Server & Enterprise Software

Optimistic tone to start the year on BofA Software Bus Tour

Price Objective Change

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Equity
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Bullish on long-term AI opportunity; not material to '24

We hosted the BofA 2024 New Year Software Bus Tour on January 8-10 in the San Francisco area, visiting 10 software public companies and two private companies (SymphonyAI and Tipalti). While all companies noted an unchanged macro environment, the tone from firms focused on the enterprise suggests some improvement in the discretionary software spending environment. SMB vendors presented a still challenging macro backdrop, though we noted generally a better tone than what Q3 results indicated. AI was a key theme of course and our takeaway is that efficiency gains represent a meaningful monetization opportunity over the long term, though not expected to be material in CY24. We characterize tone from front office vendors as most positive (Salesforce and Adobe), consistent with our view that sales and marketing projects are likely to come back into focus this year.

ADBE: Top of funnel strength with multiple upgrade paths in view

ADSK: Transaction model shift creates near-term modeling challenges

CRM: A long runway for organic growth in vast front office market

ESTC: Becoming core piece of future generative AI tech stacks

GTLB: AI strategy is driving differentiation

HCP: Macro and sales transition weighing on land and expand deals

INTU: Macro caution lingers, though factored into conservative guidance

MDB: Visibility for sustained strength in new workloads

WDAY: Steady product enhancements to drive FINS traction

ZM: Market trends remain consistent; Reaccelerating growth remains top priority

Executives that we met with include:

Adobe President of the Digital Media Business David Wadhwani and Vice President of Investor Relations Jonathan Vaas; **Autodesk** EVP of Product Dev & Manufacturing Solutions Jeff Kinder and Investor Relations Simon Mays-Smith; **Salesforce** EVP of Corporate Strategy, Bill Patterson, GM, Salesforce Easy, Kris Billmaier and Executive VP Investor Relations, Mike Spencer; **Elastic** CFO and COO Janesh Moorjani; **Gitlab** CEO Sid Sijbrandij, and CFO Brian Robins; **HashiCorp** CFO Navam Welihinda and VP of Investor Relations and Corporate Development Alex Kurtz; **Intuit** CFO Sandeep Aujla and Vice President of Investor Relations Kim Watkins; **MongoDB** CFO and COO Michael Gordon and SVP of Finance Serge Tanjga; **Workday** CFO Zane Rowe, CTO Jim Stratton, and Vice President of Investor Relations Justin Furby; **Zoom** CFO Kelly Steckelberg.

PO changes

We raise PO for ESTC (to $125 from $108) and ADSK (to $250 from $235) (Exhibit 1).

Refer to important disclosures on page 16 to 18. Analyst Certification on page 14. Price Objective Basis/Risk on page 12.
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Company takeaways

We include takeaways from the following meetings at our BofA Software Bus Tour (in alphabetical order): **ADBE** (Adobe), **ADSK** (Autodesk), **CRM** (Salesforce), **ESTC** (Elastic), **GTLB** (GitLab), **HCP** (HashiCorp), **Intuit** (INTU), **MDB** (MongoDB), **WDAY** (Workday), and **ZM** (Zoom).

ADBE (Buy, PO $700): AI a core focus, though direct monetization further out

Executives we met with: David Wadhwani, President of the Digital Media Business, and Jonathan Vaas, Vice President of Investor Relations

- **Strong top of funnel and increasing PLG motion.** Top of funnel has been a foundational part of Adobe's Digital Media and Creative Cloud business. The company crossed four billion images generated through Firefly last year, with 90% of users coming to the website as net new users. While top of funnel remains strong and a key imperative for Adobe, product led flywheel effects are incremental. For example, Adobe Stock pulls through Firefly generations by offering a "see more like this" feature that generates variations of an image.

- **Increasing strategic focus on Document Cloud.** Adobe plans to monetize more aggressively against a captive base of 500 million Acrobat monthly active users. Engagement metrics have trended well, with Acrobat web growth up +70% y/y and link sharing for PDF +400% y/y in Q4. Generative AI capabilities such as new creation, comprehension, and collaboration functionality are currently in private beta and expected to flip public in the next couple of months.

- **Generative Credits not expected to contribute meaningfully to FY24 revenue.** While AI feature use proliferation remains a clear priority for Adobe, the company does not foresee the majority of its user base running up against the standard allotted credit limits and does not expect generative credit consumption to contribute meaningfully to revenue growth in FY24. This is more of an FY25 opportunity. On the cost side, Adobe is seeing algorithmic costs come down precipitously and is seeing massive gains in efficiency for training and inferencing. The company is passing on some of the value to customers, but also needs to price against elevated usage for power users (hence the credit pack model) and commercial/enterprise use cases leveraging Firefly APIs.

ADSK (Neutral, PO $250): Transaction model shift creates near term modeling challenges; ADSK well positioned to grow through cycles

Executives we met with: EVP of Product Dev & Manufacturing Solutions Jeff Kinder and Investor Relations Simon Mays-Smith

- **Fusion disrupting manufacturing.** Autodesk is disrupting manufacturing design on price and functionality. Mid-market penetration is progressing well with larger customers slower to migrate away from on premise and highly customized solutions. Solidworks is the closest competitor and Autodesk believes they have a superior product and functional lead in manufacturing. Autodesk will continue leading with price as a tool to gain share and will evaluate price increases over time. According to Jeff Kinder, there isn't a set cadence of price increases based on the calendar and pricing is determined by product value delivered. On underlying growth of Fusion and maintaining historic subscriber growth management noted growth has been strong but Autodesk is beginning to hit the law of large numbers.

- **AI isn't new to ADSK, but monetization will take time.** Autodesk has developed generative design capabilities into manufacturing for years. However, moving to the next step of aggregating customer data and developing a usage based model will take time. Simon Mays-Smith emphasized that no single client has sufficient data to train AI models. Aggregating customer data in the cloud to train models is essential to take the next step in generative AI. Autodesk is taking a prudent approach to utilizing customer data and prefers to work closely with customers to ensure data utilization is fully understood and in line with contractual agreements. Rolling AI out too soon or broadly could also have a detrimental effect on margin, according to management due to compute intensity. Setting pricing structure to align with value and cost is essential. Autodesk believes it has already conditioned the market to usage based pricing through EBAs. The AI roadmap will take years to achieve according to management as Autodesk is taking a deliberate approach.

- **New transaction model provides more control, but modeling challenging in near term.** Autodesk is implementing a shift from and indirect to a direct transaction model to more closely integrate with customers. Under the previous model resellers would occasionally undercut each other on price discounts and created an additional layer between Autodesk and its customers. On potential disruption to resellers, Autodesk believes high quality VARs will do well, but VARs that don't add value could see more disruption. The key challenge is timing and scope of the rollout. Autodesk has tested the new model with a single product (Flex) and conducted a scaled test in Australia. The company will continue phased roll-outs across the US and Europe and providing guidance on the financial impact is challenging at this time. Management is evaluating how to provide investors with a framework for modeling the shift and expects to update investors at 4Q earnings. Notable impacts will be reducing contra revenue and increasing operating expense, but the timing could be uneven.

- **Reiterate Neutral, raise PO to $250 (from $235).** We increase our PO to $250, which is based on an EV/EBITDA multiple of 23x our CY24 EBITDA estimate (was 22x). We increase our multiple based on multiple expansion across the group. The 23x multiple is slightly below the design software peer group average of 26x. We believe a slight discount multiple is warranted by a cloudier short-term outlook, partially offset by ADSK's durable business model and favorable margin profile.

CRM (Buy, PO $300): A long runway for organic growth in vast front office market

Executives we met with: EVP of Corporate Strategy, Bill Patterson; GM, Salesforce Easy, Kris Billmaier; Executive VP Investor Relations, Mike Spencer

- **Maintaining an organic growth strategy and focus on productivity**. Incremental focus on sales productivity has been the key driver of margin upside in Q3 (above the one time step up from the reduction in force earlier in FY24). The current margin level (guide for 30.5% in FY24) represents a floor, not a ceiling, as the company remains focused on productivity and efficiency going forward. The company has already achieved the hiring quota/plan for FY24 and while attrition has been more limited than in past years, the company continues to hire to backfill for attrition. Salesforce maintains a plan to keep headcount flat near term. A long runway for organic growth exists with only ~43% share in the core sales industry for example. Recent M&A activity consisted of tuck in acquisitions (Airkit.ai for service desk automation and Spiff for inventive compensation management) to bolster the already comprehensive Salesforce front office stack.

- **Significant opportunity for AI across the Salesforce stack.** The AI monetization strategy is early for Salesforce, though significant, given the return on investment associated with sales and marketing efficiency gains from AI. The Sales Cloud and Service Cloud GPT offerings are priced on a per seat basis, though the Data Cloud has a consumption component with "credits" for the amount of data ingested, records processed, or Einstein outputs, among other tasks. Credits are expected to ramp with usage on three key transaction categories: 1) CDP profiles, 2) AI application usage, and 3) transactions for third party data signals. There has been a real effort amongst customers to load data into Data Cloud from third party data systems such as Snowflake in order to get the Salesforce data set in order for AI. Ongoing integration of the vast Salesforce stack remains a key focus. For example, there is an effort underway to embed messaging capabilities into the Marketing Cloud and Service Cloud. The company is also investing in development of vertical AI solutions as add-ons to the Industry Clouds.

- **Salesforce's Starter Suite targets SMBs with an integrated offering.** Salesforce launched the Starter Edition in April, initially with core Sales and Service features for the SMB market. In fall of 2023, the company added Marketing and Commerce Cloud capabilities, making the offering a complete suite targeting the SMB with a simple, comprehensive low-cost offering (priced at $25 per user per month). Salesforce added over a thousand new SMB logos last quarter with Starter, and sees the opportunity to develop other bundled offerings to reduce friction in the sales cycle over time.

ESTC (Buy, PO $125): Becoming core piece of future generative AI tech stacks

Executives we met with: CFO and COO Janesh Moorjani

- **Demand drivers intact, consumption commitments healthy.** Following a good F2Q net-new cloud revenue result (+$13.8mn), commentary around the shape, health, and visibility of the current cohort of consumption commitments was positive and increases our confidence that more healthy net-new Cloud revenue results are likely in the future. Contract durations are typically one to three years, with the average contract duration of 1.5 years, thought it was noted that the sales motion doesn't use a target contract duration during sales cycles. Particularly interesting, in our view, was commentary around commitment visibility, where strong relationships with customers have resulted in a good sense of go-live timing and consumption ramping trends, which leads us to believe there is potential upside to its revenue guidance.

- **Generative AI continues to drive demand for Elastic.** While significant revenue contributions from AI specific workloads are not likely to impact the P&L over the medium-term (vs. imminent), commentary on demand and end-market awareness of Elastic's generative AI capabilities was positive. Elastic's next-generation AI technologies such as ESRE, ELSER, and vector search, among many other features, are driving hundreds of customers to begin proof of concept projects, of which many will likely turn into large scale monetization opportunities for Elastic.

- **Consolidation theme is a positive driver for Elastic adoption.** Elastic is positioned to be a beneficiary of consolidation given the high performance and ROI of the platform. The macro is driving a cost-conscious end-market, and customers are consolidating fragmented technology stacks within enterprise search, observability, and security to Elastic. Commentary around end-market budgets was conservative, which means that customers are now trying to do much more with less (or slightly higher budgets), which should drive increasing demand for high value platforms like Elastic.

- **Reiterate Buy, raise PO to $125 (from $108).** We increase our PO to $125, which is based on a 9.2x EV/C24 revenue multiple (was 8.0x). We increase our multiple based on higher confidence for revenue and free cash flow upside in upcoming quarterly results following our meeting with management, and recent peer group multiple expansion (now 7.5x EV/C24, was 7.5x).

GTLB (Buy, PO $74): AI strategy is driving differentiation

Executives we met with: CEO Sid Sijbrandij, and CFO Brian Robins

- **AI products drive competitive differentiation.** GitLab is strategically investing in its AI offerings and will continue to do so to drive differentiation. While GitLab is differentiated along many fronts, there was admission where GitLab lags peers on others. Its R&D rigor over the past year has resulted in meaningful platform enhancements, and we expect its roadmap execution pace to continue in the future, closing the gap against competitive offerings. There are now 15 AI-features, including code suggestions, suggested reviewers, and vulnerability resolution. Aside from AI, another area of end-market interest is the newer Enterprise Agile Planning SKU, which unlocks personas beyond the typical developer to include product managers, designers, and S&M professionals. This add-on is priced at $15 per seat per month, with a 50-seat minimum, and could become an incremental growth driver in the future. In our view, GitLab is well positioned to continue being a DevSecOps category consolidator, which should drive good revenue growth with expanding margins over the medium-term.

- **Early AI efficiency gains impressive.** While still very early, management discussed how some customers are reporting up to 50% efficiency gains within the DevSecOps workflows when deploying GitLab's AI features. We think this is meaningful, as GitLab's AI functionality address a developer's end-to-end workflow (rather than just code generation), demonstrating high ROI and foretells more installed-base adoption of GitLab's AI offerings. Our conversations with developers suggest that writing code takes up less than half of a developer's total time, so the ability to drive efficiency gains throughout a developer's entire workflow is meaningful and should drive healthy demand for GitLab's AI-powered offerings.

- **Many growth opportunities despite macro environment.** With a broad set of products available on the platform, GitLab helps customers reduce total cost of ownership when consolidating from multiple point solutions, which has been a strong selling-point and value proposition. While customers are only buying licenses for current employee count in the current demand environment (in the past, customers often would buy ahead of planned headcount growth), its high value platform that demonstrates good ROI continues to drive good new logo growth and adoption of its Ultimate Tier offering, which we anticipate continuing in the future.

HCP (Neutral, PO $24): Macro and sales transition weighing on land and expand deals

Executives we met with: CFO Navam Welihinda, VP of Investor Relations and Corporate Development Alex Kurtz

- **Macro weighing on land and expand deal sizes**: A weak demand environment and tighter budget cycle impacted both land and expand activity in Q3. Specifically, customers (especially the G4K) have been deferring net new application development projects which has led to a slower pace of entitlement consumption. This ongoing trend is the root cause of a lower net revenue retention (119% in 3Q24 from 131% in FY23) and a downsize of contract value. On the positive side, transaction volume increased in 2023 and pipelines remains healthy. Terraform and Vault are viewed as the de facto standards for infrastructure and security management. On recovery, the company remains conservative as it walks through 4QFY24 which still ties to the 2023 budget cycle. The company expects cRPO to lag revenue growth before it normalizes and returns as a leading indicator for top line growth.

- **Focus on suite selling under new sales leadership:** HashiCorp has made several changes to the go to market effort in the past year, under newly appointed President of Worldwide Field Operations, Susan St. Ledger. In this new effort, the company is positioning the HashiCorp stack as an infrastructure and security lifecycle management platform as opposed to selling individual products. This initiative should reduce friction in the sales cycle. The company is also directing a heavier weight of sales coverage to the enterprise, especially the G4K cohort. Although most of these changes are already underway, results are not expected to materialize until FY25.

- **New commercial features to accelerate conversion to paid:** Adoption of HashiCorp Cloud Platform (HCP) in the enterprise segment should be a key driver for cloud revenue mix (14% of subscription revenue as of 3QFY24). Currently, infrastructure provisioning in HCP are more mature than security. We are encouraged by the development efforts in place to enhance security features in HCP. In order to further accelerate the enterprise adoption cycle, the default Terraform Enterprise selling motion will shift from on premise to cloud starting in FY25. HashiCorp also released a number of commercial features in 2023 in order to drive upgrade to paid. Some of the features highlighted include Boundary session recording, Terraform drift detection, Terraform stacks, and HCP Vault Secrets.

INTU (Buy, PO $650): Macro caution lingers, though factored into conservative guidance

Executives we met with: CFO Sandeep Aujla and Kim Watkins, Vice President of Investor Relations

- **Taking 2022 tax season learnings into 2023; expects flat tax filings for 2023 returns.** Two key learnings could prove to be valuable heading into the 2023 tax season. First, the business unit is focused on better search engine optimization for assisted. Intuit learned that many filers started with the search "tax filings services near me" despite an intent to use an online assisted service. Intuit plans to optimize better around prospective user searches for locality. Second, the company is focused on more seamless integration between TurboTax and Credit Karma. Last year, customers who wanted their tax return deposited into their Credit Karma Money account had to log in on both TurboTax and Credit Karma. This created friction in the user experience given the second login prompt and lowered potential cross sell results. This tax season, Intuit is focused on removing the need for a second login window to Credit Karma. Lastly, FY24 guidance for 7% to 8% consumer tax growth assumes flat tax filings for the year (versus +1.2% to 165.2 million in CY2023; longer term IRS forecast of annual rate of 1.1% average) for conservatism.

- **QuickBooks puts and takes.** Commentary concerning the macro from Intuit remained largely cautious, informed by data points such as continued SMB caution among Intuit's user base, 40% of student loan payments coming in late as they restart, and higher credit card balances across consumers. Also, while QuickBooks results have been resilient due to the sticky nature of the offering despite the macro, Intuit expects a gradual uplift as macro improves (as opposed to a quick snapback). That said, we come away from the session incrementally confident in Intuit's ability to continue realizing price given the value it continues to deliver to its QuickBooks customers. Commentary suggests Desktop and the Self-Employed QuickBooks SKUs continue to offer "tremendous" value for price. On Mailchimp, retention rates are at the highest they have been over the past few years and localization efforts are underway to drive international adoption. Intuit is leveraging its QuickBooks go-to-market playbook for Mailchimp abroad (building relationships with local marketing agencies much like it did with accounting). Lastly, generative AI enhancements are now live and should drive engagement, churn, and ultimately better monetization for Mailchimp.

- **Common platform leverage will continue to drive margin.** The goal to grow operating income faster than revenue is a foundational component of Intuit's disciplined investment framework. A key source of scale for Intuit will continue to come from its ability to leverage common platform components across multiple franchises, such as 1) the Live platform; 2) go-to-market functions; and 3) customer success organizations. As an example, the roll out of its Business Tax services leverage its existing tax experts from TurboTax, marketing expertise across all franchises, and software used to enable the Live experience.

MDB (Buy, PO $480): Visibility for sustained strength in new workloads; AI likely a multi-year journey

Executives we met with: CFO and COO Michael Gordon, SVP of Finance Serge Tanjga

- **Macro likely to continue weighing on existing workloads though recent strength in new workloads should sustain.** As a reminder, MongoDB reported solid Q3FY24 results (+30% y/y). Most of the outperformance was driven by Enterprise Advance (EA) which was partially benefited from more multi-year contracts than expected. Although the company does not expect the multi-year contract to be a new trend, the ongoing EA strength speaks to the appeal and success of the MongoDB's run-anywhere strategy. Regarding Atlas, consumption is driven by underlying usage of the applications, which the company has limited visibility of. However, MongoDB has developed a better understanding on Atlas' consumption seasonality – a weaker Q2/Q4 and a stronger Q3. In the short-term, macro is expected to continue weighing on read/write volume, unchanged from recent quarters. Encouragingly, recent strength in new workloads and new logos should sustain. Over the years, the company has been working on reducing the importance of upfront commitment in sales reps' comp structure and has now eliminated this component entirely. This better alignment of incentive between customers and sales personnel should further reduce friction in the sales cycle and accelerate the velocity of new workload adoption, which is viewed as the business' north star.

- **Reinvestment of revenue upside should remain moderated in the near term:** MongoDB has demonstrated solid margin expansion in a moderated growth environment (implied guidance of 14.4% adjusted operating margin in FY24, up from 4.8%/1.4% in FY23/FY22). The company has been slower in developing conviction to reinvest revenue upside. For example, headcount is expected to have single digit growth in FY24 compared to roughly 30% growth in the year before. Within the near term, MongoDB will remain cautious given the unsettled macro and is expected to continue to invest but at a slower pace than the business otherwise would in a normal economy. On resource allocation, some of the investment priorities include increasing GTM footprint coverage, continued hiring of quota-bearing heads as well as further increase in R&D capacity to strengthen the company's product roadmap.

- **Bullish on the AI opportunity ahead though believe it is likely a multi-year journey:** At a high level, MongoDB's AI opportunity can be categorized into three major buckets. First, the surge in AI-powered coding tools should accelerate the speed to write applications. With this underlying trend, the overall database market is likely to see an increase in spend. Second, as enterprises work on building AI-powered applications, they are more likely to migrate to a modern data platform from a legacy database. This should drive incremental market share for the company. Lastly, MongoDB continues to add AI features which should serve as additional monetization opportunities. Some of the prominent AI features announced include Atlas Vector Search (Preview), Atlas Stream Processing (Preview), and AI-powered Query Converter for Relational Migrator (Preview). Although enterprises have shown significant interest in AI, most of the companies' executives are still waiting for a proof of concept. Overall, it is emphasized that the AI opportunity for MongoDB should be viewed as a long-term growth engine and less of a near-term catalyst.

WDAY (Buy, PO $300): Steady product enhancements to drive FINS traction

Executives we met with: CFO Zane Rowe, CTO Jim Stratton, and Justin Furby, Vice President of Investor Relations

- **Focused investments in vertical product areas.** Key vertical functionality has bolstered Workday's ability to win full platform deals within the healthcare and higher education sectors. The Healthcare Supply Chain product and Workday Student were the key products that helped Workday win these deals. Continuing this playbook, Workday will be making focused vertical functionality product investments for verticals such as financial services and government.

- **Incremental focus on international.** The company feels underinvested in its international business and is making investments on both the product and go-to-market side to capture share, with an aspiration for a 50%/50% US versus international revenue mix (from 75% US versus 25% international today). Workday is seeing good traction in Europe and plans to invest more heavily in Japan over the longer term. On the product side, localization to other geographies has helped win rates. On the go-to-market front, Workday is making incremental investments in not only sales capacity but also marketing and brand support to augment locally deployed field reps.

- **High bar set for AI monetization.** Workday introduced a slew of generative AI features at its Rising conference in September, including job description generation for HCM, knowledge base article generation (HCM and FINS), and statement of work (SOW) generation for procurement in FINS. However, the company does not intend on charging separately for these features. Commentary suggests it will not release a separate AI SKU in the near future, and that AI enhancements will rather continue to be naturally embedded into existing products. Generative AI product enhancements will generally be focused on cutting down the time spent on tedious tasks. Referring back to the job description example, Workday estimates its new generative AI functionality here could save users at least thirty million hours per year, citing the average time to draft a job description is one to two hours (Workday saw thirty million job postings created on its platform in 2023)

ZM (Neutral, PO $90): Market trends remain consistent; Reaccelerating growth remains top priority

Executives that we met with: CFO Kelly Steckelberg

- **CFO scrutiny of contracts continues.** Zoom hasn't seen a notable shift in customer behavior even as recession concerns have faded. Sales cycles remain elongated and CFO involvement in evaluating new spending matches levels from 2022 and early 2023. Seat contraction due to RIFs should fade as deals were right sized real time, but there could be some impact in 2024. Updating and upgrading communications systems is an opportunity for Zoom as enterprises address deferred spending and on premise solutions.

- **Growth drivers in 2024 less about churn and more about new products.** Levers for improving growth in 2023, included reducing online churn, pricing and new products. There is less opportunity to reduce churn in 2024, in our view, based on commentary from our meeting with management. Online churn is at all time lows and is unlikely to move materially lower. Online product traction has been meetings and phone and contact center growth continues. Contact center is unlikely to be a visible driver of growth in FY25, but is expected to follow a similar trajectory as phone which reached 10%+ of revenue after four years. Management also noted that the company did a large salesforce reorganization and is lapping the negative effect of the headcount reduction taken in 2023. Some regions took 2-3 quarters to recover from the disruptive impact, but 2024 should be a cleaner year for go to market. The majority of customer had a renewal event in FY24 according to management, but there will still be some negative impact in FY25.

- **Price disruption strategy evolving.** CFO Kelly Steckelberg noted Zoom will remain a price leader, but is implementing new tiered pricing strategies to highlight incremental functionality. Price increases taken in 2023 are fully flowing through in 2024 and recently implemented contact center tiered pricing has been well received. On the potential to shrink the price discount gap relative to competitor products over time Zoom acknowledged this is something they evaluate.

- **Contact center functionality improving.** Zoom is prioritizing investment in contact center and has established a team reporting direct to CEO Eric Yuan to update on progress. Management highlighted that increased capabilities such as secure payment are expected in the next twelve months which are projected to improve win rates with large enterprise customers.

- **M&A still an option, but valuation matters.** Zoom evaluates M&A to improve product portfolio and growth, but valuation is a factor. When asked why Zoom commented publicly on press reports regarding a potential acquisition of Five9, Kelly Steckelberg highlighted the company tries to be a good corporate citizen. Return of cash to shareholders and offsetting dilution of SBC is something the company evaluates each quarter, but hasn't risen to the best use of cash in recent periods, in our view. Management didn't rule out using equity or debt for M&A, but noted cost of capital is a consideration.

Exhibit 1: PO change table
PO changes for ADSK and ESTC

Ticker	Company	New PO	New PO reasoning	Previous PO	Previous PO reasoning
ADSK	Autodesk	$250	Our $250 PO is based on an EV/EBITDA multiple of 23x our CY24 EBITDA estimate	$235	Our $235 PO is based on an EV/EBITDA multiple of 22x our CY24 EBITDA estimate
ESTC	Elastic NV	$125	Our $125 PO is based on 9.2x EV/C24E revenue multiple which represents an EV/revenue/growth adjusted multiple of 0.6x	$108	Our $108 PO is based on 8.0x EV/C24E revenue, which represents an EV/revenue/growth adjusted multiple of 0.5x

Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 2: Stocks mentioned
Rating and price summary

BofA Ticker	Company name	Price	Rating
ADBE	Adobe	US$ 591.03	B-1-9
ADSK	Autodesk	US$ 238.82	B-2-9
CRM	Salesforce.com	US$ 264.13	B-1-9
ESTC	Elastic	US$ 108.04	C-1-9
GTLB	GitLab	US$ 62.29	C-1-9
HCP	HashiCorp	US$ 23.13	C-2-9
INTU	Intuit	US$ 608.7	B-1-7
MDB	MongoDB	US$ 393.15	C-1-9
WDAY	Workday	US$ 8.68	B-1-9
ZM	Zoom	US$ 68.18	C-2-9

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Adobe (ADBE)

Our PO of $700 is based on an EV/FCF multiple of 31x our C25E free cash flow estimate. This represents 1.5x our 3-year mid-teens FCF CAGR, a premium to the large-cap GARP (growth at reasonable price) software group average of 1.3x. We view the premium as justified given Adobe's AI leadership position and durability of both top- and bottom-line growth.

Risks to our PO are 1) competition from point solutions and platform vendors, 2) application spending cyclicality, and 3) future acquisitions, which could weigh on margin expansion.

Autodesk (ADSK)

Our $250 PO is based on an EV/EBITDA multiple of 23x our CY24 EBITDA estimate. The 23x multiple is slightly below the design software peer group average of 26x. We believe a slight discount multiple is warranted by a cloudier short-term outlook, partially offset by ADSK's durable business model and favorable margin profile.

Downside risks to our PO are increased competition leading to higher churn, greater than expected headwinds to FCF in association with Autodesk's billing transition, spending reductions in the company's end markets arising from an economic slowdown and lower than expected net subscriber additions.

Upside risks to our PO are better than expected economic activity, greater than projected net subscriber additions and NR3, lower than expected impact of billing transition on FCF and better than expected execution leading to heightened operating margin expansion.

Elastic NV (ESTC)

Our $125 PO is based on 9.2x EV/C24E revenue multiple, which represents an EV/revenue/growth adjusted multiple of 0.6x, comparable to its infrastructure software peers at 7.5x/0.6x, warranted for its potential growth profile, differentiation, and positioning in the attractive AI opportunity, and balanced against a contracting net revenue retention (NRR) metric.

Risks to our PO are: 1) competition, 2) relatively unproven profitability, 3) M&A could weigh on margins and execution, 4) application spending is highly cyclical, 5) increasing SaaS demand could weigh on gross margins, and 6) conversion ratio to paid subscriptions could decrease.

GitLab Inc. (GTLB)

Our $74 PO is based on an EV/revenue multiple of 15.5x to our FY25E (C24E) revenue estimate. The multiple implies an EV/revenue/growth multiple of 0.58x, which is above infrastructure peers at 7.3x/0.57x. We believe the premium multiple to peers is warranted given its faster growth, NRR in the high 120s, and upside potential.

Risks to our PO: 1) valuation risk, 2) competition, 3) deteriorating NRR, 4) extended timeline to profitability, 5) execution, and 6) enterprise software spend can be cyclical.

HashiCorp (HCP)

Our PO of $24 is based on EV/sales of 4.6x our CY25e Sales, or 0.2x our C25 revenue growth rate of 20%, a discount to the mid-cap peers at 0.3x (13% growth) for lower profitability and heightened near term macro/execution risk.

Upside risk to our PO is that HashiCorp shares trade in line with the software group. In the event of changes to market sentiment on macro abating and IT spend returning to normal, shares could rerate.

Downside risks to our PO are: 1) It has high exposure to cyclical trends of application software spend. Enterprise application software has proven to be highly cyclical. During an economic slowdown, when firms are faced with shrinking IT budgets, application upgrades, migrations, or new installations are often deferred, which could present a high degree of risk for bookings deceleration. 2) HashiCorp competes against deep-pocketed platform vendors, such as the major cloud providers as well as point solutions, and thus the absence of ongoing feature and capability enhancement may slow share gains.

Intuit (INTU)

Our PO of $650 is based on 27x our C25E FCF. It implies 1.4x on a growth-adjusted basis (assuming a normalized 17% CAGR for FCF), a premium to the large cap GARP software peer group average of 1.3x to reflect a more durable growth profile.

Risks to our price objective are a deepening of the macroeconomic slowdown, leading to increased pressure on the SMB business, potential government intervention requiring the tax-filing process be free for all users, increased complications in the tax code driving users to professionals for tax filing, increased focus from competitors in the SMB accounting and payroll space.

MongoDB Inc (MDB)

Our PO of $480 represents EV/sales of 15x our CY25e, or 0.6x our C25 revenue growth rate of 26%, in line with the large-cap peers at 0.6x (16% growth). We believe MongoDB has a long expected runway for growth as the company consolidates the $108 billion market for the database market.

Downside risks to our PO are: 1) MongoDB trades at a significant premium to its software large-cap peer group on an EV/Sales basis. In the event of changes to market sentiment stemming from global macro uncertainty, or potentially disappointing quarterly revenue results, there could be risk of a potential pullback. 2) The company recognizes a large majority of its revenue based on actual consumption which implies more revenue volatility than a traditional subscription model. 3) MongoDB serves in a highly competitive market, which consists of deep-pocketed next-gen NoSQL database, public cloud vendors and legacy database vendors. An inability to execute on a product roadmap for added capabilities could result in slowing share gains or even share losses.

Salesforce.com (CRM)
Our PO of $300 is based on an EV/FCF multiple of 22x our C25 FCF estimate, representing a growth adjusted multiple of 0.7x. This is a discount to the large cap software group at 1.3x, which we believe is justified for margin expansion.

Downside risks are: 1) Competition from point solutions and platform vendors presents the risk of slowing share gains/share losses if the company fails to continue delivering ongoing roadmap of new features/new modules, 2) Salesforce's history of acquisitions could present a higher degree of execution risk given the need to continuously integrate the technologies and the installed bases of offerings of technology that are not organically built, and 3) enterprise application spending has proven to be highly cyclical, given the more discretionary nature of applications projects - during an economic slowdown, projects involving application upgrades, migrations or new installations are often deferred which could present a higher degree of risk for a bookings deceleration.

Workday Inc. (WDAY)
Our PO of $300 is based on a C25E EV/FCF multiple of 32x. On a growth-adjusted basis, this is 1.3x our estimated our estimated 3-yr FCF CAGR of 20%. Our 1.3x multiple is in line with the large cap software GARP group at 1.3x (growing +21% y/y).

Downside risks are as as follows: 1) Large deal size could be impacted by a worsening macro environment (deal delays). 2) Workday has been gaining share in the HCM market since the company's founding in 2005. There is risk that overall growth slows faster than expected from slowing sales in the HCM market, absent increased progress selling Financials and add-on products. 3) Enterprise application spending has proven to be highly cyclical, given the more discretionary nature of applications projects. We believe that this profile presents a higher degree of risk for a billings deceleration for Workday and other application vendors, in the event of an economic slowdown.

Zoom Video Communications (ZM)
Our $90 PO is based on free cash flow multiple of 14.0x and represents a free cash flow yield of 7.1%. The 14.0x multiple is a discount to the less than 20% growth software peer group trading at 32.5x. This discount is warranted based on ZM's weaker visibility with regards to future growth trajectory and an increasingly competitive xCaaS environment.

Upside risks to our price objective are stabilization of the non-enterprise user base, successful penetration of enterprise phone and contact center and acquisition.

Downside risks are greater-than-expected attrition of non-enterprise users, failed M&A, a prolonged economic downturn and heightened competitive pressure.

Analyst Certification

We, Brad Sills, Koji Ikeda, CFA and Michael J. Funk, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	8x8	EGHT	EGHT US	Michael J. Funk
	Adobe	ADBE	ADBE US	Brad Sills
	Alarm.com	ALRM	ALRM US	Michael J. Funk
	Amplitude, Inc.	AMPL	AMPL US	Koji Ikeda, CFA
	BILL	BILL	BILL US	Brad Sills
	CCC Intelligent Solutions	CCCS	CCCS US	Michael J. Funk
	Dropbox	DBX	DBX US	Michael J. Funk
	Dynatrace	DT	DT US	Koji Ikeda, CFA
	Elastic NV	ESTC	ESTC US	Koji Ikeda, CFA
	GitLab Inc.	GTLB	GTLB US	Koji Ikeda, CFA
	Global-e Online Ltd.	GLBE	GLBE US	Koji Ikeda, CFA
	HubSpot	HUBS	HUBS US	Brad Sills
	Informatica Inc.	INFA	INFA US	Koji Ikeda, CFA
	Intapp Inc.	INTA	INTA US	Koji Ikeda, CFA
	Intuit	INTU	INTU US	Brad Sills
	JFrog Ltd	FROG	FROG US	Koji Ikeda, CFA
	MeridianLink, Inc.	MLNK	MLNK US	Koji Ikeda, CFA
	Microsoft Corporation	MSFT	MSFT US	Brad Sills
	MongoDB Inc	MDB	MDB US	Brad Sills
	nCino, Inc.	NCNO	NCNO US	Adam Bergere
	NICE Ltd.	NICE	NICE US	Michael J. Funk
	NICE Ltd.	NCSYF	NICE IT	Michael J. Funk
	PagerDuty	PD	PD US	Koji Ikeda, CFA
	PowerSchool Holdings, Inc.	PWSC	PWSC US	Koji Ikeda, CFA
	RingCentral	RNG	RNG US	Michael J. Funk
	Salesforce.com	CRM	CRM US	Brad Sills
	ServiceNow	NOW	NOW US	Brad Sills
	UiPath	PATH	PATH US	Brad Sills
	Unity	U	U US	Michael J. Funk
	Weave	WEAV	WEAV US	Michael J. Funk
	Workday Inc.	WDAY	WDAY US	Brad Sills
	Zeta Global	ZETA	ZETA US	Koji Ikeda, CFA
NEUTRAL				
	Autodesk	ADSK	ADSK US	Michael J. Funk
	Bentley Systems	BSY	BSY US	Michael J. Funk
	BigCommerce Holdings, Inc.	BIGC	BIGC US	Koji Ikeda, CFA
	Coveo	YCVO	CVO CN	Koji Ikeda, CFA
	Datadog Inc	DDOG	DDOG US	Koji Ikeda, CFA
	DocuSign	DOCU	DOCU US	Brad Sills
	Freshworks, Inc.	FRSH	FRSH US	Adam Bergere
	HashiCorp	HCP	HCP US	Brad Sills
	Jamf	JAMF	JAMF US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	LSPD	LSPD US	Koji Ikeda, CFA
	Lightspeed Commerce Inc.	YLSPD	LSPD CN	Koji Ikeda, CFA
	Oracle Corporation	ORCL	ORCL US	Brad Sills
	Paycom	PAYC	PAYC US	Adam Bergere
	Paylocity	PCTY	PCTY US	Adam Bergere
	Shopify, Inc.	SHOP	SHOP US	Brad Sills
	Snowflake	SNOW	SNOW US	Brad Sills
	Veeva Systems, Inc.	VEEV	VEEV US	Brad Sills
	Zoom Video Communications	ZM	ZM US	Michael J. Funk
	ZoomInfo	ZI	ZI US	Koji Ikeda, CFA
UNDERPERFORM				
	AvidXchange, Inc.	AVDX	AVDX US	Brad Sills
	Blackbaud, Inc.	BLKB	BLKB US	Koji Ikeda, CFA
	BlackLine, Inc.	BL	BL US	Koji Ikeda, CFA
	C3.ai	AI	AI US	Brad Sills
	Confluent	CFLT	CFLT US	Brad Sills
	CS Disco, Inc.	LAW	LAW US	Koji Ikeda, CFA
	Enfusion, Inc.	ENFN	ENFN US	Koji Ikeda, CFA
	Everbridge	EVBG	EVBG US	Koji Ikeda, CFA
	Five9	FIVN	FIVN US	Michael J. Funk

US - Enterprise Software Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Guidewire Software, Inc.	GWRE	GWRE US	Michael J. Funk
	Twilio	TWLO	TWLO US	Michael J. Funk
	Vertex, Inc.	VERX	VERX US	Brad Sills
RSTR				
	Splunk	SPLK	SPLK US	Brad Sills

Disclosures

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Equity Investment Rating Distribution: Technology Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	215	53.09%	Buy	111	51.63%
Hold	97	23.95%	Hold	45	46.39%
Sell	93	22.96%	Sell	24	25.81%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster R2
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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