AUDIT & ASSURANCE | TAX & LEGAL | ADVISORY M&A - SOFTWARE SECTOR UPDATE Q1-2023

May 2023

1010. 11100-7



## **Current topics: ChatGPT and SaaS**

#### Artificial intelligence (AI) expected to transform the industry

- General-purpose AI (foundation models) such as ChatGPT, whose latest version GPT-4 was launched in March 2023, are expected to further transform the way software is created and deployed
- While being accessible to downstream developers through application programming interface (API) and open-source access, AI models are used today as
  infrastructure by many software companies to provide end users with downstream services
- While the disruptive nature of AI raises policy questions around privacy and intellectual property rights, liability and accountability, lawmakers need to strike a delicate balance between fostering the deployment of these technologies while making sure adequate safeguards are in place
- Despite the current layoffs within the broader technology sector, generative AI companies continue to attract investors. Recently, Stability AI and Jasper have raised \$101 million and \$125 million, respectively, and investors like Sequoia think the field of generative AI can generate trillions of dollars in economic value

#### SaaS companies poised for substantial margin expansion into 2023

- Companies experienced a tougher spending environment last year hence management teams took cost saving measures to protect operating margins
- SaaS companies are therefore expected to deliver one of the best years of software margin expansion in 2023
- In addition, SaaS companies are poised for better profitability in the near to long term
- Within a weakening spending environment, revenue expectations have been reduced by ca 5pts for 2023 across SaaS names while operating margins were revised upwards by 3pts





## M&A sentiment & KPIs Q1-2023

#### Global Sales growth EBITDA-margin EV/Sales 23E **EV/EBITDA 23E** Subsector 23E 23E 1.406 in 01-2023 No. of deals SaaS 6.4x 24.0x 19.7% 18.2% 1.112 in 01-2022 Transaction €74bn in 01-2023 SCM 9.9x 28.7x 14.7% 29.6% Volume €138bn in Q1-2022 PLM & 8.4x 25.0x 8.4% 36.3% Ĵ **3.6x** in LTM 01-2023 EV/Sales (x) Engineering (median-based) 5.2x in LTM 01-2022 HCM 7.6x 24.9x 17.9% 29.8% Germany ERP 6.5x 23.0x 16.2% 26.3% No. of deals with **73** in O1-2023 German targets 61 in 01-2022 Cyber-5.4x 20.8x 13.7% 21.0% security Private Equity 47% in O1-2023 (DE) involvement 49% in Q1-2023 (global) Large 5.6x 14.1x 6.0% 40.2% platforms

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

Sources: Mergermarket, CapitalIQ, BDO analysis

M&A sentiment software sector – the "big picture"

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

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



## M&A activity over time

Global software sector deal activity in Q1-2023 increased to the highest number of deals since inception of this analysis. Similarly, deal activity in Germany has soared to unprecedented highs

3.6

2M

#### Global M&A activity (based on announced deals)



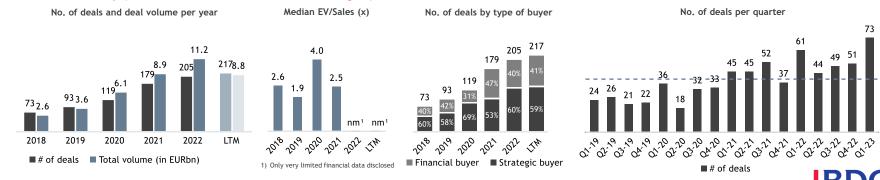




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#### German M&A activity (based on announced deals, German targets)



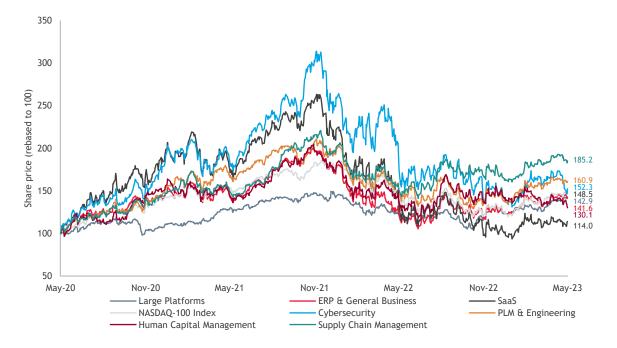
Sources: Mergermarket, BDO analysis

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

## Recent software sector share price performance

2023 shows an upward trend across most software segments. Supply Chain Management and PLM & Engineering are the best performing subsectors over the last three years — the SaaS peer group is now the worst performer

Share price performance over time (by selected software subsector)



Software subsector		Change (%	)
	3-year	1-Year	4-week
Supply Chain Management	85.2%	20.6%	(1.8%)
PLM & Engineering	<b>60.9</b> %	5.4%	(0.8%)
Cybersecurity	52.3%	(20.0%)	(8.3%)
NASDAQ-100 Index	48.5%	3.2%	1.5%
Large Platforms	42.9%	16.2%	2.1%
ERP & General Business	41.6%	14.4%	(0.3%)
Human Capital Management	30.1%	(7.2%)	(6.3%)
SaaS	14.0%	(17.2%)	0.0%

Sources: CapitalIQ, Equity Research, BDO analysis

Note: Market data as of 5th May 2023. Subsector constituents limited to top 10 companies by market capitalization



## Appendix Selected M&A transactions & implied trading multiples



# Selected M&A transactions Q1-2023 (1/4)

Germany

Date	Target	Target activity	Buyer	EV (€m)	EV/Sales(x)	EV/EBITDA(x)
Mar-2023		Leading provider of software and Internet solutions for sales support in the pump industry	everfield	n.a.	n.a.	n.a.
Mar-2023	(Series A funding; EUR 20.0m)	Software start-up providing an automated customer service platform	the source of the second secon	n.a.	n.a.	n.a.
Mar-2023	🛑 passbase	Software start-up providing scalable KYC and ID verification solutions		n.a.	n.a.	n.a.
Mar-2023	(Undisclosed Stake)	Supply chain and ESG software provider	T Ø E 🗣	n.a.	n.a.	n.a.
Mar-2023		Software company engaged with development, seller and supporter of a software program used by dental clinics	🖨 LIFCO	n.a.	n.a.	n.a.
Mar-2023	🛑 zenloop	Start-up providing feedback management software	<b>—</b>	n.a.	n.a.	n.a.
Mar-2023	🛑 AMANA	Provider of tax and accounting software for financial reporting and IFRS accounting	ELucaNet	n.a.	n.a.	n.a.
Mar-2023		Provider of data/process management, and business intelligence for the banking and finance sector	e Foconis	n.a.	n.a.	n.a.
Mar-2023	🗕 syska.	Developer of accounting software		n.a.	n.a.	n.a.
Mar-2023	🛑 🜟 GK	Company specializing in software solutions and services for the operation of large retail company branches		395	2.7x	15.8x
Mar-2023	🛑 😳 Steuerbot	Tax software start-up	🛑 taxfix	n.a.	n.a.	n.a.
Feb-2023	SoCom	Software specialist for laundries and provider of end-to-end process management/ERP software	everfield	n.a.	n.a.	n.a.



# Selected M&A transactions Q1-2023 (2/4)

EV/Sales(x) Date Target Target activity Buyer EV (€m) EV/EBITDA(x) 2 🐠 gastromatic Provider of workforce management software solutions Feb-2023 n.a. n.a. n.a. Riverside trbo Feb-2023 Cchat**champ** Conversational commerce and guided selling provider n.a. n.a. n.a. SANDS HAWK:AI ₫ CAPITAL Jan-2023 Anti money laundering software n.a. n.a. n.a. (Series B funding: EUR 15.6m) & 4 other investors Existing Management onventis Jan-2023 Provider of cloud-based e-procurement software n.a. n.a. n.a. KEENSIGHT Provider of software that offers end-to-end solutions for the investment MAIN odv 🔧 Jan-2023 n.a. n.a. n.a. process chain for investment banks, brokers and exchanges Provider of SaaS solution that digitalizes all processes of cleaning service 210010 Jan-2023 fortytools n.a. n.a. n.a. providers Developer of financial management software with a focus on accounting 💊 VISMA Jan-2023 **Buchhaltungs**Butler n.a. n.a. n.a. automation VIMCAR ₫ Battery V Jan-2023 Developing of SaaS/IoT solutions for efficient fleet management n.a. n.a. n.a. (Growth equity investment round) Provider of IT consultancy services such as digital transformation, data 38 Lobster # FSN Jan-2023 n.a. n.a. n.a. infrastructure solutions and software development CAPITAL (Undisclosed minority Stake) blackned 🕞 Jan-2023 Software provider for tactical communication networks field RHEINMETALL n.a. n.a. n.a. (40.0% Stake)



Sources: Mergermarket, CapitalIQ, BDO analysis

Germany

# Selected M&A transactions Q1-2023 (3/4)

Global

Date	Target	Target activity	Buye	er	EV (€m)	EV/Sales(x)	EV/EBITDA(x)
Mar-2023	(50.0% Stake)	Human resource related software business of works applications	6:	<b>∯</b> GIC	4,890	n.a.	n.a.
Mar-2023	🖶 aumni	Provider of investment analytics software to the venture capital industry		JPMORGAN CHASE & CO.	215	n.a.	n.a.
Mar-2023	(Undisclosed Stake)	Software-Cybersecurity cloud-native, contextual data privacy $\ensuremath{\mathfrak{k}}$ security platform		<b>EXEL</b> Technologies CAPITAL & 2 other investors	n.a.	n.a.	n.a.
Mar-2023		Supply chain management (SCM)-related software developer		SAMSUNG SDS	240	n.a.	n.a.
Mar-2023		Software company engaged with cybersecurity solutions	ŧ	PayPal (PayPal Ventures)	n.a.	n.a.	n.a.
Feb-2023	🙌 🗘 algolux	Computer vision company providing cameras and new designs through cloud-based tools and embedded AI software		Mercedes-Benz	n.a.	n.a.	n.a.
Feb-2023		Software company engaged with providing cloud networking security software		uluulu cisco	n.a.	n.a.	n.a.
Feb-2023	🚔 斷 Slync.io	Provider of supply chain management software	<b>4</b>	Gudman & 3 other investors	n.a.	n.a.	n.a.
Feb-2023	(Undisclosed Stake)	Software company engaged with an intelligence-driven managed security service	<b>4</b>	& 2 other investors	n.a.	n.a.	n.a.
Feb-2023		Provider of advanced AI-based marketplace compliance solutions		ebay	n.a.	n.a.	n.a.



Sources: Mergermarket, CapitalIQ, BDO analysis

# Selected M&A transactions Q1-2023 (4/4)

Global

Date	Target	Target activity	Buy	er	EV (€m)	EV/Sales(x)	EV/EBITDA(x)
Feb-2023	(45.2% Stake)	Provider of digital security and privacy software		Unikmind Holdings	1,532	3.7x	9.2x
Feb-2023	(Series D funding; EUR 93.3	Provider of SaaS based business management software for the field service m) industries	•	GENERAL ATLANTIC & 3 other investors	n.a.	n.a.	n.a.
Feb-2023	(Undisclosed Stake)	All-in-one operating system for Shopify brands	(+)	<b>shopify</b> & 2 other investors	n.a.	n.a.	n.a.
Jan-2023	茎 🥠 CLOUDIFY	Software company engaged with open-source software for cloud application	ŧ	Dell	64	n.a.	n.a.
Jan-2023	(34.5% Stake)	Research company focused on building artificial general intelligence	<b></b>	Microsoft	29,000	n.a.	n.a.
Jan-2023	👙 🎮 MAGNET	Software for criminal investigations		THOMABRAVO	1,088	13.2x	n.m.
Jan-2023	(Undisclosed Stake)	Developer of a integrated HR technology platform		Microsoft	n.a.	n.a.	n.a.
Jan-2023	InstaDeep™ (Undisclosed Stake)	Company engaged in building and providing artificial intelligence based decision making systems		BIONTECH	n.a.	n.a.	n.a.
Jan-2023	Supply Vision	Provider of software-as-a-service supply chain solutions for the transportation and logistics industry	(+)	D E S C 🖊 R T E S	14	n.a.	n.a.
Jan-2023	👙 📎 myst ai	Artificial intelligence platform for time series forecasting in electricity	<b>_</b>	<b>**</b> snowflake	n.a.	n.a.	n.a.



Sources: Mergermarket, CapitalIQ, BDO analysis

10 n.a. = not available; n.m. = not meaningful

### Implied multiples SaaS players (1/2)

	Market cap	EV		EV / Sales			EV / EBITDA	1		EV / EBIT			P / E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
SaaS														
Salesforce	175,571	177,723	5.7x	5.1x	4.6x	19.7x	16.3x	14.9x	22.4x	17.2x	14.5x	80.0x	46.5x	35.8x
ServiceNow	80,401	77,972	9.7x	8.0x	6.5x	30.2x	24.3x	18.8x	37.3x	29.4x	23.1x	nm	nm	82.6x
Shopify	72,003	68,859	11.3x	9.5x	7.6x	nm	nm	nm	nm	nm	nm	nm	nm	nm
Snowflake	45,476	42,077	16.5x	12.0x	8.9x	nm	nm	nm	nm	nm	nm	nm	nm	nm
Workday	42,663	40,056	6.2x	5.3x	4.5x	23.6x	18.3x	14.7x	29.5x	22.0x	17.4x	nm	nm	97.3x
Block Inc.	32,528	32,162	1.7x	1.5x	1.3x	25.7x	19.1x	14.2x	nm	nm	63.9x	nm	nm	64.4x
Atlassian	31,660	31,009	8.9x	7.3x	5.8x	45.4x	36.5x	na	46.9x	36.9x	24.0x	nm	nm	nm
CrowdStrike	26,213	24,490	9.2x	7.1x	5.6x	48.9x	32.6x	23.6x	60.1x	38.4x	27.4x	nm	nm	nm
Veeva	26,004	23,243	10.9x	9.2x	8.1x	32.1x	24.9x	21.1x	33.1x	25.6x	21.7x	66.2x	51.2x	43.5x
Datadog	22,369	21,305	11.2x	8.8x	6.6x	nm	44.5x	31.8x	66.8x	49.2x	33.4x	nm	nm	77.0x
HubSpot	20,013	19,389	10.2x	8.4x	6.8x	nm	49.2x	36.0x	nm	58.6x	41.6x	nm	nm	nm
Roblox	19,419	18,129	5.9x	5.2x	4.6x	nm	43.7x	34.0x	nm	nm	nm	nm	nm	nm
Zoom	16,908	12,083	3.0x	2.9x	2.7x	8.3x	7.5x	7.1x	8.9x	7.8x	7.4x	nm	nm	39.9x
DiDi	15,380	10,568	0.5x	0.4x	0.4x	11.7x	7.8x	6.3x	nm	20.5x	12.4x	na	na	na
MongoDB	15,338	14,791	10.9x	9.0x	7.3x	nm	nm	nm	nm	nm	nm	nm	nm	nm
Paycom	14,320	13,888	8.9x	7.4x	6.2x	21.3x	17.6x	14.5x	25.7x	21.1x	17.4x	44.5x	37.3x	29.4x
Palantir	14,244	11,916	6.0x	5.0x	4.1x	24.8x	19.1x	15.3x	26.5x	20.5x	15.9x	nm	88.6x	45.4x
Cloudflare	13,276	13,154	11.3x	8.7x	6.6x	nm	nm	37.4x	nm	nm	73.6x	nm	nm	nm
Check Point Software Tec.	13,258	11,746	5.4x	5.1x	5.0x	12.3x	11.8x	11.5x	12.6x	12.1x	11.7x	17.9x	17.2x	16.6x
Splunk	12,805	14,715	4.2x	3.7x	3.2x	24.4x	18.2x	14.7x	27.8x	20.1x	15.6x	nm	nm	35.6x



### Implied multiples SaaS players (2/2)

	Market cap	EV		EV / Sales			EV / EBITDA	1		EV / EBIT			P/E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
SaaS														
Zscaler	11,783	11,157	7.0x	5.5x	4.4x	38.7x	27.4x	na	48.6x	34.1x	24.8x	nm	nm	nm
Dynatrace	11,533	11,217	9.4x	7.9x	6.5x	35.5x	29.0x	na	38.0x	31.0x	24.7x	nm	87.9x	50.9x
Okta	10,800	10,607	5.4x	4.6x	3.7x	nm	46.8x	28.3x	nm	50.6x	29.5x	nm	nm	nm
Qualtrics	9,846	9,366	6.1x	5.4x	4.6x	43.4x	32.6x	23.4x	59.1x	40.9x	28.7x	nm	nm	nm
Unity	9,090	10,441	5.4x	4.6x	3.8x	46.9x	20.9x	16.4x	64.0x	26.4x	19.5x	nm	nm	nm
Bill.com	9,080	8,400	7.9x	6.4x	5.3x	nm	48.6x	28.0x	nm	54.2x	37.6x	nm	nm	na
DocuSign	8,948	8,817	3.6x	3.4x	3.0x	15.6x	12.7x	10.2x	17.7x	14.5x	11.9x	nm	nm	39.7x
Twilio	8,790	6,143	1.6x	1.4x	1.1x	11 <b>.</b> 9x	9.3x	6.8x	23.0x	14.8x	9.3x	nm	nm	nm
Paylocity Holding	8,773	8,626	7.4x	6.2x	5.3x	23.0x	18.9x	15.8x	26.9x	21.7x	18.1x	63.8x	51.6x	42.3x
Xero Limited	8,513	8,576	9.4x	8.0x	6.9x	37.5x	27.3x	22.0x	nm	50.0x	38.9x	nm	73.7x	49.2x
Ceridian	7,978	8,738	6.5x	5.6x	4.8x	25.5x	20.7x	16.2x	32.9x	26.5x	22.4x	nm	88.5x	41.5x
Dropbox	6,840	7,770	3.5x	3.3x	3.1x	9.3x	8.7x	8.9x	11.6x	10.6x	11.0x	24.7x	20.4x	16.6x
UiPath	6,548	5,011	4.5x	3.8x	3.1x	nm	29.3x	20.2x	68.6x	33.5x	22.5x	nm	nm	nm
Confluent	6,090	5,424	7.8x	6.1x	4.8x	nm	nm	nm	nm	nm	nm	nm	nm	nm
AppLovin	5,782	7,841	3.1x	2.8x	2.6x	8.1x	6.9x	6.1x	29.3x	20.5x	14.8x	59.7x	29.8x	17.5x
HashiCorp	5,053	3,900	7.4x	5.8x	4.6x	nm	nm	na	nm	nm	nm	nm	nm	nm
GitLab	3,825	3,025	6.4x	5.0x	3.8x	nm	nm	nm	nm	nm	nm	nm	nm	nm
RingCentral	2,284	3,741	1.9x	1.7x	1.5x	8.7x	6.9x	6.2x	10.4x	8.4x	7.2x	nm	nm	nm
Sinch	1,770	2,592	1.0x	0.9x	0.8x	8.2x	7.2x	6.0x	10.6x	11.1x	9.9x	nm	25.0x	12.8x
		Median	6.4x	5.4x	4.6x	24.0x	19.9x	15.6x	29.3x	23.8x	20.6x	59.7x	48.9x	41.5x
		Average	6.7x	5.6x	4.6x	24.6x	23.3x	17.7x	33.5x	27.6x	23.5x	51.0x	51.5x	44.1x

Note: Financials calendarised to 31st December, market data as of 5th May 2023, "na" = not available

12 "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	n	E	BITDA marg	gin	E	BIT margi	n	Net	income m	argin		CAGR 2	3E-25E	
Companies	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	Sales	EBITDA	EBIT	N.I.
SaaS																
Salesforce	11.0%	11.3%	12.0%	28.9%	31.4%	30.7%	25.4%	29.7%	31.5%	7.0%	10.9%	12.6%	11.6%	14.9%	24.2%	49.5%
ServiceNow	22.0%	22.0%	22.0%	32.2%	32.8%	34.7%	26.1%	27.1%	28.3%	5.9%	6.9%	8.2%	22.0%	26.7%	27.0%	43.4%
Shopify	20.1%	18.5%	26.0%	4.8%	7.9%	10.5%	4.8%	6.8%	8.3%	(7.0%)	(1.5%)	2.5%	22.2%	80.6%	60.1%	na
Snowflake	41.2%	36.9%	34.4%	5.4%	11.0%	12.9%	3.3%	9.0%	11.5%	(31.6%)	(23.2%)	(14.2%)	35.6%	109.1%	153.7%	(9.2%)
Workday	16.2%	17.2%	18.4%	26.3%	28.9%	30.4%	21.0%	24.1%	25.7%	(0.7%)	2.6%	4.9%	17.8%	26.7%	30.2%	na
Block Inc.	17.3%	13.4%	14.8%	6.7%	7.9%	9.3%	(1.1%)	0.6%	2.1%	(1.3%)	0.5%	2.1%	14.1%	34.3%	na	na
Atlassian	21.9%	21.2%	25.4%	19.5%	20.0%	na	18.9%	19.8%	24.3%	(10.9%)	(6.9%)	(1.2%)	23.3%	na	39.9%	(58.6%)
CrowdStrike	34.9%	29.4%	26.7%	18.8%	21.8%	23.8%	15.3%	18.5%	20.5%	(3.2%)	(0.4%)	3.4%	28.1%	44.0%	48.1%	na
Veeva	9.8%	18.5%	14.7%	34.2%	37.1%	38.2%	33.0%	36.1%	37.1%	18.5%	20.2%	20.7%	16.6%	23.3%	23.5%	23.4%
Datadog	25.1%	26.7%	33.5%	18.7%	1 <b>9.9</b> %	20.8%	16.8%	18.0%	19.9%	(4.9%)	(1.5%)	9.0%	30.0%	37.3%	41.5%	na
HubSpot	20.7%	21.5%	23.9%	16.5%	17.1%	18.9%	13.3%	14.4%	16.3%	(9.1%)	(4.3%)	1.9%	22.7%	31.3%	35.9%	na
Roblox	51.5%	14.3%	13.6%	10.5%	11.9%	13.4%	(30.3%)	(28.1%)	(23.4%)	(31.3%)	(29.2%)	(25.8%)	14.0%	29.1%	0.1%	3.6%
Zoom	2.0%	4.8%	5.8%	35.9%	38.3%	38.2%	33.8%	36.3%	36.6%	(1.0%)	0.9%	9.4%	5.3%	8.7%	9.7%	na
DiDi	15.7%	16.6%	10.6%	4.2%	5.4%	6.1%	(0.4%)	2.1%	3.1%	na	na	na	13.5%	36.2%	na	na
MongoDB	19.2%	21.1%	24.0%	4.0%	7.8%	10.3%	2.9%	6.9%	9.2%	(24.2%)	(20.9%)	(13.2%)	22.5%	97.0%	117.7%	(9.5%)
Paycom	24.7%	20.8%	18.7%	41.9%	41.9%	43.0%	34.7%	35.1%	35.8%	20.7%	20.4%	21.8%	19.8%	21.3%	21.7%	23.0%
Palantir	15.5%	1 <b>9.7</b> %	20.5%	24.1%	26.2%	27.0%	22.6%	24.3%	26.0%	2.0%	6.7%	10.9%	20.1%	27.2%	28.9%	181.6%
Cloudflare	31.4%	30.7%	31.3%	15.9%	16.1%	17.6%	5.9%	6.8%	8.9%	(13.4%)	(11.4%)	(7.9%)	31.0%	38.0%	61.5%	0.7%
Check Point Software Tec.	3.7%	4.2%	3.7%	43.4%	43.6%	43.2%	42.4%	42.3%	42.3%	33.7%	33.7%	33.7%	3.9%	3.7%	3.9%	4.0%
Splunk	8.5%	12.5%	15.8%	17.2%	20.5%	21.9%	15.1%	18.5%	20.6%	(6.2%)	(1.4%)	7.9%	14.1%	28.9%	33.6%	na

13 "na" = not available

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

	S	ales growth	1	EE	BITDA marg	gin	E	BIT margi	n	Net	income m	argin		CAGR 2	23E-25E	
Companies	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	Sales	EBITDA	EBIT	N.I.
SaaS																
Zscaler	35.5%	27.4%	25.8%	18.2%	20.2%	na	14.5%	16.2%	17.8%	(14.4%)	(11.6%)	(6.9%)	26.6%	na	40.2%	(12.7%)
Dynatrace	19.7%	19.5%	22.2%	26.6%	27.2%	na	24.9%	25.5%	26.2%	7.4%	9.2%	13.1%	20.9%	na	24.0%	61.0%
Okta	18.4%	18.5%	24.0%	4.5%	9.8%	13.1%	3.0%	9.1%	12.6%	(30.5%)	(23.9%)	(13.4%)	21.2%	106.9%	146.4%	(19.5%)
Qualtrics	15.7%	13.7%	15.6%	14.1%	16.5%	19.9%	10.3%	13.1%	16.2%	(50.3%)	(34.5%)	(16.2%)	14.7%	36.2%	43.6%	(35.0%)
Unity	52.7%	18.9%	19.9%	11.5%	21.8%	23.1%	8.5%	17.2%	19.5%	(41.9%)	(27.6%)	(17.1%)	19.4%	69.1%	81.0%	(23.7%)
Bill.com	38.2%	24.1%	20.3%	12.3%	13.2%	19.0%	10.4%	11.8%	14.1%	(19.7%)	(16.1%)	na	22.2%	51.7%	42.4%	na
DocuSign	8.3%	7.4%	11.5%	23.2%	26.5%	29.7%	20.4%	23.1%	25.4%	(0.7%)	1.6%	7.7%	9.4%	23.9%	22.1%	na
Twilio	12.3%	16.1%	18.2%	13.3%	14.6%	16.9%	6.9%	9.1%	12.3%	(19.0%)	(13.8%)	(8.5%)	17.1%	32.0%	56.7%	(21.6%)
Paylocity Holding	27.5%	19.6%	17.4%	32.0%	32.6%	33.3%	27.4%	28.4%	<b>29.</b> 1%	11.8%	12.2%	12.7%	18.5%	20.7%	21.9%	22.8%
Xero Limited	20.9%	16.7%	15.7%	25.0%	29.4%	31.5%	10.9%	16.1%	17.8%	6.2%	10.8%	14.0%	16.2%	30.5%	49.0%	74.4%
Ceridian	19.7%	15.8%	16.1%	25.3%	26.9%	29.7%	19.6%	21.1%	21.5%	2.4%	5.8%	10.6%	15.9%	25.6%	21.4%	145.0%
Dropbox	6.7%	4.8%	6.2%	37.1%	37.7%	35.0%	29.7%	31.0%	28.2%	12.3%	14.2%	16.5%	5.5%	2.4%	2.8%	22.1%
UiPath	18.5%	18.5%	20.5%	8.0%	12.9%	15.5%	6.5%	11.2%	13.9%	(18.6%)	(12.9%)	(14.6%)	19.5%	66.1%	74.6%	6.2%
Confluent	30.2%	28.0%	26.5%	(11.0%)	2.4%	7.4%	(13.0%)	0.4%	5.5%	(54.8%)	(35.4%)	(28.3%)	27.2%	na	na	(8.6%)
AppLovin	0.3%	10.2%	5.8%	37.7%	40.2%	43.2%	10.4%	13.5%	17.7%	3.8%	6.9%	11.1%	8.0%	15.6%	40.5%	84.7%
HashiCorp	26.0%	26.2%	26.4%	(24.4%)	(7.3%)	na	(25.4%)	(9.5%)	(0.8%)	(47.3%)	(33.8%)	(17.7%)	26.3%	na	(77.3%)	(22.8%)
GitLab	27.7%	28.3%	30.6%	(13.1%)	(1.3%)	5.1%	(14.1%)	(3.5%)	2.8%	(35.4%)	(29.3%)	(15.2%)	29.5%	na	na	(15.3%)
RingCentral	10.2%	11.4%	10.9%	21.6%	24.3%	24.7%	18.0%	20.2%	21.0%	(9.2%)	(5.2%)	(3.0%)	11.1%	18.9%	20.0%	(36.5%)
Sinch	5.4%	12.2%	12.6%	11.9%	12.2%	13.0%	9.3%	7.9%	7.8%	0.6%	2.4%	4.1%	12.4%	17.5%	3.4%	186.7%
Median	19.7%	18.5%	18.7%	18.2%	20.2%	21.9%	13.3%	16.2%	17.8%	(5.6%)	(1.5%)	3.4%	19.4%	29.1%	33.6%	3.8%
Average	20.7%	18.4%	19.0%	17.5%	20.7%	23.2%	12.3%	15.6%	17.8%	(9.3%)	(4.7%)	1.0%	18.7%	37.4%	39.3%	23.5%

14 "na" = not available

## Implied multiples Supply chain management

	Market cap	EV		EV / Sales			EV / EBITDA	1		EV / EBIT			P/E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
Supply chain & Logistics														
Dassault Systèmes	47,991	47,544	8.0x	7.3x	6.8x	22.2x	20.0x	18.2x	24.5x	22.1x	20.0x	42.4x	38.0x	33.3x
WiseTech Global	13,709	13,431	23.3x	18.5x	14.4x	47.3x	36.4x	28.0x	57.9x	43.7x	32.9x	81.4x	61.8x	46.6x
Aspen	10,160	9,978	9.9x	8.8x	7.5x	22.8x	19.2x	14.9x	24.8x	21.6x	na	nm	nm	69.7x
Manhatten Associates	9,510	9,362	12.0x	10.7x	9.5x	43.6x	37.4x	31.9x	45.0x	39.3x	na	80.8x	70.2x	53.8x
Descartes	5,879	5,637	11.4x	10.3x	9.3x	26.2x	23.0x	20.6x	39.8x	32.5x	30.1x	55.1x	47.2x	41.7x
SPS Commerce	4,987	4,789	10.0x	8.7x	7.6x	33.8x	28.6x	24.0x	38.5x	32.6x	27.1x	90.4x	72.4x	56.6x
Kinaxis	3,430	3,231	8.3x	6.9x	5.4x	nm	39.7x	19.5x	nm	nm	35.9x	nm	nm	49.1x
American Software	384	290	2.5x	2.3x	na	15.5x	13.6x	na	17.8x	15.5x	na	37.7x	32.5x	na
Tecsys	257	242	2.3x	2.0x	na	31.1x	17.7x	na	46.5x	na	na	72.0x	na	na
		Median	9.9x	8.7x	7.6x	28.7x	23.0x	20.6x	39.1x	32.5x	30.1x	72.0x	54.5x	49.1x
		Average	9.7x	8.4x	8.6x	30.3x	26.2x	22.4x	36.8x	29.6x	29.2x	65.7x	53.7x	50.1x



#### Sales growth rates & operating margins Supply chain management

			<u> </u>														
		S	ales growt	h	EE	BITDA mar	gin	I	EBIT marg	in	Net	income m	argin		CAGR	23E-25E	
Companies		2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	Sales	EBITDA	EBIT	N.I.
Supply chain & Logi	istics																
Dassault Systèmes		5.5%	8.3%	8.5%	35.8%	36.7%	37.3%	32.4%	33.3%	33.8%	18.9%	19.5%	20.5%	8.4%	10.6%	10.6%	12.8%
WiseTech Global		30.4%	26.3%	28.5%	49.3%	50.8%	51.4%	40.3%	42.3%	43.7%	29.2%	30.5%	31.4%	27.4%	30.1%	32.7%	32.1%
Aspen		39.9%	12.0%	17.8%	43.3%	45.9%	50.3%	39.9%	40.9%	na	(5.1%)	2.9%	10.9%	14.9%	23.7%	na	na
Manhatten Associates	s	12.3%	11.8%	13.0%	27.5%	28.6%	29.7%	26.6%	27.2%	na	15.1%	15.5%	17.9%	12.4%	17.0%	na	22.6%
Descartes		14.7%	10.2%	10.4%	43.4%	44.9%	45.4%	28.6%	31.7%	31.1%	21.5%	22.8%	23.4%	10.3%	12.9%	15.1%	14.9%
SPS Commerce		17.1%	14.9%	14.0%	29.6%	30.4%	31.7%	26.0%	26.7%	28.2%	11.5%	12.5%	14.0%	14.4%	18.5%	19.2%	26.4%
Kinaxis		16.6%	19.2%	27.2%	15.3%	17.5%	27.9%	0.9%	4.9%	15.2%	1.7%	4.4%	11.8%	23.2%	66.0%	<b>398.9</b> %	226.5%
American Software		3.2%	8.2%	na	15.9%	16.8%	na	13.9%	14.8%	na	8.7%	9.3%	na	na	na	na	na
Tecsys		9.2%	12.7%	na	7.3%	11.3%	na	4.9%	na	na	3.3%	na	na	na	na	na	na
	Median	14.7%	12.0%	14.0%	29.6%	30.4%	37.3%	26.6%	29.5%	31.1%	11.5%	14.0%	17.9%	14.4%	18.5%	19.2%	24.5%
A	Average	16.6%	13.7%	17.1%	29.7%	31.4%	<b>39.</b> 1%	23.7%	27.7%	30.4%	11.6%	14.7%	18.6%	15.9%	25.5%	95.3%	55 <b>.9</b> %



### Implied multiples PLM & Engineering

	Market cap	EV		EV / Sales			EV / EBITDA				EV / EBIT			P / E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E	2	023E	2024E	2025E	2023E	2024E	2025E
PLM & Engineering															
Cadence Design	50,794	50,578	13.7x	12.3x	11.1x	30.9x	27.3x	23.8x	1	33.1x	29.0x	25.3x	61.0x	49.7x	42.3x
Dassault Systèmes	47,991	47,544	8.0x	7.3x	6.8x	22.2x	20.0x	18.2x	1	24.5x	22.1x	20.0x	42.4x	38.0x	33.3x
Autodesk	38,001	38,545	7.9x	7.1x	6.4x	21.5x	18.4x	16.3x	1	22.9x	19.2x	16.6x	49.4x	39.9x	32.7x
Hexagon	27,875	31,410	5.9x	5.5x	5.2x	15.6x	14.5x	13.4x	2	20.6x	19.1x	17.6x	25.7x	22.7x	20.7x
ANSYS	23,728	24,073	11.6x	10.5x	9.6x	27.9x	24.3x	19.3x	1	27.9x	25.1x	22.0x	52.1x	44.7x	36.8x
PTC	13,863	15,496	7.8x	7.0x	6.3x	19.4x	16.8x	na	2	21.1x	18.4x	na	50.1x	35.7x	27.6x
Bentley Systems	12,107	13,580	12.3x	11.1x	10.1x	36.0x	31.6x	27.9x	1	38.2x	33.1x	28.8x	75.5x	60.0x	48.3x
Trimble	10,804	11,847	3.4x	3.2x	2.9x	13.2x	12.1x	10.6x		14.4x	12.9x	11.5x	26.6x	23.7x	20.4x
Nemetschek	7,775	7,703	9.2x	8.2x	7.2x	31.1x	26.3x	22.2x	4	40.4x	32.2x	25.9x	52.9x	42.8x	35.0x
Altair Engineering	4,998	4,975	8.9x	8.2x	7.5x	43.7x	36.2x	29.2x	4	47.0x	38.2x	30.3x	nm	nm	nm
		Median	8.4x	7.8x	7.0x	25.0x	22.1x	19.3x	2	26.2x	23.6x	22.0x	50.1x	39.9x	33.3x
		Average	8.9x	8.1x	7.3x	26.1x	22.7x	20.1x		29.0x	24.9x	22.0x	48.4x	39.7x	33.0x



## Sales growth rates & operating margins PLM & Engineering

-	S	ales growth	n	EI	BITDA marg	gin	I	EBIT margi	in	1	et income n	nargin		CAGR 2	23E-25E	
Companies	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	202	E 2024E	2025E	Sales	EBITDA	EBIT	N.I.
PLM & Engineering																
Cadence Design	13.9%	11.2%	11.4%	44.5%	45.3%	46.5%	41.5%	42.5%	43.8%	22.6	<b>24.9</b> %	26.3%	11.3%	13.8%	14.4%	20.1%
Dassault Systèmes	5.5%	8.3%	8.5%	35.8%	36.7%	37.3%	32.4%	33.3%	33.8%	18.9	<b>19.5</b> %	20.5%	8.4%	10.6%	10.6%	12.8%
Autodesk	8.6%	11.3%	11.1%	36.7%	38.6%	39.2%	34.4%	36.9%	38.5%	15.7	۶ 1 <b>7.5</b> %	19.2%	11.2%	15.0%	17.6%	22.9%
Hexagon	4.5%	6.3%	6.6%	37.6%	38.1%	38.5%	28.4%	28.8%	29.4%	20.2	<b>21.5</b> %	22.2%	6.5%	7.8%	8.3%	11.4%
ANSYS	10.7%	10.0%	10.3%	41.6%	43.4%	49.5%	41.6%	42.0%	43.4%	21.9	23.3%	25.6%	10.1%	20.1%	12.5%	19.1%
PTC	10.1%	12.5%	10.5%	40.5%	41.5%	na	37.1%	38.0%	na	14.0	۶ 1 <b>7.5</b> %	20.5%	11.5%	na	na	34.9%
Bentley Systems	10.9%	10.3%	10.2%	34.1%	35.2%	36.2%	32.1%	33.6%	35.1%	14.5	6 <b>16.5</b> %	18.6%	10.2%	13.6%	15.2%	25.0%
Trimble	4.8%	6.2%	8.7%	25.7%	26.3%	27.6%	23.5%	24.7%	25.6%	11.6	12.3%	13.1%	7.5%	11.3%	12.1%	14.3%
Nemetschek	4.7%	11.7%	14.9%	29.6%	31.2%	32.2%	22.7%	25.5%	27.6%	17.5	6 <b>19.4</b> %	20.7%	13.3%	18.2%	24.8%	23.0%
Altair Engineering	8.2%	8.3%	9.0%	20.2%	22.6%	25.7%	18.8%	21.4%	24.8%	(3.2%	) (0.4%)	3.1%	8.6%	22.4%	24.6%	na
													1			
Median	8.4%	10.1%	10.3%	36.3%	37.4%	37.3%	32.3%	33.5%	33.8%	16.6		20.5%	10.2%	13.8%	14.4%	20.1%
Average	8.2%	9.6%	10.1%	34.6%	35.9%	37.0%	31.3%	32.7%	33.5%	15.4	6 17.2%	19.0%	9.9%	14.8%	15.6%	20.4%



## Implied multiples Human Capital Management

	Market cap	EV		EV / Sales		1	EV / EBITD	A			EV / EBIT				P/E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E	202	23E	2024E	2025E		2023E	2024E	2025E
Human Capital Management <sup>1</sup>																
Automatic Data Processing	82,123	83,546	5.0x	4.6x	4.4x	17.7x	16.2x	15.2x	19	.7x	18.0x	16.8x		25.5x	23.3x	21.8x
Workday	45,718	43,099	6.6x	5.7x	4.8x	25.4x	19.6x	15.6x	31	.6x	23.6x	18.4x		nm	nm	nm
Paychex	35,935	35,310	7.5x	7.0x	6.6x	16.7x	15.4x	14.2x	18	.2x	16.9x	15.9x		24.3x	22.7x	21.0x
Paycom	16,107	15,673	10.1x	8.3x	6.9x	24.5x	20.0x	16.2x	29	.5x	24.0x	19.8x		51.8x	41.4x	31.1x
Paylocity	10,058	9,911	8.4x	7.0x	6.0x	26.7x	21.6x	18.1x	31	.1x	24.9x	20.6x		73.9x	62.1x	36.8x
Ceridian	9,690	10,453	7.7x	6.6x	5.7x	31.4x	25.0x	18.6x	41	.2x	32.2x	27.1x		nm	nm	49.9x
		Median	7.6x	6.8x	5.8x	24.9x	19.8x	15.9x	30.	3x	23.8x	19.1x	1	38.6x	32.4x	31.1x
		Average	7.6x	6.6x	5.7x	23.7x	19.6x	16.3x	28	.6x	23.3x	19.8x		43.9x	37.4x	32.1x



#### Sales growth rates & operating margins Human Capital Management

		~														
	S	ales growt	:h	E	BITDA mar	gin		EBIT mar	gin	Net	income m	nargin		CAGR	23E-25E	
Companies	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	Sale	s EBITDA	EBIT	N.I.
Human Capital Management <sup>1</sup>																
Automatic Data Processing	7.5%	6.6%	5.5%	28.0%	28.7%	29.0%	25.1%	25.8%	26.2%	<b>19.</b> 1%	1 <b>9.6</b> %	19.9%	6.0	8.0%	8.2%	8.2%
Workday	16.2%	17.2%	18.3%	26.2%	28.9%	30.7%	21.0%	24.0%	26.0%	(0.7%)	2.6%	4.9%	17.7	<b>27.7</b> %	31.0%	na
Paychex	7.1%	6.2%	6.0%	44.8%	45.6%	46.7%	41.1%	41.6%	41.8%	31.3%	31.6%	32.3%	6.1	8.2%	7.0%	7.7%
Paycom	23.6%	21.2%	20.5%	41.3%	41.6%	42.6%	34.2%	34.8%	34.9%	20.1%	20.7%	22.9%	20.8	<b>22.7</b> %	22.0%	29.0%
Paylocity	27.9%	20.6%	17.3%	31.6%	32.5%	32.9%	27.1%	28.1%	29.0%	11.6%	11.4%	16.5%	18.9	<b>21.4</b> %	23.0%	41.7%
Ceridian	19.6%	16.4%	16.2%	24.5%	26.5%	30.5%	18.7%	20.5%	21.0%	2.8%	5.7%	10.6%	16.3	<b>29.8</b> %	23.3%	123.8%
Median	17.9%	16.8%	16.7%	29.8%	30.7%	31.8%	26.1%	26.9%	27.6%	15.4%	15.5%	18.2%	17.0	<b>22.1</b> %	22.5%	29.0%
Average	17.0%	14.7%	14.0%	32.7%	34.0%	35.4%	27.9%	<b>29.</b> 1%	29.8%	14.0%	15.3%	17.8%	14.3	6 <b>19.6</b> %	19.1%	42.1%

Source: CapitallQ Note: Financials calendarised to 31<sup>st</sup> December, market data as of 5<sup>th</sup> May 2023 "na" = not available



## Implied multiples ERP & General Business

	Market cap	EV		EV / Sales			EV / EBITD	A			EV / EBIT			P / E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E		2023E	2024E	2025E	2023E	2024E	2025E
ERP & General Business															
Salesforce	175,571	177,723	5.7x	5.1x	4.6x	19.7x	16.3x	14.9x		22.4x	17.2x	14.5x	80.0x	46.5x	35.8x
Shopify	72,003	68,859	11.3x	9.5x	7.6x	nm	nm	nm		nm	nm	nm	nm	nm	nm
Workday	42,663	40,056	6.2x	5.3x	4.5x	23.6x	18.3x	14.7x		29.5x	22.0x	17.4x	nm	nm	97.3x
Constellation	37,301	38,749	5.3x	4.6x	na	20.2x	17.3x	na		34.5x	28.3x	na	71.9x	57.5x	na
Paycom	14,320	13,888	8.9x	7.4x	6.2x	21.3x	17.6x	14.5x		25.7x	21.1x	17.4x	44.5x	37.3x	29.4x
Manhattan Associates	9,510	9,362	12.0x	10.7x	9.5x	43.6x	37.4x	31.9x		45.0x	39.3x	na	80.8x	70.2x	53.8x
Sage Group	9,500	10,362	4.1x	3.8x	3.5x	17.7x	16.2x	14.2x		20.5x	18.6x	16.5x	28.3x	25.4x	22.7x
Paylocity	8,773	8,626	7.4x	6.2x	5.3x	23.0x	18.9x	15.8x		26.9x	21.7x	18.1x	63.8x	51.6x	42.3x
Ceridian	7,978	8,738	6.5x	5.6x	4.8x	25.5x	20.7x	16.2x		32.9x	26.5x	22.4x	nm	88.5x	41.5x
Descartes Systems	5,879	5,637	11.4x	10.3x	9.3x	26.2x	23.0x	20.6x		39.8x	32.5x	30.1x	55.1x	47.2x	41.7x
Monday.com	5,037	4,303	6.9x	5.4x	4.2x	nm	nm	nm		nm	nm	nm	nm	nm	nm
SPS Commerce	4,987	4,789	10.0x	8.7x	7.6x	33.8x	28.6x	24.0x		38.5x	32.6x	27.1x	90.4x	72.4x	56.6x
Smartsheet	4,720	4,366	5.2x	4.2x	3.5x	nm	48.1x	28.4x		nm	63.7x	32.5x	nm	nm	na
Workiva	4,320	4,258	7.5x	6.3x	5.2x	nm	nm	39.2x		nm	nm	40.5x	nm	nm	na
Technology One	2,892	2,806	10.6x	9.4x	8.4x	24.7x	21.3x	18.5x		34.0x	29.2x	25.2x	46.0x	39.4x	34.0x
Ziff Davis	2,848	3,160	2.5x	2.4x	2.2x	7.0x	6.4x	6.1x		8.6x	8.1x	7.8x	17.7x	15.4x	13.7x
C3.ai	1,904	1,210	4.5x	3.7x	3.0x	nm	nm	na		nm	nm	nm	nm	nm	na
Enghouse Systems	1,352	1,196	3.9x	na	na	12.7x	na	na		18.7x	na	na	25.6x	na	na
BigCommerce	493	554	2.0x	1.7x	1.5x	nm	38.9x	13.7x		nm	nm	16.2x	nm	nm	na
		Median	6.5x	5.5x	4.8x	23.0x	19.8x	16.0x	1	29.5x	26.5x	18.1x	55.1x	47.2x	41.5x
		Average	6.9x	6.1x	5.3x	23.0x	23.5x	19.5x		29.0x	27.8x	22.0x	54.9x	50.1x	42.6x

#### Source: CapitalIQ

Note: Financials calendarised to 31st December, market data as of 5th May 2023, "na" = not available

21 "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

	S	ales grow	th	E	BITDA mar	gin		EBIT marg	in	N	et income m	argin		CAGR 2	23E-25E	
Companies	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	Sales	EBITDA	EBIT	N.I.
ERP & General Business																
Salesforce	11.0%	11.3%	12.0%	28.9%	31.4%	30.7%	25.4%	29.7%	31.5%	7.0%	10.9%	12.6%	11.6%	14.9%	24.2%	49.5%
Shopify	20.1%	18.5%	26.0%	4.8%	7.9%	10.5%	4.8%	6.8%	8.3%	(7.0%)	(1.5%)	2.5%	22.2%	80.6%	60.1%	na
Workday	16.2%	17.2%	18.4%	26.3%	28.9%	30.4%	21.0%	24.1%	25.7%	(0.7%)	2.6%	4.9%	17.8%	26.7%	30.2%	na
Constellation	20.2%	14.9%	na	26.3%	26.8%	na	15.4%	16.4%	na	7.1%	7.7%	na	na	na	na	na
Paycom	24.7%	20.8%	18.7%	41.9%	41.9%	43.0%	34.7%	35.1%	35.8%	20.7%	20.4%	21.8%	19.8%	21.3%	21.7%	23.0%
Manhattan Associates	12.3%	11.8%	13.0%	27.5%	28.6%	29.7%	26.6%	27.2%	na	15.1%	15.5%	17.9%	12.4%	17.0%	na	22.6%
Sage Group	9.4%	7.7%	10.9%	23.3%	23.8%	24.4%	20.2%	20.7%	21.1%	13.4%	13.9%	14.0%	9.3%	11.7%	11.6%	11.7%
Paylocity	27.5%	19.6%	17.4%	32.0%	32.6%	33.3%	27.4%	28.4%	29.1%	11.8%	12.2%	12.7%	18.5%	20.7%	21.9%	22.8%
Ceridian	19.7%	15.8%	16.1%	25.3%	26.9%	29.7%	19.6%	21.1%	21.5%	2.4%	5.8%	10.6%	15.9%	25.6%	21.4%	145.0%
Descartes Systems	14.7%	10.2%	10.4%	43.4%	44.9%	45.4%	28.6%	31.7%	31.1%	21.5%	22.8%	23.4%	10.3%	12.9%	15.1%	14.9%
Monday.com	33.1%	28.0%	27.9%	(3.4%)	(1.2%)	2.6%	(5.1%)	(2.0%)	1.2%	(19.9%)	(16.2%)	(16.2%)	27.9%	na	na	15.6%
SPS Commerce	17.1%	14.9%	14.0%	29.6%	30.4%	31.7%	26.0%	26.7%	28.2%	11.5%	12.5%	14.0%	14.4%	18.5%	19.2%	26.4%
Smartsheet	24.3%	22.1%	21.4%	4.8%	8.8%	12.3%	2.1%	6.6%	10.7%	(18.5%)	(14.5%)	na	21.7%	95.4%	177.5%	na
Workiva	16.7%	17.8%	21.8%	(0.3%)	5.1%	13.3%	(1.0%)	4.1%	12.9%	(17.6%)	(9.2%)	na	19.8%	na	na	na
Technology One	13.2%	12.8%	12.7%	43.0%	44.4%	45.1%	31.3%	32.2%	33.2%	23.8%	24.6%	25.4%	12.8%	15.5%	16.2%	16.3%
Ziff Davis	(0.4%)	5.4%	6.6%	36.0%	37.0%	36.9%	29.4%	29.6%	28.7%	12.8%	13.9%	14.7%	6.0%	7.4%	4.9%	13.6%
C3.ai	14.7%	18.9%	26.1%	(19.5%)	(11.0%)	na	(21.8%)	(10.4%)	3.9%	(88.3%)	(67.3%)	na	22.4%	na	na	na
Enghouse Systems	5.4%	na	na	30.6%	na	na	20.8%	na	na	17.2%	na	na	na	na	na	na
BigCommerce	9.8%	13.9%	16.9%	(3.1%)	4.5%	10.9%	(5.5%)	1.9%	9.2%	(23.6%)	(13.3%)	na	15.4%	na	na	na
Median	16.2%	15.4%	16.9%	26.3%	27.8%	30.1%	20.8%	22.6%	23.6%	7.1%	9.3%	14.0%	15.9%	18.5%	21.5%	22.6%
Average	16.3%	15.6%	17.1%	20.9%	22.9%	26.9%	15.8%	18.3%	20.7%	(0.6%)	2.3%	12.2%	16.4%	28.3%	35.3%	32.9%

## **Implied multiples** Cybersecurity

-	Market cap	EV		EV / Sales		1	EV / EBITD	A		EV / EBIT			P/E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
Cybersecurity														
Palo Alto Networks	50,516	51,067	7.5x	6.2x	5.1x	28.5x	23.3x	17.9x	34.0x	27.6x	20.6x	nm	nm	61.0x
Vmware	48,269	54,057	4.3x	3.9x	3.7x	12.5x	na	na	16.2x	13.8x	11.6x	32.9x	28.1x	24.6x
Fortinet	45,980	44,266	8.9x	7.5x	6.3x	31.7x	26.3x	21.7x	34.7x	28.8x	24.0x	48.9x	40.3x	33.5x
CrowdStrike Holdings	26,213	24,490	9.2x	7.1x	5.6x	48.9x	32.6x	23.6x	60.1x	38.4x	27.4x	nm	nm	nm
Cloudflare	13,276	13,154	11.3x	8.7x	6.6x	nm	nm	37.4x	nm	nm	73.6x	nm	nm	nm
Check Point	13,258	11,746	5.4x	5.1x	5.0x	12.3x	11.8x	11.5x	12.6x	12.1x	11.7x	17.9x	17.2x	16.6x
Splunk	12,805	14,715	4.2x	3.7x	3.2x	24.4x	18.2x	14.7x	27.8x	20.1x	15.6x	nm	nm	35.6x
Zscaler	11,783	11,157	7.0x	5.5x	4.4x	38.7x	27.4x	na	48.6x	34.1x	24.8x	nm	nm	nm
Nice	11,190	10,505	4.9x	4.4x	3.8x	14.3x	13.3x	11.9x	16.8x	14.5x	13.0x	34.3x	27.8x	26.7x
OKTA	10,800	10,607	5.4x	4.6x	3.7x	nm	46.8x	28.3x	nm	50.6x	29.5x	nm	nm	nm
Gen Digital	9,948	18,403	5.5x	5.0x	4.6x	10.1x	9.2x	na	10.0x	8.8x	na	11.4x	8.2x	7.1x
DocuSign	8,948	8,817	3.6x	3.4x	3.0x	15.6x	12.7x	10.2x	17.7x	14.5x	11.9x	nm	nm	39.7x
Trend Micro	6,218	4,634	2.8x	2.6x	2.4x	12.2x	11.4x	10.6x	19.0x	17.2x	16.3x	34.6x	31.5x	30.1x
CyberArk	4,948	4,632	7.0x	5.7x	4.7x	nm	nm	31.6x	nm	nm	39.2x	nm	nm	nm
Qualys	3,905	3,637	7.2x	6.4x	5.9x	17.2x	15.5x	14.0x	19.8x	17.7x	16.3x	40.3x	37.3x	29.8x
Tenable	3,758	3,581	5.1x	4.4x	4.0x	36.8x	29.0x	na	42.5x	31.9x	24.6x	nm	nm	nm
Rapid7	2,568	3,133	4.5x	3.8x	3.3x	42.9x	30.8x	18.2x	57.7x	39.4x	29.9x	nm	nm	nm
BlackBerry	2,476	2,491	4.0x	3.5x	1.4x	nm	47.8x	16.7x	nm	nm	20.3x	nm	nm	nm
		Median	5.4x	4.8x	4.2x	20.8x	23.3x	17.3x	23.8x	20.1x	20.6x	34.3x	28.1x	30.0x
		Average	6.0x	5.1x	4.3x	24.7x	23.7x	19.2x	29.8x	24.6x	24.1x	31.5x	27.2x	30.5x

Note: Financials calendarised to 31st December, market data as of 5th May 2023, "na" = not available

23 "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

	Sales growth 2023E 2024E 2025		vth	E	BITDA mai	rgin	E	BIT marg	in	Net	income n	nargin		CAGR 23	E-25E	
Companies	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	Sales	EBITDA	EBIT	N.I.
Cybersecurity																
Palo Alto Networks	23.6%	20.4%	22.4%	26.2%	26.7%	28.3%	22.0%	22.5%	24.6%	4.4%	5.5%	8.2%	21.4%	26.1%	28.4%	66.4%
Vmware	5.5%	8.3%	6.3%	34.1%	na	na	26.3%	28.5%	32.0%	11.5%	12.5%	13.4%	7.3%	na	18.3%	15.6%
Fortinet	23.8%	18.8%	18.5%	28.1%	28.5%	29.1%	25.7%	26.0%	26.4%	19.0%	19.4%	19.7%	18.7%	20.7%	20.2%	20.8%
CrowdStrike Holdings	34.9%	29.4%	26.7%	18.8%	21.8%	23.8%	15.3%	18.5%	20.5%	(3.2%)	(0.4%)	3.4%	28.1%	44.0%	48.1%	na
Cloudflare	31.4%	30.7%	31.3%	15.9%	16.1%	17.6%	5.9%	6.8%	8.9%	(13.4%)	(11.4%)	(7.9%)	31.0%	38.0%	61.5%	0.7%
Check Point	3.7%	4.2%	3.7%	43.4%	43.6%	43.2%	42.4%	42.3%	42.3%	33.7%	33.7%	33.7%	3.9%	3.7%	3.9%	4.0%
Splunk	8.5%	12.5%	15.8%	17.2%	20.5%	21.9%	15.1%	18.5%	20.6%	(6.2%)	(1.4%)	7.9%	14.1%	28.9%	33.6%	na
Zscaler	35.5%	27.4%	25.8%	18.2%	20.2%	na	14.5%	16.2%	17.8%	(14.4%)	(11.6%)	(6.9%)	26.6%	na	40.2%	(12.7%)
Nice	12.3%	12.3%	13.6%	34.2%	32.7%	32.3%	29.2%	30.0%	29.5%	15.2%	16.6%	15.3%	13.0%	9.8%	13.6%	13.4%
ΟΚΤΑ	18.4%	18.5%	24.0%	4.5%	9.8%	13.1%	3.0%	9.1%	12.6%	(30.5%)	(23.9%)	(13.4%)	21.2%	106.9%	146.4%	(19.5%)
Gen Digital	16.8%	9.7%	9.1%	54.3%	54.7%	na	55.1%	57.3%	na	26.0%	33.3%	35.0%	9.4%	na	na	26.9%
DocuSign	8.3%	7.4%	11.5%	23.2%	26.5%	29.7%	20.4%	23.1%	25.4%	(0.7%)	1.6%	7.7%	9.4%	23.9%	22.1%	na
Trend Micro	9.1%	7.5%	8.5%	23.1%	22.9%	22.7%	14.9%	15.3%	14.8%	10.9%	11.2%	10.8%	8.0%	7.0%	7.8%	7.3%
CyberArk	23.4%	22.9%	21.1%	2.6%	8.7%	14.9%	0.1%	5.7%	12.0%	(15.8%)	(9.5%)	(0.3%)	22.0%	193.8%	nm	(83.5%)
Qualys	13.1%	12.2%	9.1%	42.0%	41.5%	42.2%	36.6%	36.4%	36.2%	19.2%	18.6%	21.3%	10.6%	10.9%	10.0%	16.3%
Tenable	14.3%	14.9%	11.0%	13.7%	15.2%	na	11.9%	13.8%	16.1%	(11.2%)	(9.3%)	(6.1%)	12.9%	na	31.3%	(16.8%)
Rapid7	13.1%	16.0%	16.1%	10.4%	12.5%	18.2%	7.7%	9.7%	11.1%	(13.6%)	(10.6%)	(9.6%)	16.0%	53.5%	38.8%	(2.3%)
BlackBerry	4.2%	12.2%	147.8%	(6.7%)	7.4%	8.5%	(11.5%)	2.3%	7.0%	(31.2%)	(9.5%)	(2.6%)	66.8%	na	na	(52.3%)
Median	13.7%	13.7%	15.9%	21.0%	21.8%	23.2%	15.2%	18.5%	20.5%	(1.9%)	0.6%	7.8%	15.1%	26.1%	28.4%	4.0%
Average	16.7%	15.9%	23.4%	22.4%	24.1%	24.7%	18.6%	21.2%	21.0%	(0.0%)	3.6%	7.2%	18.9%	43.6%	34.9%	(1.0%)



## Implied multiples Large Platforms

•	Market cap	EV		EV / Sales			EV / EBITD	A		E١	V / EBIT				P/E	
Companies	(EURm)	(EURm)	2023E	2024E	2025E	2023E	2024E	2025E	202	3E 2	2024E	2025E		2023E	2024E	2025E
Large platforms																
Microsoft	2,096,406	2,073,618	10.2x	9.2x	8.1x	21.1x	18.3x	na	24.	łx	21.5x	18.8x		30.1x	26.3x	22.4x
Oracle	237,609	313,440	6.6x	6.2x	5.6x	13.7x	12.2x	na	15.	″х	14.2x	12.8x		27.5x	22.1x	19.8x
SAP	142,598	144,693	4.6x	4.3x	4.0x	14.4x	12.8x	11.4x	16.	γx	14.8x	12.9x		36.4x	29.0x	24.0x
IBM	101,905	150,788	2.7x	2.6x	2.5x	10.8x	10.3x	9.6x	15.	łx	14.4x	12.8x		16.8x	15.3x	13.8x
		Median	5.6x	5.2x	4.8x	14.1x	12.5x	10.5x	16.	x 1	14.6x	12.8x	] [:	28.8x	24.2x	21.1x
		Average	6.0x	5.5x	5.1x	15.0x	13.4x	10.5x	18.	)x	16.2x	14.3x		27.7x	23.2x	20.0x



### Sales growth rates & operating margins Large Platforms

•		S	ales growt	h	EE	BITDA mar	gin		EBIT marg	gin		Net i	ncome m	argin			CAGR 2	23E-25E	
Companies		2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	20	23E	2024E	2025E	1	Sales	EBITDA	EBIT	N.I.
Large platforms																			
Microsoft		9.0%	11.9%	12.7%	48.6%	49.9%	na	41.9%	42.6%	43.3%	34	4%	35.2%	36.7%	1	2.3%	na	14.1%	16.0%
Oracle		11.2%	7.7%	9.2%	48.4%	50.6%	na	42.4%	43.4%	44.0%	18	3%	21.1%	21.7%		8.5%	na	10.5%	18.0%
SAP		1.3%	8.0%	8.3%	32.1%	33.3%	34.8%	27.7%	29.0%	30.7%	12	5%	14.5%	16.2%		8.2%	12.7%	13.8%	23.1%
IBM		3.0%	3.4%	3.8%	24.6%	25.1%	26.0%	17.3%	17.9%	19.4%	10	7%	11.4%	12.1%		3.6%	6.4%	<b>9.9</b> %	10.2%
	Median	6.0%	7.9%	8.7%	40.2%	41.6%	30.4%	34.8%	35.8%	37.0%	15.	4%	17.8%	18.9%	8	8.3%	9.5%	12.2%	17.0%
	Average	6.1%	7.8%	8.5%	38.4%	39.7%	30.4%	32.3%	33.2%	34.4%	19	.0%	20.6%	21.7%		8.1%	9.5%	12.1%	16.8%



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