	28.8%	28.6%	na	na	na	na	na
Median	14.6%	16.5%	19.7%	25.6%	25.7%	29.6%	20.6%	21.4%	17.0%	16.1%	16.7%	17.7%	20.3%	9.9%	36.9%	23.1%
Average	17.3%	16.8%	21.6%	24.3%	25.5%	31.0%	19.6%	21.2%	17.9%	15.5%	17.0%	18.8%	20.0%	17.5%	61.0%	53.0%

Source: CapitalIQ



# Implied multiples Large Platforms

	Market cap	EV		EV / Sales			EV / EBITD	A		EV / EBIT			P/E	
Companies	(EURm)	(EURm)	2022E	2023E	2024E	2022E	2023E	2024E	20221	2023E	2024E	2022E	2023E	2024E
Large Platforms														
Microsoft	2,006,614	1,961,106	10.6x	9.3x	8.2x	21.3x	18.3x	na	25.2	21.8x	19.3x	30.4x	26.5x	na
Oracle	196,187	245,561	6.4x	6.1x	5.8x	12.7x	12.1x	na	14.2	13.6x	na	16.3x	15.5x	14.3x
SAP	143,225	150,893	5.2x	4.9x	4.5x	15.2x	14.1x	11.9x	17.9	16.3x	14.3x	22.2x	20.3x	17.1x
IBM	103,971	163,723	3.1x	3.0x	na	10.3x	9.7x	na	15.8>	16.0x	na	12.8x	11.8x	na
		Median	5.8x	5.5x	5.8x	14.0x	13.1x	11.9x	16.9>	16.2x	16.8x	19.3x	17.9x	15.7x
		Average	6.3x	5.8x	6.2x	14.9x	13.6x	11.9x	18.3	16.9x	16.8x	20.4x	18.5x	15.7x





Large Platforms

	Sales growth			E	BITDA marg	gin	E	BIT margi	n	Net	income m	argin		CAGR 2	22E-24E	
Companies	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	2022E	2023E	2024E	Sales	EBITDA	EBIT	N.I.
Large Platforms																
Microsoft	15.3%	13.8%	13.9%	49.8%	50.9%	na	42.1%	42.7%	42.3%	35.6%	35.9%	na	13.9%	na	14.1%	na
Oracle	4.4%	4.7%	5.2%	50.6%	50.6%	na	45.1%	45.2%	na	31.4%	31.7%	32.5%	5.0%	na	na	6.9%
SAP	5.2%	6.4%	7.8%	34.1%	34.5%	38.0%	29.0%	29.9%	31.8%	22.2%	22.9%	25.1%	7.1%	13.0%	12.2%	13.8%
IBM	(14.6%)	4.3%	na	30.1%	30.6%	na	19.6%	18.6%	na	15.4%	16.1%	na	na	na	na	na
Median	4.8%	5.5%	7.8%	42.0%	42.6%	38.0%	35.5%	36.3%	37.0%	26.8%	27.3%	28.8%	7.1%	13.0%	13.2%	10.3%
Average	2.6%	7.3%	9.0%	41.2%	41.7%	38.0%	33.9%	34.1%	37.0%	26.2%	26.6%	28.8%	8.6%		13.2%	10.3%

Source: CapitalIQ



#### Contact details



#### OLIVER BACH

Senior Manager, Corporate Finance - M&A BDO AG Wirtschaftsprüfungsgesellschaft Hanauer Landstraße 115 60314 Frankfurt am Main

Phone: +49 69 95941-127 oliver.bach@bdo.de



#### HANS-JÜRGEN RONDORFF

Partner, Corporate Finance - M&A BDO AG Wirtschaftsprüfungsgesellschaft Hanauer Landstraße 115 60314 Frankfurt am Main

Phone: +49 69 95941-118 hans-juergen.rondorff@bdo.de



#### Jane Evans

Senior Manager, Corporate Finance - M&A BDO AG Wirtschaftsprüfungsgesellschaft Georg-Glock-Str. 8 40474 Düsseldorf

Phone: +49 211 1371-192 jane.evans@bdo.de



#### Dietmar Flügel

Partner, Head of Corporate Finance BDO AG Wirtschaftsprüfungsgesellschaft Georg-Glock-Str. 8 40474 Düsseldorf

Phone: +49 211 1371-162 dietmar.fluegel@bdo.de

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