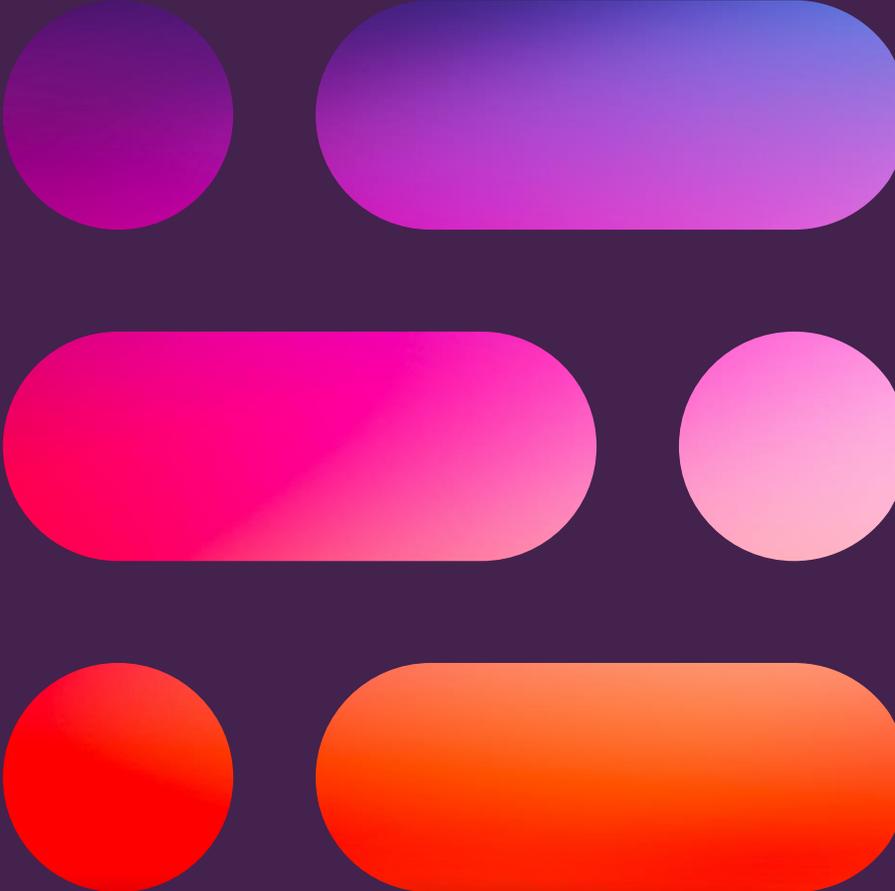


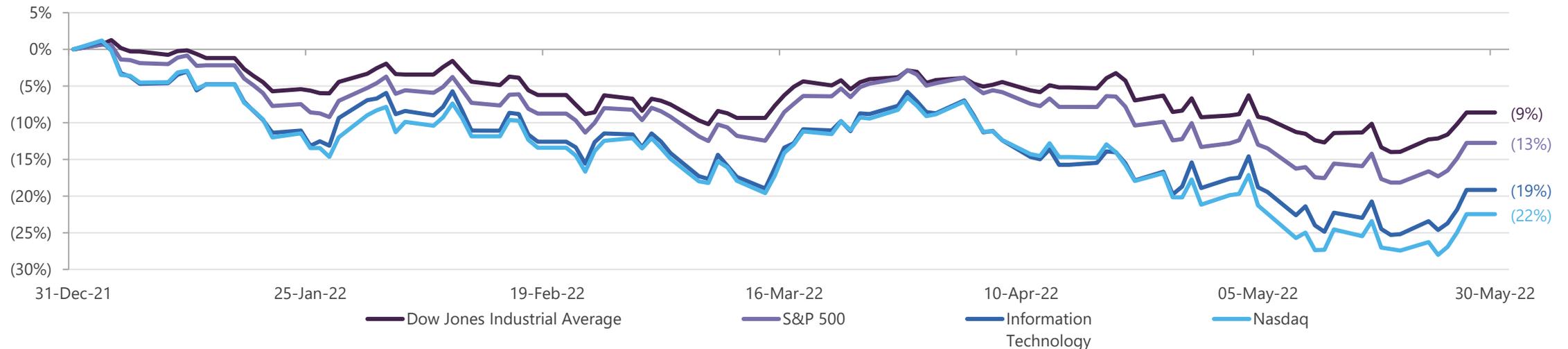
Technology Sector – Q1 2022 Update

Corporate and Investment Banking Practice



Positive long-term outlook despite weak Q1 2022

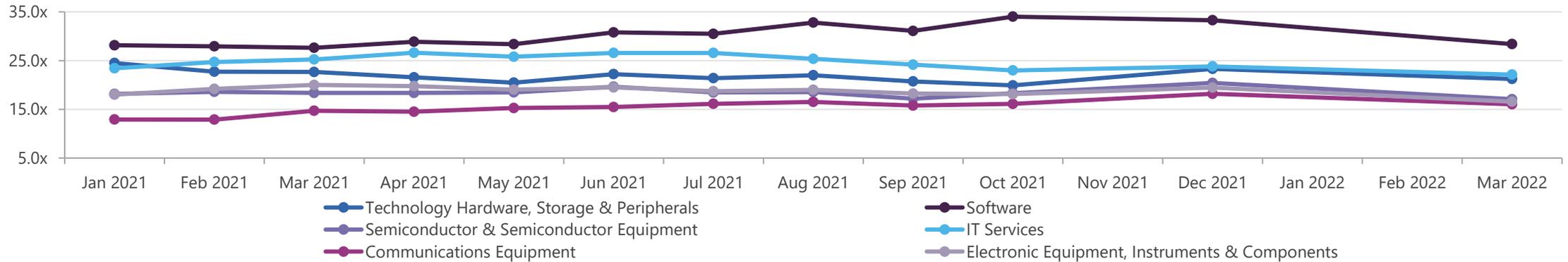
Performance of Technology Sector in Q1 2022



- Since the beginning of 2022, the global market, in general, has been weak due to negative forces such as inflation, interest rates hikes, and Russia-Ukraine conflict
 - In Q1 2022, the technology sector saw a massive downturn, with tech stocks losing ~\$2 trillion. Apple lost \$200 billion of market value, Amazon reported its first loss since 2015, and Alphabet posted weaker-than-expected quarterly earnings and revenue
 - Technology and growth stocks are highly vulnerable to any increase in interest rates as higher discount rates diminish the value of their future earnings
- However, the technology sector is still attractive because it has a relatively high concentration of companies with low-risk characteristics such as strong balance sheets, ample free cashflow generation, high profit margins, and solid return on invested capital
 - The prices of technology stocks have fallen because they had high but unsustainable valuations. In fact, the downside provides long-term investors an opportunity to build a sound portfolio as technology stocks are at their lowest prices since March 2009

Decline in valuation of major sub-sectors

Technology Sub-sector Valuations – EV / LTM EBITDA Through March 31, 2022



Software

- The valuation of the software sector decreased to 28x in Q1 2022 from 33x in Dec 2021, largely due to market uncertainty
 - The downside can be attributed to changing investor preferences as key market players with low margins remained susceptible to interest rate hikes, resulting in a higher discount on earnings and a reduction in value.
 - Despite the current dip, application software is at the forefront of financial acquirers' acquisition criteria

Semiconductor & Semiconductor Equipment

- The sector has underperformed since the beginning of the year as markets shifted to a risk-off territory
 - The shortage of semiconductors led to the shutting down of production chains, which in turn had a severe effect on sales
 - The persistent shortage of chips drove up the prices of semiconductors
- Globally, the semiconductor and other related customer industries missed \$500 billion of revenue over the last two years

Hardware, Storage & Peripherals

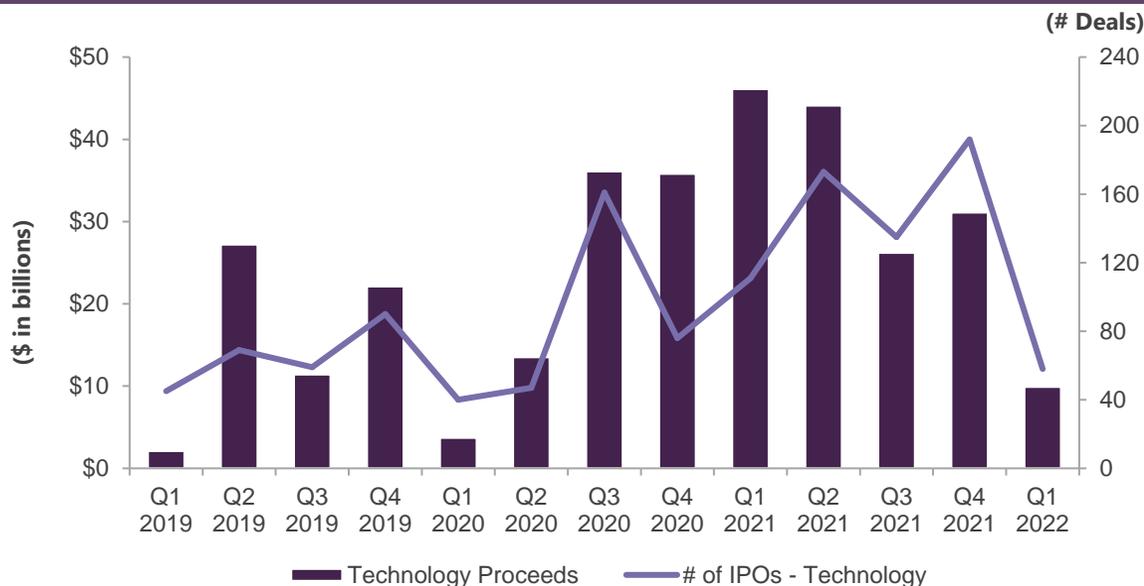
- Valuations are very stretched relative to the historical average, making expectedly higher interest rates a significant headwind
- Capex in the industry seems to have a positive outlook, particularly due to the prospects of higher spending on technology infrastructure globally

IT Services

- The dip in the valuation of IT services was lower than other sector groups, as IT services had gained a major share of the tech market due to a global shift to work from home / hybrid work models due to the pandemic
- Going forward, large organizations are expected to rely more on outsourced services and consultancies due to a gap in skills, wage inflation, and competition for talent

Slowdown in listing activity

IPO Activity in Technology Sector



- Since the beginning of 2022, equity markets have been volatile due to factors such as inflationary pressure and geopolitical tensions in Eastern Europe
 - Q1 2022 experienced a significant dip in global listing activity as IPO proceeds were down by ~91%, and secondary proceeds were down by ~83% on a y-o-y basis
 - There is a risk that IPO activity will further slow down if IPO candidates postpone their transactions
- During the quarter, the Asia-Pacific region recorded the maximum number of IPOs globally. The Americas saw only 37 deals across all sectors during the same period
- Most of the tech companies that had successful IPOs in 2021 are now trading below their offer or opening price – some have lost over 60 % of their valu.
 - Many companies that were planning to go public in H1 2022 have either withdrawn or delayed their listing, including Justworks (cloud), Rhodium (blockchain), Authentic Brands Group (e-commerce), and TypTap (fintech)
- Although the technology sector has maintained dominance in deal numbers for the seventh consecutive quarter (since Q3 2020), it stood at the second position in terms of proceeds (preceded by energy)

Biggest Technology IPOs of Q1 2022



In March 2022, Softbank- and Alibaba Group-backed GoTo, Indonesia's biggest tech firm, announced to raise \$1.1 billion in an IPO, making it one of Asia's biggest IPOs so far this year



In March 2022, Chinese software and IT service provider iSoftStone Information Technology raised \$726 million and went public on Shenzhen's ChiNext board

Han's CNC Technology

In February, Han's CNC Technology raised \$487.1 million in an IPO on the Shenzhen Stock Exchange's ChiNext board

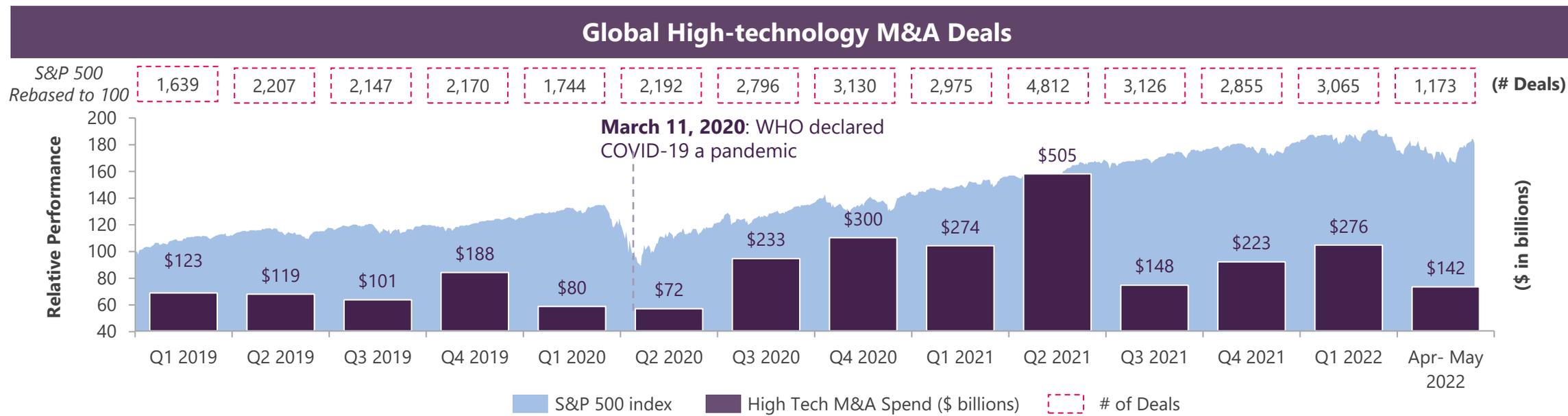


Asian digital payments provider Pine Labs seeks to raise ~\$500 million through an IPO at a valuation of \$3 billion



In January 2022, China's chipmaker, ASR Microelectronics raised \$1.08 billion in an IPO on the Shanghai STAR Market

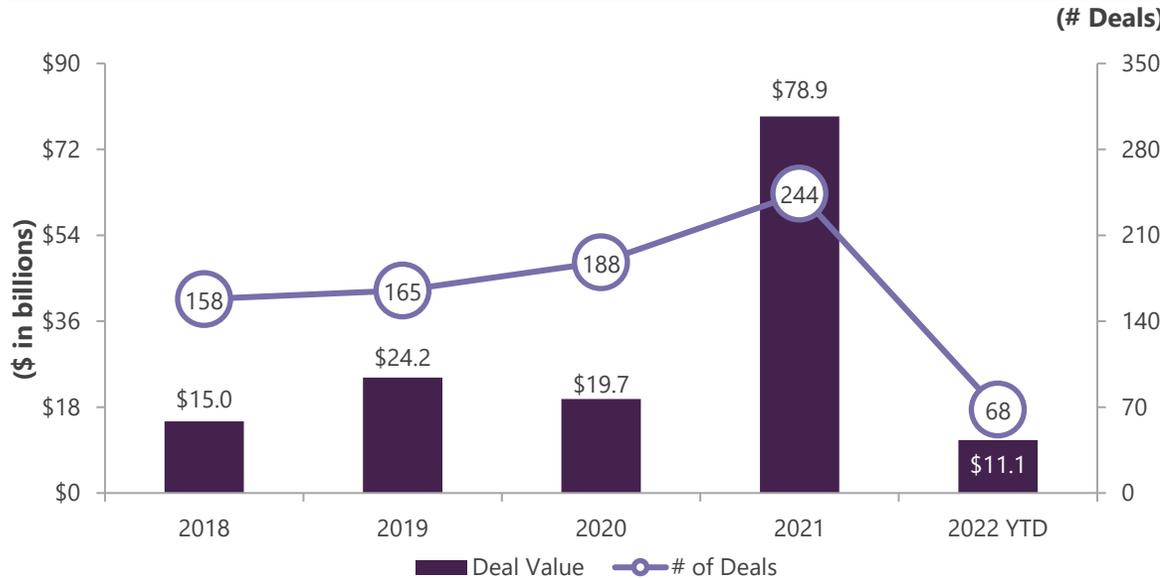
Tech M&A remained strong



- Although M&A activity in the technology sector seemed to have lost momentum due to the jittery market conditions, a deeper assessment of market dynamics revealed that the total deal volume of tech M&A was strong. Deal volume exceeded 3,065 transactions in Q1 2022 (higher than any other first quarter in the last 20 years)
 - The technology sector consolidated its lead and accounted for 25% of the deals globally in Q1 2022. The top themes driving key deals in the sector were digital health and cybersecurity
- The strong M&A and investment activity in the sector seems to be driven by private equity firms. A large number of financial sponsors are managing more money than they can invest and are willing to pay high valuations for attractive targets
 - In the last quarter, various PE firms acted on the dislocation in public markets through take-private acquisitions; they are still aggressively looking to pursue acquisitions in the technology sector, most notably in software, IT services and unified communications
- Many SPACs that took off in 2020 and early-2021 (raising \$160 billion) are also expected to be deal drivers in the technology sector in the next 12 months
 - Technology companies offer SPAC sponsors the potential for growth in earnings and profitability that they may not find in other sectors. According to a Mergermarket study, high technology accounted for 27% of all de-SPAC transactions announced between 2019 and February 18, 2022
 - SPACs are also expected to increasingly target technology companies in Asia-Pacific to complete business combinations, as the number of quality targets in the US domestic market may begin to dwindle due to pent-up demand

M&A continues to be exciting exit for cyber companies

Momentum in Cybersecurity Market to Continue Due to Increase in Number of Threats



- According to Mordor Intelligence, the market for security software is expected to more than double to \$352 billion during 2020–26
 - The transition to remote working amid the pandemic, along with the Russia-Ukraine conflict, has fueled a spike in cyberattacks and bolstered demand for security software
- Cybersecurity was the main driver of mid-market technology deal activity in Q1 2022
 - About 43% of all data breaches involved small and medium-sized businesses (SMB). Nearly 61% of SMBs reported at least one cyberattack during 2021
 - The leading players are paying scarcity premiums for the best cybersecurity solutions to fill out product suite and portfolio gaps
- Big tech companies have shown that cybersecurity can be lucratively paired with cloud services
 - Microsoft collects about \$15 billion annually from its cybersecurity business
 - Google improved its cybersecurity portfolio with the \$5.4 billion acquisition of Mandiant, the company that unveiled the SolarWinds attack in 2020

Notable Transactions in Q1 2022



In March 2022, SentinelOne announced its plans to acquire Attivo Networks, a leading identity security and lateral movement protection company, for \$615 million



In March 2022, TA Associates announced its plans to acquire a majority stake in Veracode, an app security platform, valued at \$2.5 billion



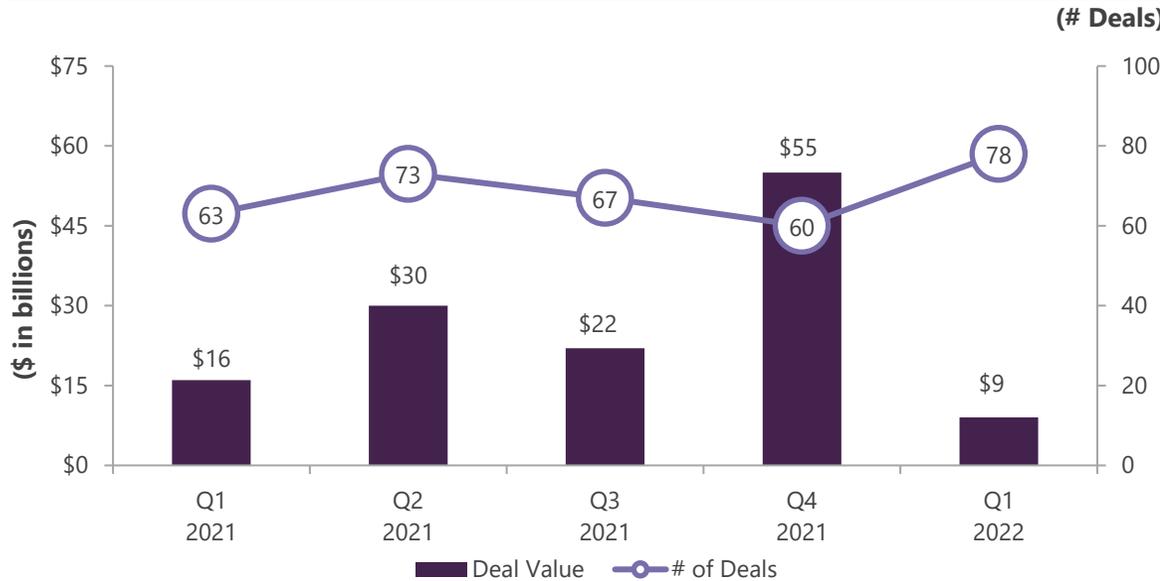
In March 2022, HelpSystems acquired Alert Logic, a managed detection and response (MDR) services provider, for \$700 million. The deal was completed in April 2022



In March 2022, Google announced the acquisition of Mandiant, a cybersecurity firm specializing in tracking activities of hackers and cyberspies, for \$5.4 billion

M&A activity among digital health start-ups expected to increase

M&A Activity in Digital Health Sub-sector Q1 2021 – Q1 2022



- Despite a slow down in other sub-sectors within healthcare, digital health witnessed the highest number of M&A deals in a single quarter since 2010
 - Most of the deals involved companies with practice-focused technologies such as health information management, revenue cycle management, service providers, and data security technology
 - In Q1 2022, the biggest deals were focused on acquiring digital capabilities, such as digital care and cloud-based platforms
- Despite a slowdown in investments, M&A activity in digital health is expected to remain strong for the rest of the year
 - Market consolidation seems to be the way forward due to the availability of a large number of point solutions in the digital health market
 - Consolidation will help the market to move from fragmented uncoordinated care across different point solutions, to something more integrated and holistic

Notable Transactions in Q1 2022



In January 2022, R1 RCM announced the acquisition of Cloudmed, a leader in revenue intelligence solutions for healthcare providers, for \$4.1 billion



In February 2022, Stryker acquired Vocera Communications, a leader in digital care coordination and communication, for \$3.1 billion



In March 2022, Constellation Software announced its plans to acquire the hospital business segment of Allscripts for up to \$700 million



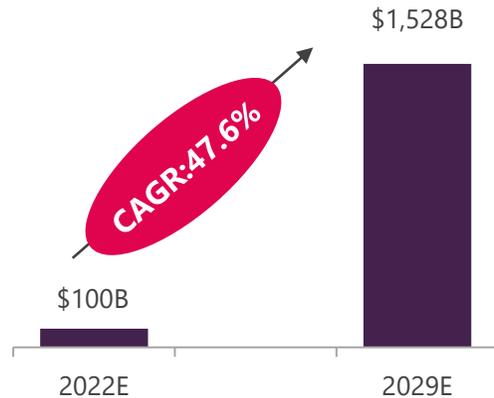
In January 2022, Sema4 announced its plans to acquire GeneDx for \$623 million. The acquisition will strengthen its market-leading AI-driven genomic and clinical data platform



In February 2022, Vera Whole Health acquired Castlight Health, a health data and navigation company for \$370 million

Increasing interest in Metaverse

Metaverse Attracting Investments from Companies



- Recently, Gartner named the metaverse as one of the top five emerging trends and technologies in 2022
 - Metaverse is a simulated digital environment enabled with technologies such as augmented reality (AR), virtual reality (VR), mixed reality, and blockchain. These technologies are used to deliver a rich user experience
 - Many companies are embracing the metaverse by developing experiences – both hardware and software – that take people a step closer to a shared digital space
- The global spending on VR / AR, the metaverse's foundational technologies, is expected to rise from \$12 billion in 2020 to \$72.8 billion in 2024
 - Leading companies in industries such as gaming, retail, arts, healthcare, and blockchain are determining how to position themselves as critical players in this emerging ecosystem
- Several e-commerce players are adopting digital services to showcase their products in the virtual world
 - In November 2021, Nike, a global retail apparel and shoe brand, collaborated with Roblox Corporation to create a virtual world called Nikeland. This virtual world enables users to dress up their respective avatars in Nike's apparel and sneakers

Prominent Tech Companies Consider Metaverse as Opportunity to Expand Their Reach



In April 2022, Sony and KIRKBI, the family-owned holding and investment company behind the Lego group, invested \$1 billion each in Epic Games to create a metaverse for kids



In January 2022, Google contributed almost \$40 million to a private equity fund for metaverse projects



In January 2022, Microsoft announced the acquisition of Activision Blizzard for \$68.7 billion, and accelerated the growth of its gaming business across mobile, PC, console, and cloud



In January 2022, NVIDIA announced its plans to distribute a free version of its Omniverse software for creating virtual worlds to individual artists



In November 2021, Facebook rebranded itself as Meta. It also spent \$10 billion to acquire and develop hardware and software to provide VR functions within the metaverse

Major challenges

Challenges

Inflation

- Rising inflation presents a challenge for the tech sector and there are elevated concerns about labor and energy costs in various markets
 - The hike in costs will be passed on to consumers, leading to substantial increases in selling price. As a result, the sector's profitability is expected to slow down after rapid growth over the last two years.
- Economic uncertainty is a major concern for strategic planners and managing capital will become a high priority for the cash-burning higher risk tech companies in 2022
 - The valuations of tech companies are expected to become moderate in 2022
 - Due diligence by investors and regulatory tightening around listings are expected to increase

International Growth

- Building on the momentum of the last two years, tech companies are increasingly focused on prioritizing international growth
 - According to a recent survey by Grant Thornton, around 60% of the surveyed executives (from tech companies) are allocating more employee resources to this goal
 - 57% plan to sell their products and services in more countries in 2022, and 52% plan to use more non-domestic suppliers and outsourcers
- International expansion presents a huge opportunity for tech companies, but opens them up to several distinct risks, particularly around compliance
 - Tech companies need to enhance their global risk and compliance management framework as they expand globally
 - Global trends and risks and opportunities around digital tax, employee regulations as well as visa restrictions need to be carefully factored into strategic plans

Hybrid Working and Tax Regimes

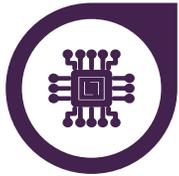
- The infrastructure required to enable hybrid working model needs substantial investments to acquire assets that can support, govern, and handle heavy data loads
- Due to the change in working style, tech companies need to expand their global talent base, especially in countries with a deep tech talent pool, and create centers of excellence related to cloud, quantum computing, AI, and cyber security
- Potential tax implications of mixing remote, in-office and hybrid working, creates a big challenge for tech companies due to an impact on a wide range of taxation, including corporate tax, transfer pricing, employment taxes
 - A workforce with greater international reach and increased mobility creates a more complex tax profile, taking into account such international tax risks

Cloud and XaaS (everything-as-a-service)

- Organizations are leveraging a hybrid, multi-cloud strategy to increase their access to best technologies, optimize costs, improve resilience and reliability, and minimize vendor lock-in
 - The approach requires organizations to seamlessly integrate and coordinate a multitude of cloud-based applications and data
 - The approach also adds complexities to the ways that revenue is recognized and leads to challenges in forecasting revenue streams
 - The multiple locations (infrastructure and employees) and processing of XaaS offerings create challenges in adhering to multiple tax regimes and optimizing the tax structure
 - Both service providers and users manage risks such as application and infrastructure security, data management, resilience and availability, governance, and compliance in multi-cloud environments

Predictions for 2022

Factors Affecting Technology Sector



Dealmakers Bullish on Technology M&A

- In an increasingly competitive environment, tech companies continue to rely on M&A as a powerful tool for differentiation
 - The fear of missing out is forcing companies to undertake deals that will future-proof their businesses
 - Moreover, with the pandemic coming to an end, business owners will likely start seeking opportunities for consolidation, leading to an insurgence of M&A deals in 2022
 - PwC predicts cryptos and NFTs will become the hotspots as emerging markets get established



Tech- nationalism is on the rise

- With the proposed CHIPS Act, the US is looking to become a leading chip manufacturer once again
 - Formerly a major chip manufacturer, the U.S. has passed much of its production on to East Asia over the past 15 - 20 years
- Europe aims to double its share in global chip production to 20% by 2030
- China is pushing out many foreign-owned businesses and reducing competition for local Chinese businesses



Normalization of massive growth

- The overall market sentiment is reversing from being bullish (seen during the pandemic when tech companies saw a huge boom in demand). In a post-pandemic world, demand will likely reach a normalized level
 - After the surge in 2020, the industry is returning to its previous growth pattern of 5–6% year-on-year
- High inflation and regular increases in interest rates will lead to postponement of discretionary spend and higher focus on cost optimization, which will dampen tech budgets

About the authors



VIVEK SHARMA

Vice President
Corporate and Investment Banking LoB

Vivek has over 14 years of experience in setting up offshore support teams for global investment banks and managing delivery

✉ Vivek.Sharma@evalueserve.com



ARUN AGGARWAL

Manager
Corporate and Investment Banking LoB

Arun has over 8 years of experience working in investment banking and capital markets teams

✉ Arun.Aggarwal1@evalueserve.com



SAMRITI GOYAL

Group Manager
Corporate and Investment Banking LoB

Samriti has over 12 years of experience in managing investment banking delivery teams

✉ Samriti.Goyal@evalueserve.com



JANGA BHARGAVI

Senior Business Analyst
Corporate and Investment Banking LoB

Bhargavi has over 5 years of experience working in investment banking and capital markets teams

✉ Janga.Bhargavi@evalueserve.com

Evalueserve's Corporate and Investment Banking practice works with bulge bracket banks, commercial banks and boutique advisory firms. Our key practice areas include Sector and Product support, Lending & Credit support, Business Information / Library Services, Presentation Support services and Business Reporting. Our proprietary technology platform helps streamline and automate workflows, re-use work products through knowledge management and automate repetitive tasks. For more information, please visit: <https://www.evalueserve.com/industry/financial-services>

Thank You!