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CORPORATE FINANCE

## Newsletter

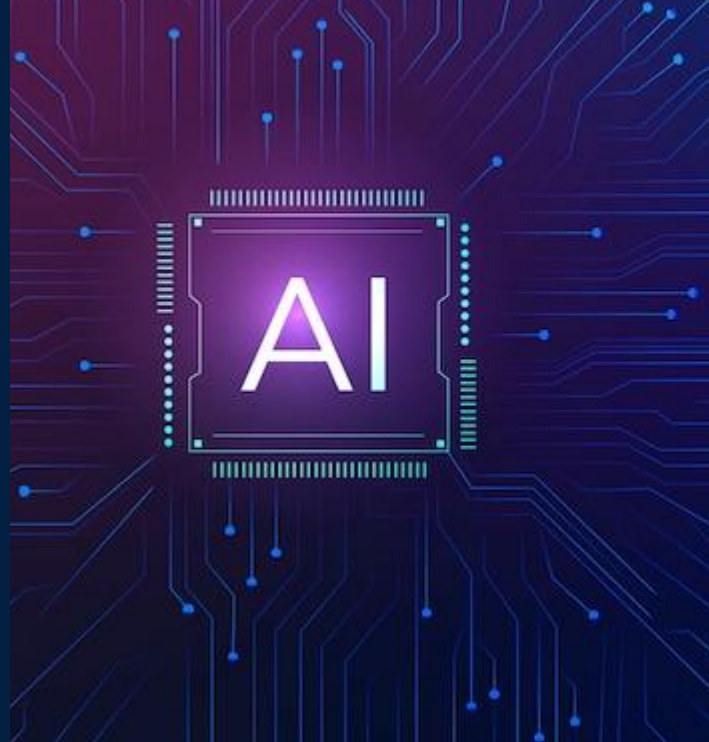
# Software & Technology

Q1 2023

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- About Ludwig & Co.

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# Summary

## Top M&A Deals Q1 2023

- Microsoft Corporation** extends its ambitions in **OpenAI LP**, the company behind the AI solutions ChatGPT and Dall-E to a reported 49% stake. After investments in 2019 and 2021, the deal is set to be around \$10bn, valuing the company at around \$29bn. ChatGPT is one of the companies behind the soaring interest in AI applications worldwide
- German software company **SAP SE** has sold its remaining 95.9% stake in Qualtrics International, Inc. to **Canada Pension Plan Investment Board** and **Silver Lake Management** for €9.5bn in cash
- Alphabet, Inc.** (Google), the world's fourth-largest company by market capitalization, is investing in its AI division with a stake in **Anthropic**. The deal is valued at €274m for a minority stake of 10%. Alphabet had come under pressure after it was revealed that Microsoft was using OpenAI resources to boost its "Bing" search engine
- Another AI deal that preceded the above deals in early January was the transaction of Covid 19 vaccine pioneer **BioNTech SE**. **BioNTech acquired** London-based **InstaDeep Ltd.** for €638m, which uses machine learning and AI to leverage drug development, among other things. This acquisition has several potential benefits. First, it diversifies BioNTech's business model due to its various use cases besides drug development. Second, it is worth noting that BioNTech is currently developing a new mRNA anti-cancer vaccine. The potential shorter development time may be a competitive advantage

## Overview of Global M&A Activity

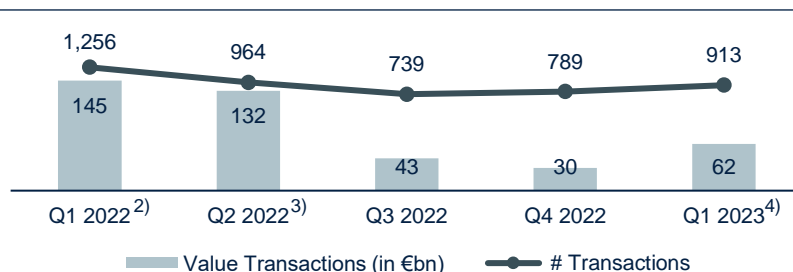
Uncertainties in the first quarter of the year were different than in previous quarters. Mergers and acquisitions related to Signature Bank and Credit Suisse, the collapse of Silicon Valley Bank and thus the possible outcome for tech startups and their development in the future are not clear at the moment. On the other hand, one thing changed the software and technology sector in Q1. It was Artificial Intelligence ("AI"), in particular, ChatGPT from OpenAI, which led to an astonishing reaction from companies that may be threatened by the power of AI or see a growing opportunity. Google's parent company Alphabet, Inc. reportedly invested around \$275m (approx. €252m) in Anthropic, an AI startup, and Microsoft-backed OpenAI will receive \$10bn (approx. €9.2 billion) in new capital over the next few years, bringing Microsoft's stake to 49%, according to media reports.

The Software M&A activity increased moderately by 15.7% in Q1 2023 to 913 transactions compared to 789 transactions in Q4 2022. Compared to Q1 2022, the deals amount fell by around 57%. Of these 913 transactions, 815 involved strategic and 98 financial buyers. Compared to Q4 2022, more high-priced deals, such as the Qualtrics International deal worth around EUR 10 billion, have been included. The deal between Microsoft and OpenAI is not included in the chart below. Due to the complexity of Microsoft paying the \$10 billion (approx. €9.2 billion) over the years rather than at the outset, it has not been included in our calculations.

The number of IPOs and follow-ons in the software sector suffered a significant setback in relevant transactions but the total number increased from 36 to 57 IPOs and follow-ons. Reddit, a social media platform, has been aiming for an IPO since 2021 and mentioned in February this year that they are seeking to go public this year with a planned valuation of around €15 bn.

Despite macroeconomic uncertainty that has put the brakes on IPOs but also bond issuances, bold technology companies are still closing well-thought deals to emerge stronger from the downturn and use their opportunity to restructure or enhance their business model. While valuations falling, those who act bravely and quickly can benefit - most dramatically affecting high-growth companies. This golden opportunity period will not last forever. History teaches us that it is not recessions but uncertainties such as the fall of Silicon Valley Bank and geo-political risks that slow down the markets for mergers and acquisitions in the software & technology sector, and that once uncertainty decreases, activity - and probably valuations - should return.

M&A Activity Quarterly 2022 – 2023<sup>1)</sup>



Selected Information Technology Bonds Issuances Q1 2023

Issuance Date	Maturity Date	Company	Amount (in €m)	Coupon	Yield	Price
30/01/2023	15/12/2026	TechTarget	381	0.00%	7.10%	77
03/02/2023	01/03/2028	Snap Inc.	1,381	0.13%	7.49%	70
06/02/2023	06/02/2053	Oracle	2,071	5.55%	5.91%	95
15/02/2023	15/02/2028	Sage Group	500	3.82%	3.92%	99
10/03/2023	15/03/2026	Warner Media	1,381	6.41%	5.87%	100

Note: 1) Completed and pending transactions, 2) Potential acquisition of Activision Blizzard by Microsoft (59 €bn), 3) Acquisition of VMware by Broadcom (63.6 €bn), 4) Acquisition of Qualtrics International, Inc. to CPP Investments and Silver Lake (\$9.5bn); Source: FactSet, Ludwig & Co. Research as of April 2023.

# Market Performance (I/III)

## Information Systems and Related Areas – Benchmarking by Sector and Market Cap

Company	EV (€m)	EV/Revenue		EV/EBITDA		EV/EBIT		Revenue growth		EBITDA Margin		EBIT Margin	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
<b>Ecommerce</b>													
<b>Large &amp; Mid Cap</b>													
Amazon	1,039,243	2.0x	1.8x	13.6x	11.1x	57.5x	34.3x	4.7%	12.7%	15.0%	16.2%	3.5%	5.3%
Alibaba	196,223	1.5x	1.4x	7.4x	6.7x	12.6x	10.3x	n.a.	10.4%	20.5%	20.6%	12.1%	13.5%
Booking Holdings	92,528	5.0x	4.5x	15.0x	13.2x	16.2x	14.3x	13.4%	10.8%	33.4%	34.3%	30.9%	31.8%
Uber	65,236	1.9x	1.6x	21.5x	13.7x	n.m.	37.1x	11.3%	17.3%	9.0%	12.1%	0.7%	4.4%
Airbnb	63,375	7.2x	6.2x	20.6x	17.0x	31.0x	24.5x	10.4%	15.3%	34.9%	36.7%	23.2%	25.4%
eBay	23,540	2.6x	2.5x	7.9x	7.4x	9.1x	8.6x	(1.6%)	3.4%	32.9%	34.0%	28.5%	29.1%
DoorDash	20,090	2.8x	2.4x	31.8x	20.7x	n.a.	n.a.	16.4%	17.1%	8.7%	11.4%	(11.4%)	(6.7%)
Expedia	15,302	1.3x	1.2x	6.1x	5.4x	10.2x	8.4x	6.7%	9.2%	21.3%	22.1%	12.7%	14.0%
Delivery Hero	10,779	1.0x	0.8x	55.4x	15.7x	n.a.	118.5x	n.a.	19.2%	1.8%	5.3%	(3.5%)	0.7%
Zalando	9,776	0.9x	0.8x	15.7x	12.1x	36.6x	23.4x	2.9%	10.4%	5.9%	6.9%	2.5%	3.6%
Lyft	2,480	0.6x	0.5x	10.4x	6.0x	n.a.	n.a.	5.1%	12.8%	5.8%	9.0%	(12.4%)	(4.7%)
<b>Median</b>		<b>1.9x</b>	<b>1.6x</b>	<b>15.0x</b>	<b>12.1x</b>	<b>16.2x</b>	<b>23.4x</b>	<b>6.7%</b>	<b>12.7%</b>	<b>15.0%</b>	<b>16.2%</b>	<b>3.5%</b>	<b>5.3%</b>
<b>Average</b>		<b>2.4x</b>	<b>2.2x</b>	<b>18.7x</b>	<b>11.7x</b>	<b>24.7x</b>	<b>31.0x</b>	<b>7.7%</b>	<b>12.6%</b>	<b>17.2%</b>	<b>19.0%</b>	<b>7.9%</b>	<b>10.6%</b>
<b>Ecommerce</b>													
<b>Small Cap</b>													
Revolve	1,543	1.4x	1.3x	19.0x	14.3x	21.9x	16.0x	3.7%	13.3%	7.5%	8.8%	6.5%	7.8%
ASOS	1,541	0.3x	0.3x	9.4x	5.6x	33.1x	16.9x	(3.3%)	7.1%	3.6%	5.7%	1.0%	1.9%
ACV Auctions	1,518	3.6x	2.8x	n.a.	76.3x	n.a.	n.a.	6.3%	26.6%	(7.1%)	3.7%	(21.5%)	(8.5%)
IndiaMART	1,478	11.1x	9.1x	37.8x	28.8x	40.6x	31.1x	n.a.	21.9%	29.3%	31.5%	27.3%	29.2%
Upwork	1,233	1.9x	1.6x	76.0x	24.1x	n.a.	n.a.	9.0%	19.8%	2.5%	6.7%	(8.9%)	(3.3%)
Global Industry	993	0.9x	0.9x	10.8x	10.1x	11.3x	10.5x	(3.8%)	4.8%	8.6%	8.8%	8.3%	8.5%
Udemy	769	1.2x	0.9x	n.a.	38.9x	n.a.	n.a.	11.2%	22.1%	(2.7%)	2.4%	(5.1%)	(0.1%)
Overstock	518	0.4x	0.3x	21.3x	13.3x	n.a.	59.1x	(19.9%)	5.9%	1.7%	2.5%	(0.6%)	0.6%
<b>Median</b>		<b>1.3x</b>	<b>1.1x</b>	<b>20.1x</b>	<b>19.2x</b>	<b>27.5x</b>	<b>16.9x</b>	<b>3.7%</b>	<b>16.5%</b>	<b>3.1%</b>	<b>6.2%</b>	<b>0.2%</b>	<b>1.2%</b>
<b>Average</b>		<b>2.6x</b>	<b>2.2x</b>	<b>29.1x</b>	<b>26.4x</b>	<b>26.7x</b>	<b>26.7x</b>	<b>0.5%</b>	<b>15.2%</b>	<b>5.4%</b>	<b>8.8%</b>	<b>0.9%</b>	<b>4.5%</b>
<b>Software</b>													
<b>Large &amp; Mid Cap</b>													
Microsoft	1,935,704	10.1x	9.1x	21.0x	18.2x	24.8x	21.5x	8.9%	11.2%	48.0%	49.9%	40.8%	42.1%
Tencent	445,944	5.4x	4.8x	16.0x	14.0x	19.1x	16.5x	5.2%	11.7%	33.9%	34.7%	28.4%	29.4%
Oracle	310,740	6.3x	5.9x	12.4x	11.3x	14.7x	13.3x	n.a.	7.8%	50.9%	51.7%	43.0%	44.0%
Salesforce	183,546	5.8x	5.2x	16.4x	15.1x	21.7x	17.6x	5.9%	11.2%	35.4%	34.4%	26.7%	29.6%
Cisco	183,348	3.5x	3.4x	9.9x	9.3x	10.7x	10.0x	12.0%	4.3%	35.8%	36.2%	33.1%	33.8%
Adobe	158,045	8.9x	8.0x	18.4x	16.6x	19.9x	17.8x	7.4%	11.8%	48.6%	48.2%	44.8%	45.0%
IBM	151,981	2.6x	2.5x	11.0x	10.7x	15.1x	14.3x	0.1%	3.6%	23.9%	23.8%	17.4%	17.8%
SAP	142,040	4.4x	4.1x	15.9x	13.7x	16.2x	14.2x	4.1%	7.8%	27.9%	29.9%	27.4%	28.8%
Intuit	118,254	9.1x	8.2x	23.4x	20.1x	24.3x	21.5x	13.7%	11.2%	38.9%	40.8%	37.4%	37.9%
VMware	54,767	4.2x	3.9x	11.7x	10.8x	14.9x	13.4x	2.5%	7.5%	35.8%	36.2%	28.1%	29.1%
Shopify	52,255	8.6x	7.1x	n.m.	127.4x	n.a.	n.m.	14.6%	21.2%	1.2%	5.5%	(0.8%)	2.8%
Autodesk	41,332	8.3x	7.4x	21.9x	19.2x	23.4x	20.1x	5.3%	11.6%	37.9%	38.8%	35.5%	37.0%
HCL Technologies	31,642	2.5x	2.3x	11.2x	10.2x	13.6x	12.2x	n.a.	10.2%	22.7%	22.6%	18.6%	18.8%
Gen Digital	18,762	5.3x	5.0x	9.8x	9.0x	9.6x	8.5x	n.a.	5.5%	54.1%	55.7%	55.3%	58.9%
DXC Technology	8,994	0.7x	0.7x	4.2x	4.3x	7.7x	7.6x	n.a.	(0.7%)	16.1%	15.7%	8.7%	8.9%
Nemetschek	7,429	8.9x	8.0x	30.4x	26.2x	37.1x	31.1x	4.1%	11.0%	29.2%	30.6%	24.0%	25.8%
<b>Median</b>		<b>5.6x</b>	<b>5.1x</b>	<b>15.9x</b>	<b>13.8x</b>	<b>16.2x</b>	<b>14.3x</b>	<b>5.6%</b>	<b>10.6%</b>	<b>35.6%</b>	<b>35.4%</b>	<b>28.2%</b>	<b>29.5%</b>
<b>Average</b>		<b>5.9x</b>	<b>5.3x</b>	<b>15.6x</b>	<b>21.0x</b>	<b>18.2x</b>	<b>16.0x</b>	<b>7.0%</b>	<b>9.2%</b>	<b>33.8%</b>	<b>34.7%</b>	<b>29.3%</b>	<b>30.6%</b>

Note: Small Cap = Market Cap < 2 €bn, n.a. = not available, n.m. = not meaningful; Source: FactSet as of April 2023.

# Market Performance (II/III)

## Information Systems and Related Areas – Benchmarking by Sector and Market Cap

Company	EV (€m)	EV/Revenue		EV/EBITDA		EV/EBIT		Revenue growth		EBITDA Margin		EBIT Margin	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
<b>Software</b>													
<b>Small Cap</b>													
TeamViewer	3,230	5.1x	4.7x	12.7x	11.4x	19.3x	15.5x	11.8%	8.7%	40.1%	41.2%	26.5%	30.3%
Progress Software Corp.	2,908	4.6x	4.4x	11.3x	10.6x	12.1x	10.9x	10.2%	5.9%	41.1%	41.2%	38.2%	40.0%
N-able	2,458	6.5x	5.9x	21.5x	19.3x	25.7x	23.0x	6.4%	11.1%	30.4%	30.4%	25.4%	25.5%
EverCommerce	2,309	3.7x	3.3x	18.3x	15.2x	19.0x	16.0x	6.9%	12.4%	20.0%	21.4%	19.3%	20.4%
ForgeRock	1,383	5.7x	4.6x	n.a.	116.4x	n.a.	137.5x	17.2%	24.5%	(2.0%)	3.9%	(3.0%)	3.3%
ATOSS	1,296	9.5x	8.0x	30.7x	25.0x	34.8x	28.0x	19.2%	18.8%	31.1%	32.1%	27.4%	28.7%
PROS Holdings	1,241	4.6x	4.1x	n.a.	128.9x	n.a.	n.m.	3.5%	11.5%	(0.2%)	3.2%	(2.1%)	1.3%
Amplitude	1,127	4.3x	3.5x	n.a.	n.a.	n.a.	n.a.	16.4%	22.8%	(4.0%)	(0.3%)	(6.7%)	(2.3%)
Saksoft	656	3.8x	3.0x	21.4x	14.4x	28.2x	18.3x	20.6%	25.4%	17.8%	21.0%	13.5%	16.6%
Axway Software	537	1.7x	1.6x	10.8x	9.6x	12.1x	10.7x	0.3%	4.8%	15.8%	16.9%	14.0%	15.2%
Cegedim SA	505	0.8x	0.8x	4.5x	4.2x	13.6x	11.5x	8.0%	4.1%	18.7%	19.3%	6.2%	7.1%
<b>Median</b>		<b>4.6x</b>	<b>4.1x</b>	<b>15.5x</b>	<b>14.8x</b>	<b>19.1x</b>	<b>16.0x</b>	<b>10.2%</b>	<b>11.5%</b>	<b>18.7%</b>	<b>21.0%</b>	<b>14.0%</b>	<b>16.6%</b>
<b>Average</b>		<b>4.6x</b>	<b>4.0x</b>	<b>16.4x</b>	<b>35.5x</b>	<b>20.6x</b>	<b>30.2x</b>	<b>11.0%</b>	<b>13.6%</b>	<b>19.0%</b>	<b>20.9%</b>	<b>14.4%</b>	<b>16.9%</b>
<b>Entertainment &amp; Consumer Electronics</b>													
<b>Large &amp; Mid Cap</b>													
Apple	2,461,055	6.9x	6.4x	21.4x	20.0x	23.6x	22.0x	(2.0%)	7.0%	32.2%	32.2%	29.1%	29.3%
Alphabet	1,144,131	4.2x	3.7x	10.8x	9.4x	16.0x	13.8x	2.5%	11.5%	38.8%	39.7%	26.1%	27.2%
Meta	492,472	4.4x	4.0x	9.3x	8.2x	16.3x	13.4x	0.8%	11.2%	47.1%	48.0%	26.9%	29.5%
Samsung	229,662	1.2x	1.1x	6.2x	4.1x	25.6x	8.9x	(14.0%)	13.0%	19.4%	25.8%	4.7%	11.9%
Walt Disney	216,028	2.6x	2.5x	15.5x	12.6x	17.9x	14.5x	8.4%	6.4%	16.8%	19.4%	14.6%	16.9%
Netflix	152,075	4.8x	4.3x	22.3x	18.2x	25.2x	20.2x	4.8%	11.8%	21.6%	23.6%	19.2%	21.4%
Sony	118,115	1.4x	1.4x	8.3x	7.8x	13.3x	12.0x	n.a.	3.9%	16.9%	17.4%	10.5%	11.3%
Activision Blizzard	53,596	6.2x	6.0x	16.1x	14.7x	16.7x	15.2x	22.1%	2.7%	38.4%	40.9%	37.1%	39.4%
EA	29,878	4.3x	4.0x	13.0x	11.6x	14.4x	12.7x	n.a.	8.2%	33.2%	34.4%	29.9%	31.4%
Xiaomi	28,427	0.7x	0.7x	18.1x	15.0x	25.6x	19.2x	(2.2%)	11.7%	4.0%	4.4%	2.9%	3.4%
Take-Two Interactive	20,223	3.5x	2.8x	17.3x	11.7x	18.4x	11.9x	n.a.	25.0%	20.3%	24.0%	19.0%	23.5%
Snap	16,481	3.8x	3.3x	35.6x	21.7x	n.a.	n.a.	(1.2%)	17.1%	10.7%	15.0%	(23.7%)	(14.9%)
Pinterest	15,044	5.4x	4.5x	30.7x	21.9x	34.1x	26.5x	4.8%	18.9%	17.5%	20.6%	15.8%	17.1%
Ubisoft	3,630	1.6x	1.5x	3.9x	3.1x	11.1x	9.0x	n.a.	8.5%	41.9%	47.9%	14.7%	16.7%
<b>Median</b>		<b>4.0x</b>	<b>3.5x</b>	<b>15.8x</b>	<b>12.2x</b>	<b>17.9x</b>	<b>13.8x</b>	<b>1.7%</b>	<b>11.4%</b>	<b>20.9%</b>	<b>24.9%</b>	<b>17.4%</b>	<b>19.2%</b>
<b>Average</b>		<b>3.6x</b>	<b>3.3x</b>	<b>16.3x</b>	<b>12.9x</b>	<b>19.9x</b>	<b>15.3x</b>	<b>2.4%</b>	<b>11.2%</b>	<b>25.6%</b>	<b>28.1%</b>	<b>16.2%</b>	<b>18.9%</b>
<b>FinTech</b>													
<b>Large &amp; Mid Cap</b>													
Paypal	78,565	2.9x	2.7x	11.2x	9.9x	12.8x	11.3x	4.8%	9.6%	26.1%	26.7%	22.8%	23.4%
Adyen	43,097	24.9x	18.8x	49.9x	35.8x	54.8x	38.8x	(80.6%)	32.5%	50.0%	52.6%	45.4%	48.4%
Block	36,192	2.0x	1.7x	29.1x	20.9x	n.a.	n.m.	10.3%	14.9%	6.8%	8.2%	(1.3%)	0.5%
SoFi Technologies	15,794	8.7x	6.9x	62.6x	33.7x	n.a.	n.a.	8.0%	25.7%	13.9%	20.6%	(9.8%)	(2.2%)
Coinbase	11,797	4.5x	3.7x	159.5x	25.4x	n.a.	n.a.	(12.9%)	21.8%	2.8%	14.4%	(36.3%)	(17.2%)
Affirm	5,939	4.3x	3.5x	n.a.	81.0x	n.a.	n.m.	16.5%	22.2%	(5.9%)	4.3%	(8.9%)	0.4%
ACI Worldwide	3,592	2.7x	2.6x	10.1x	9.4x	17.6x	15.7x	(1.8%)	5.5%	26.7%	27.3%	15.4%	16.3%
Remitly	2,439	3.0x	2.4x	n.m.	76.0x	n.a.	n.a.	30.1%	26.1%	0.9%	3.1%	(12.5%)	(10.8%)
Marqeta	691	0.8x	0.7x	n.a.	n.a.	n.a.	n.a.	17.5%	21.2%	(4.0%)	(0.7%)	(23.9%)	(17.9%)
Robinhood	n.m.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	27.2%	11.9%	23.9%	25.3%	(35.1%)	(6.1%)
<b>Median</b>		<b>3.0x</b>	<b>2.7x</b>	<b>39.5x</b>	<b>29.6x</b>	<b>17.6x</b>	<b>15.7x</b>	<b>9.2%</b>	<b>21.5%</b>	<b>10.3%</b>	<b>17.5%</b>	<b>(9.3%)</b>	<b>(0.9%)</b>
<b>Average</b>		<b>6.0x</b>	<b>4.8x</b>	<b>53.7x</b>	<b>36.5x</b>	<b>28.4x</b>	<b>22.0x</b>	<b>1.9%</b>	<b>19.1%</b>	<b>14.1%</b>	<b>18.2%</b>	<b>(4.4%)</b>	<b>3.5%</b>

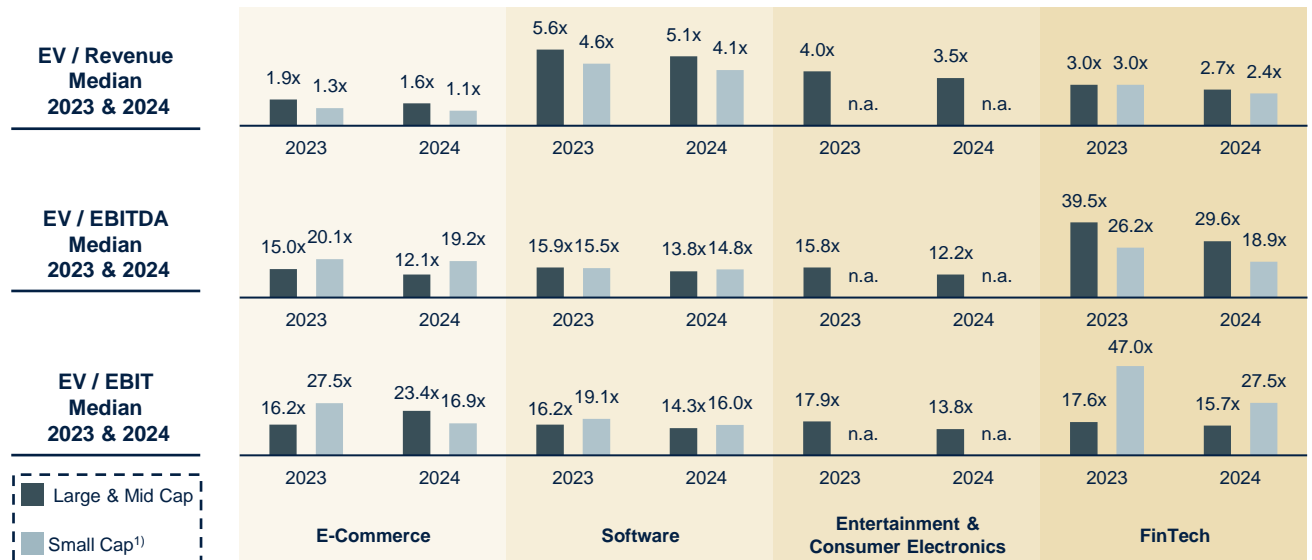
Note: Small Cap = Market Cap < 2 €bn, n.a. = not available, n.m. = not meaningful; Source: FactSet as of April 2023.



# Market Performance (III/III)

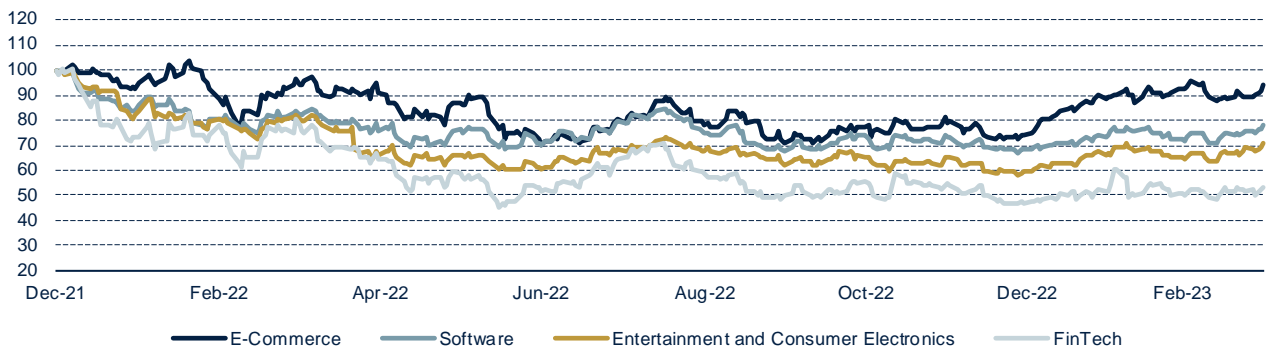
## Information Systems and Related Areas – Benchmarking by Sector and Market Cap

Company	EV (€m)	EV/Revenue		EV/EBITDA		EV/EBIT		Revenue growth		EBITDA Margin		EBIT Margin	
		2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
<b>FinTech</b>													
<b>Small Cap</b>													
Upstart	1,736	3.5x	2.4x	n.a.	18.2x	n.a.	n.a.	(38.2%)	44.8%	(4.9%)	13.3%	(30.1%)	(0.0%)
Q2 Holdings	1,552	2.7x	2.3x	27.0x	18.9x	47.0x	27.5x	8.3%	13.4%	9.9%	12.4%	5.7%	8.5%
AxidXchange	1,130	3.4x	2.9x	n.m.	61.8x	n.a.	n.a.	11.0%	17.6%	0.4%	4.7%	(11.1%)	(6.7%)
Paymentus	882	1.6x	1.3x	26.2x	19.5x	173.6x	61.9x	14.4%	21.0%	6.2%	6.9%	0.9%	2.2%
Lemonade	665	1.9x	1.5x	n.a.	n.a.	n.a.	n.m.	91.0%	24.9%	(63.0%)	(41.1%)	(79.7%)	(59.4%)
Fawry	417	4.5x	3.3x	13.2x	9.8x	17.7x	13.0x	n.a.	36.6%	34.1%	33.6%	25.4%	25.4%
<b>Median</b>		<b>3.0x</b>	<b>2.4x</b>	<b>26.2x</b>	<b>18.9x</b>	<b>47.0x</b>	<b>27.5x</b>	<b>11.0%</b>	<b>23.0%</b>	<b>3.3%</b>	<b>9.7%</b>	<b>(5.1%)</b>	<b>1.1%</b>
<b>Average</b>		<b>2.9x</b>	<b>2.3x</b>	<b>22.1x</b>	<b>25.6x</b>	<b>79.5x</b>	<b>34.2x</b>	<b>17.3%</b>	<b>26.4%</b>	<b>(2.9%)</b>	<b>5.0%</b>	<b>(14.8%)</b>	<b>(5.0%)</b>



Valuations have declined as a result of several factors, including increasing inflation, interest rates, defaults of banks as well as geopolitical uncertainty. While these challenges have had an impact, technology companies are still highly valued. Currently, small and large & mid cap companies are valued similarly.

### Share Price Index of the Peer Group Q1 2022 – Q1 2023



Note: Due to partial non-availability of data, especially regarding EBITDA and EBIT, the median and average of the multiples may be distorted. 1) Market Cap < 2 €bn; n.a. = not available, n.m. = not meaningful; Source: FactSet as of April 2023.

# Selected Market Transactions

## Information Technology and Related Areas – Selected Global M&A Transactions Q1 2023

Date	Buyer	Target	Target		Seller	TV <sup>1)</sup> (€m)
			Country	Business description		
10/01/2023	BioNTech SE	InstaDeep Ltd.	United Kingdom	Enables to leverage the development of drugs with AI and machine learning among other things.	Consortium of shareholders	638
11/01/2023	Guerbet SA	Intrasense SA	France	Provider of specialized software to scan and check organs and diagnose illnesses earlier.	Consortium of shareholders	13 (Majority)
12/01/2023	Kismet Capital Group LLC	HeadHunter Group Plc	Russia	Online recruitment platform focusing on the russian-speaking market.	Elbrus Capital	137 (Minority)
20/01/2023	Thoma Bravo LP	Magnet Forensics, Inc.	Canada	SaaS provider for e.g. criminal investigation departments for analysis of crime cases.	Consortium of shareholders	1,016
23/01/2023	Cognizant Technology Solutions Corp.	Mobica Ltd.	United Kingdom	Provides services for software engineering, QA, testing and UI/UX.	Consortium of shareholders	285
23/01/2023	McKinsey & Co., Inc.	Iguazio Ltd.	Israel	Provider of a machine learning platform that enables companies to develop and manage AI applications.	Consortium of shareholders	46
27/01/2023	Fiscalnote Holdings, Inc.	Dragonfly Eye Ltd.	United Kingdom	Engages in the security sector and provides intelligence services for corporate security.	Consortium of shareholders	30
03/02/2023	Alphabet, Inc.	Anthropic, Inc.	USA	Provider of an AI assistant that helps in tasks about customer service, search, sales, etc.	Consortium of shareholders	274 (Minority)
10/02/2023	Sherpa Co., Ltd.	Trusting Social Pte Ltd.	Singapore	Provider of AI-powered credit risk, identity and acquisition solution to the lending industry.	Consortium of shareholders	98 (Minority)
14/02/2023	Celcoin Instituição de Pagamento SA	Finansystech	Brazil	Enables companies to operate services such as payments, data sharing, etc. in open finance.	Consortium of shareholders	15
14/02/2023	Wisetech Global Ltd.	Envase Holdings LLC	USA	Transportation Management System and Business Intelligence program.	McLarly Capital Partners LLC	215
17/02/2023	Grafenia Plc	Topfloor Systems Ltd.	Ireland	Provider of software services for property management.	Consortium of shareholders	6
27/02/2023	Nexi SpA	PayComet SL	Spain	SaaS payment provider with solutions and services like virtual POS and fraud control.	Banco de Sabadell SA	280 (Majority)
01/03/2023	Fujitsu ND Solutions AG	GK Software SE	Germany	Provider of cloud services for retail chains from inventory management to e-receipt solutions.	Consortium of shareholders	408
06/03/2023	Canada Pension Plan Investment Board / Silver Lake Management	Qualtrics International, Inc.	Canada	Provider of an experience management platform to track and analyse among other things consumer data.	SAP SE	9,530 (Majority)
08/03/2023	carsales.com Ltd.	WebMotors SA	Brazil	Online trading platform for cars.	Banco Santander (Brazil)	225 (Minority)
14/03/2023	Blackstone Corporate Private Equity	Cvent Holding Corp.	USA	SaaS for event management, including marketing, engagement, budgeting and data solutions.	Vista Equity Partners Management LLC	3,964
20/03/2023	PSG Equity LLC	Unnax Payment Systems SL	Spain	SaaS provider for e.g. online banking to aggregate several bank accounts into one app.	Consortium of shareholders	40
22/03/2023	Atari, Inc.	Nightdive Studios LLC	USA	Game developer, especially for retro games.	Consortium of shareholders	19
27/03/2023	Clearlake Capital Group LP	Blackbaud, Inc.	USA	Provider cloud computing services in the social good community of nonprofit and other companies.	Consortium of shareholders	3,510

Note: 1) Transaction Value; Source: FactSet, Ludwig & Co. Research as of April 2023.

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Ludwig & Co. is a dynamic corporate finance advisory firm. Since its formation in 2012, we act as an entirely independent adviser. With no banking or brokerage operations, we are free of conflicts of interest and fully focus on optimizing our clients' processes and results. Our clients can expect tailor-made advisory services of highest quality and excellent process management. In addition to that, we have built and seek long-term relationships of unparalleled quality, loyalty, and integrity not only with our global network of investors but also, and most importantly, with our clients. As corporate finance generalists, we have neither a favorite transaction size nor type, since the motivated members of our team structured and executed transactions in almost every industry sector on a global scale.

## Our Services

### M&A

The core business of Ludwig & Co. is providing comprehensive advice on mergers and acquisitions. Our expertise comprises disposal and acquisition mandates, succession solutions, corporate/shareholder disputes, strategic mergers and joint ventures, divestments and spin-offs as well as MBO/MBI and LBO-transactions.

### Equity

Ludwig & Co. advises and accompanies corporates and their shareholders in the process of private placements of equity and hybrid capital, capital market transactions – such as IPOs – capital increases, share placements, dual tracks, convertible and exchangeable bonds, demergers and spin-offs.

### Debt

We advise and negotiate on behalf of clients regarding alternatives for existing debt and the issuance of new debt. Our team provides in-depth knowledge and understanding of the debt markets, underpinned by an extensive network of contacts within banks and other financial institutions.

### Restructuring

We deliver tailored advice and solutions to corporate and investor clients as well as creditor representation in all types of liability-driven capital structure situations. Ludwig & Co. serves companies in situations of financial stress or developing and implementing comprehensive financial restructuring transactions on their behalf.

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