

U.S. Software

Observability Industry Review: Volume 8

| CORE

Our theme of the quarter highlights internet search trends across observability. Results show that awareness is still relatively low vs. other software applications, with companies still early in branding themselves as platforms vs. point solutions. Datadog captures the most mind share, while Dynatrace is gaining momentum.

Theme of the Quarter - Relative Search Interest Continues to Increase, But Is Still Early on Its Journey:

In our eighth quarterly observability industry review, we look at Google search trends over the last five years to understand how popular these tools are among a broader basket. Relative interest in point solutions (APM, ITIM, Logs) has moderated over the last five years, while observability interest has increased as vendors have rebranded towards offering platform solutions. However, relative to other software verticals, observability is still early in capturing mind share from the broader community, which should bode well for vendors as companies increasingly focus on modernizing their IT infrastructure. Amongst our coverage, Datadog stands out for its high levels of interest, while Dynatrace and Elastic remain a bit further behind.

Takeaways from VAR Survey - Q4 Results Look Consistent, Though Q1 Downtick Raises Questions:

In our eighth observability VAR survey, expected demand was roughly flat on a q/q basis, in line with what we are seeing from the hyperscalers. However, expectations for the next quarter trended to the negative, while the impact from optimizations is expected to lessen. In turn, this could be a bit of a balancing effect as the macro improves but there appears to be a lack of a catalyst for overall spend. VARs again highlighted Datadog for its platform leadership, while Dynatrace saw improved results in its platform and ITIM offering. Splunk and Elastic again showed strength in logging, but continued to lag from a platform perspective. We highlight the continued downtick in hyperscaler results from our VAR Survey as something worth watching, as the end of optimizations could be resulting in customers shifting from lower cost hyperscaler offerings to best of breed individual observability vendor solutions.

Trend Spotter Takeaways - Holiday Seasonality Weighs On All Vendors In Q4:

Our analysis of web log-in data in the observability space shows that login trends declined sequentially for all vendors, likely driven by lower usage around December. Datadog logins appear the most resilient, followed by Dynatrace, while Elastic and Splunk fared not as well. Trends continue to appear to have leveled off after strong growth at the start of the year, particularly on the unique visitor front.

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Google Search Interest Showcases Early Mind share of Monitoring Solutions in Software

For our theme this quarter, we take a closer look at Google Search trends over the last five years to get a sense of popularity in various vendors and topics within observability. For each term, we indexed results to their peak popularity over a given time frame, with a value of 100 representing the most popular time for the search. While this data is not fully reflective of the demand vendors are seeing for their solutions, we believe it is directionally accurate for understanding popularity and mind share of vendors and themes in our space.

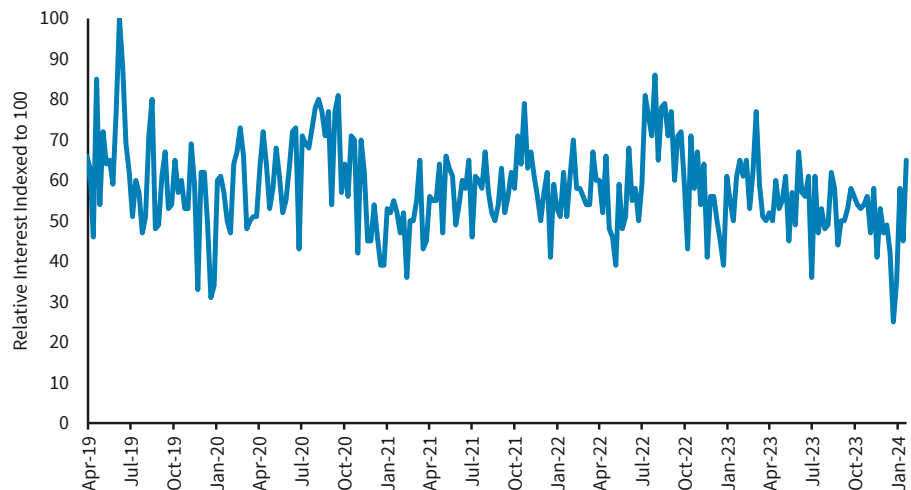
Industry Trends Highlight Mind Share Journey for Observability

For a long period of time, each sub-segment of observability was viewed as an individual point solution for a given task, with vendors specializing in certain segments and being sought out for their ability handle these at the highest level. The three core segments here are APM, Infrastructure Monitoring, and Log Management, though other solutions including Network Monitoring, Digital Experience Monitoring, and more, are also prominent sub-verticals. Given the industry's emphasis on these three core types of monitoring, we start off by looking at search interest for these segments over the last five years.

Application Performance Monitoring: Sustained Interest Over Time

Looking at the data below, we can see that interest in APM has remained relatively consistent over the last five years. As the largest of the three main observability sub-segments (as seen in [U.S. Software: Observability Industry Review: Volume 7, 10/31/23](#)), this makes sense to us, especially given APM's more prevalent role in the IT ecosystem, and the continued tailwinds the segment is seeing as a result of workload migration from on-premise to the cloud. As such, the term is more decoupled from other observability segments, helping to drive sustained interest in the topic in our view. Within APM, Datadog was the most related query, followed closely by Elastic and New Relic. Within the top 25 were also Google APM, Splunk, Dynatrace, Grafana, and SignalFX (owned by Splunk).

FIGURE 1. APM Search Interest Over Time



Source: Google Trends

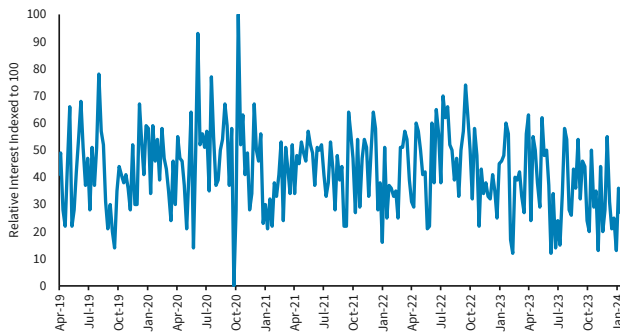
Log Management and Infrastructure Monitoring Seeing Less Sustained Volumes

Looking at the data for Log Management and Infrastructure Monitoring, we see somewhat similar trends. Both of these sub-verticals have roughly trended down in search interest over the last few years, and while they continue to be important parts of the observability stack, it is

increasingly evident that businesses approach to marketing, and consumers approach to searching for these products, has shifted from point solutions to the broader platform. Given vendors' approach to marketing the 'observability stack' as opposed to just a single segment (and absent the tailwinds seen in APM), the results here again make sense.

- Among most closely related Log queries, Splunk was the predominant result (which aligns with the company's position as the incumbent in the space), though Datadog, SolarWinds, Dynatrace, and Humio (owned by CrowdStrike) were also featured in the top 25.
- In Infrastructure monitoring, Splunk, Datadog, and Dynatrace were all featured in the top 25 most related queries.

FIGURE 2. Log Management Search Interest Over Time



Source: Google Trends

FIGURE 3. Infrastructure Monitoring Search Interest Over Time

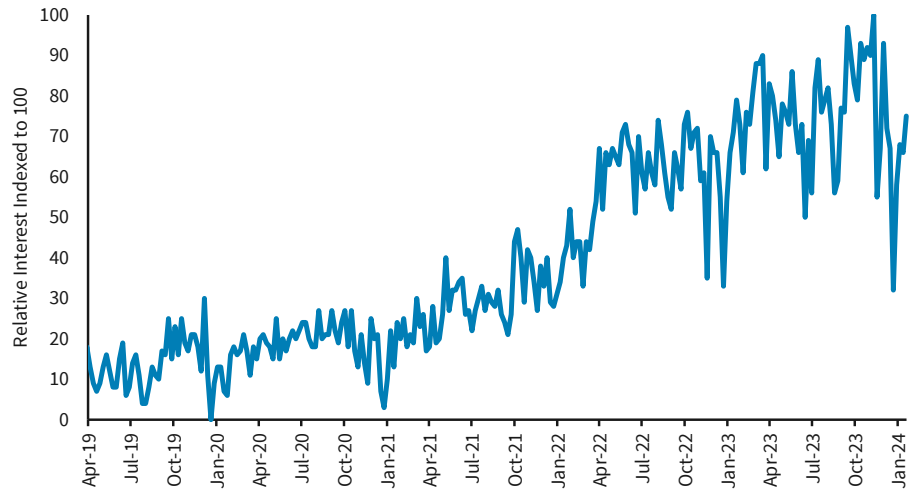


Source: Google Trends

Upward Interest In Observability Highlights Importance of Platform Branding

Over the last few years (and as we have written about extensively, starting with [U.S. Software: Raimo's Roundup: Observability - An Emerging Battleground in Software, 09/06/2019](#)), IT monitoring vendors have increasingly marketed their offerings as "Observability Solutions," as opposed to just APM, Infra. monitoring, etc. This platform approach to observability has resulted in a shift in how users search for these tools as well. As we can see below, "Observability" search interest over time has trended upwards (as opposed to flat/down like the point solution approaches above), demonstrating that more individuals are looking for solutions via a broader spectrum than they were prior.

FIGURE 4. Observability Search Interest Over Time Reveals Positive Trends



Source: Google Trends

Looking at the most popular queries related to observability, as seen below, we are somewhat but not overly surprised to see Splunk top the list. Given the company's history as the oldest and largest vendor in the space, it makes sense to us that results would over-index here. In a similar manner, AWS coming in at #5 also does not surprise us, given the company's position as the largest hyperscaler, and with many of its customers likely looking for in-house observability tools to leverage in their day to day. We were encouraged to see Datadog in the top ten, which aligns with our view that the company remains the best play in the space as it continues to build out a well rounded observability suite. Elastic and Grafana interest was also high, but interestingly, Dynatrace did not show up in results, though this could be due to the company's customer profile, which indexes towards enterprises and thus would be less likely to be searched by individuals.

FIGURE 5. Top 15 Queries Related to Observability per Google Trends

Observability Top Queries (# out of 15)	
1	Data observability
3	Splunk
4	Splunk Observability
5	AWS observability
8	Datadog
9	Observability Platform
11	Elastic
12	Elastic Observability
15	Grafana

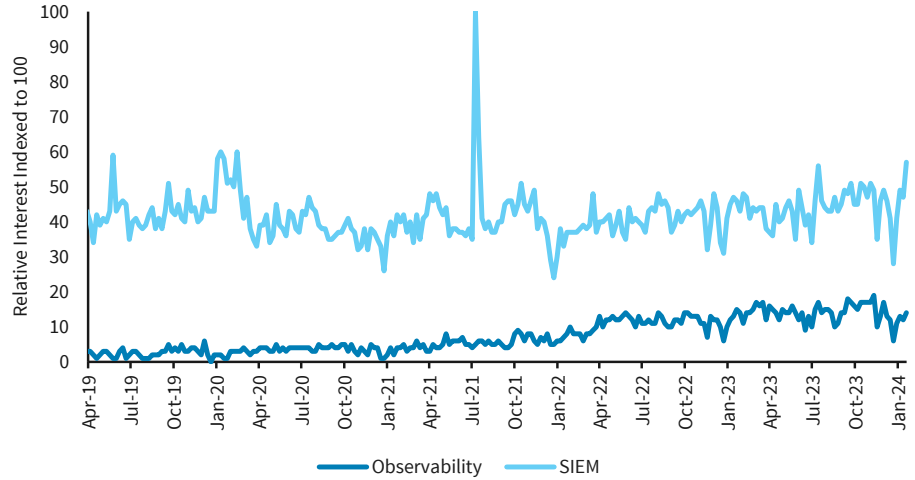
Source: Google Trends

Search Mind Share for Observability Remains Small vs. Other Aspects of Software

Given the improvements in Observability interest over the last five years, we then looked to see how the topic compared vs. a more traditional/well know software practice like SIEM. Here we can see that the gap in relative interest is still very large, demonstrating that Observability is still early in its journey to capture development and organization mind share, in our view. We believe that many businesses may still be looking at products on a solution-by-solution basis, as outlined above. Moving forward, as the importance of observability continues to grow in organizations, we expect to see these results move closer to parity. During the Dynatrace

Perform keynote last week, management noted that only 10-20% of workloads are on the cloud today, and of these only 20% are modernized and monitored, meaning there remains a long tail of adoption for vendors in the space.

FIGURE 6. Relative Interest vs. SIEM Demonstrates Awareness Is in Early Innings Relative to Other Software Components

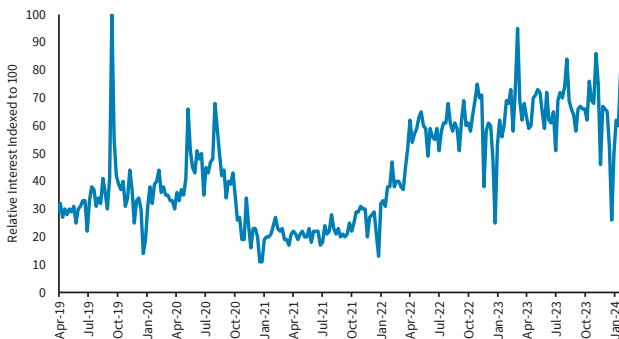


Source: Google Trends

Vendor Interest Aligns with Channel Checks and Customer Feedback

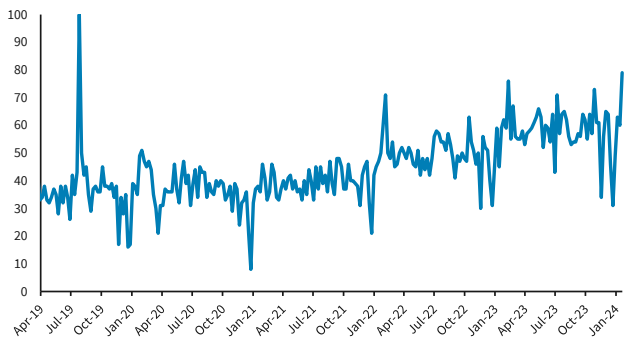
We then looked at the relative levels of interest over the last five years for each of the main vendors we cover in the space. As we can see, Datadog results have trended up positively since 2019 (the time of its IPO), at parity with their highest levels over the last few years. Given the company’s pronounced lead on a product and platform perspective, this makes sense to us, and Datadog relative interest vs. the other three vendors was significantly higher on a query share basis. Dynatrace results looked promising as well (with its peak in 2019 also representative of search interest at its IPO), particularly over the last year as the company has undergone significant product improvements in an effort to more closely compete with Datadog on a platform level.

FIGURE 7. Datadog Search Interest Over Time



Source: Google Trends

FIGURE 8. Dynatrace Search Interest Over Time

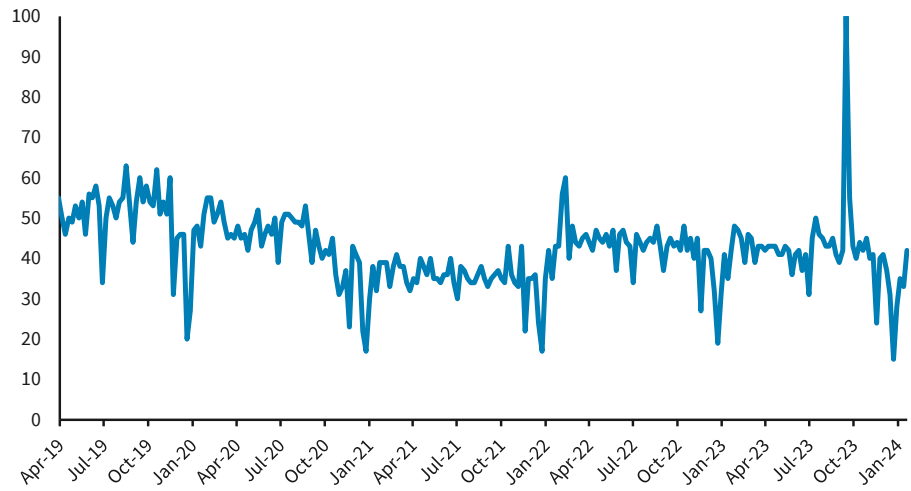


Source: Google Trends

Looking at Splunk, we can see relative interest has faded over the last five years, with the spike in October of 2023 being associated with the company’s expected takeout by Cisco in CY24. From a product perspective, Splunk remains the incumbent in Logs with continued traction for

its solution, but continues to struggle with landing in organizations with its broader observability suite.

FIGURE 9. Splunk Search Interest Over Time



Source: Google Trends

We also looked at search interest for Elastic over the last five years, but have omitted the chart due to inconsistent data. Interest spiked dramatically in 2021 and 2022 before falling to nearly 0 in 2023, which is not supported in our view, as we are inclined to believe interest would be higher in 2023 as a result of the company's refocused efforts on hybrid and vector search, though we note these products are still early in their life cycle. We do note that Elastic similarly has had more difficulty in appealing to customers from a platform perspective, but as seen in our VAR survey below, does have strong traction with both its Logs and Security product.

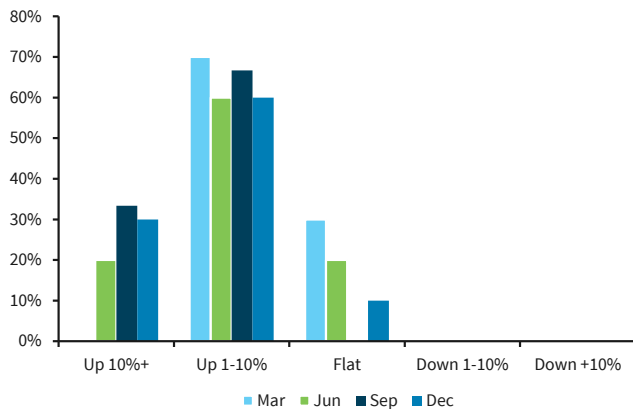
Observability Survey: Datadog Platform Strength Continues to Show, Cloud Vendors Lose Momentum

Our eighth observability survey interviewed 10 VARs that sell one or more infrastructure monitoring (ITIM), log management, or application performance monitoring (APM) tools. Overall demand for observability solutions was roughly flat vs. last quarter, most likely attributable to lower cloud optimization headwinds in CYQ4, offset slightly by end of year seasonality. In this environment, we saw Datadog extend its platform advantage amid less interest in the cloud providers, while results were more mixed across the board. Splunk and Elastic both saw positive results again for their log management solutions, with Elastic also seeing a sequential improvement in its APM and CI/CD use cases. However, the company continues to lag its more established peers from a platform perspective. Dynatrace, which saw healthy results last quarter, saw a reversal in sentiment around its APM solution, though platform results improved. We continue to ask vendors about the factors customers prioritized most when making vendor decisions, and the top responses were again product, platform, and features available, as well as ease of use and cost. Datadog continues to show strongly here, while the cloud vendors received the most votes for the third quarter in a row. Lastly, we call out the decrease in expected impact of optimizations for the coming quarter, which we view as positive, though contrasts with overall demand expectations VARs have for the coming three months.

In Quarter Demand Consistent vs. Q3, Though Optimizations Continue to Linger

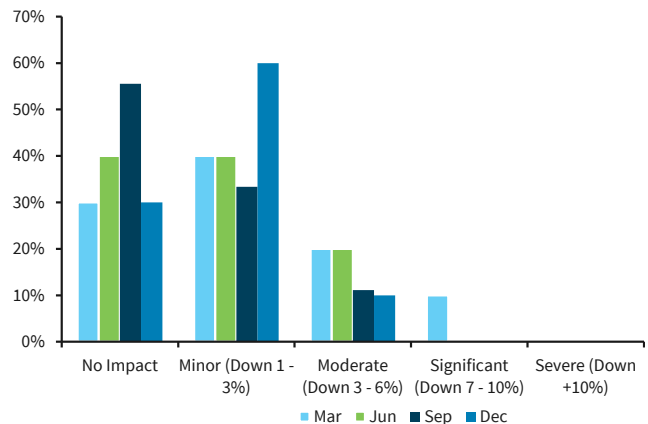
Our first question (Figure 7) asks about y/y demand trends for monitoring tools in the December quarter, with 90% of respondents pointing to increasing demand this quarter (vs. 100% in the prior quarter). Results were fairly consistent vs. last period, with 30% of vendors indicating upside of over 10% (vs. 33% in the prior quarter), and 60% indicating upside of 1-10%. We additionally asked respondents about the impact of cloud optimization on monitoring tools over the last three months (Figure 8). Interestingly, the impact of optimizations ticked back up this quarter, as only 30% of respondents cited no impact (vs. 56% in the prior quarter). 60% noted a minor impact (vs. 33% in the prior quarter), and 10% noted cloud optimization was having a moderate or significant effect (same as the prior quarter). The worse results here appear contrary to commentary from early hyperscaler results, making us more uncertain about the pace of recovery for names in the space.

FIGURE 10. How would you characterize y/y demand for monitoring tools over the last 3 months?



Source: Barclays Research

FIGURE 11. How would you characterize impact of cloud optimization from the prior question?

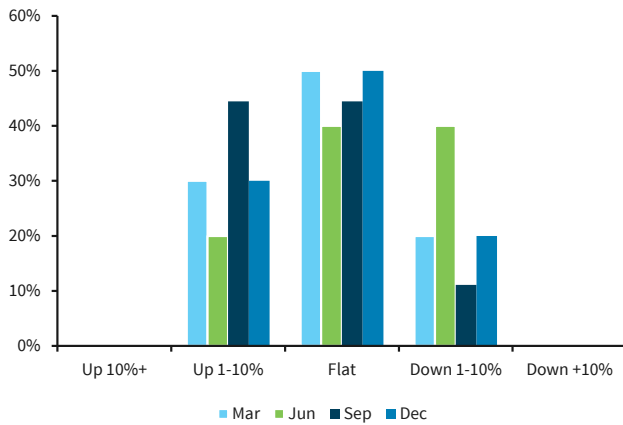


Source: Barclays Research

Easing Optimization Impact in Q1 Contrasts with Weaker Demand Outlook

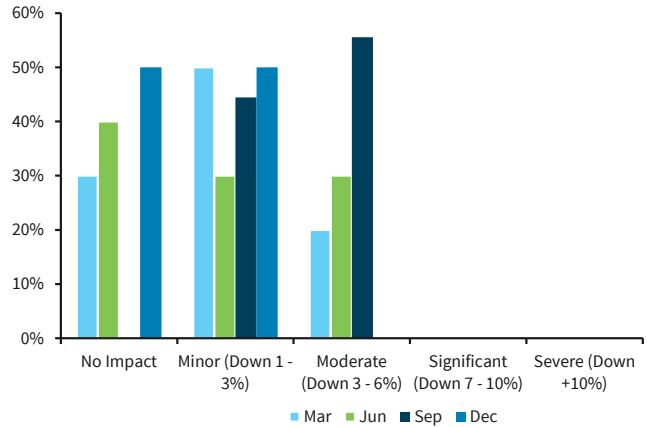
We then asked about y/y demand expectations for the March-end quarter (Figure 9) with results more mixed vs. last quarter's improvement. 30% of respondents expect positive trends (vs. 44% in the prior quarter) compared to 20% of respondents pointing to declining demand trends (vs. 11% in the prior quarter), with the remainder expecting business to be flat. Similar to the prior set of questions, we then asked about the impact of cloud optimization on go-forward demand. Here, the impact of optimizations was notably improved vs. prior quarters, with 50% of respondents indicating no impact (vs. 0% in the prior quarter), and the remaining 50% citing a minor impact (vs. 44% in the prior quarter). No respondents indicated that cloud optimizations would have a moderate or significant effect (vs. 56% in the prior quarter), which we view as in-line with commentary from the hyperscalers. The discrepancy between more negative demand yet more positive optimization results vs. the prior quarter is worth monitoring, but our initial takeaway is that the slightly worse results in the current quarter could improve as optimizations become less of an issue, provided the demand environment inflects higher.

FIGURE 12. Where do you expect y/y demand for monitoring tools to trend over the next 3 months?



Source: Barclays Research

FIGURE 13. How would you characterize impact of cloud optimization from the prior question?



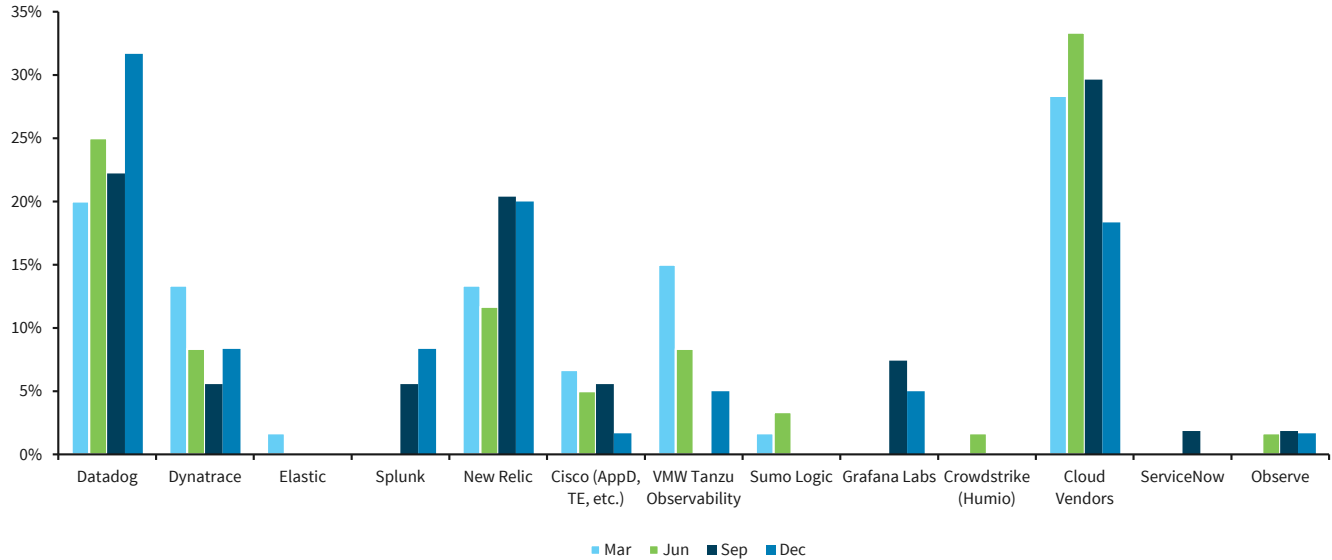
Source: Barclays Research

In the next three questions, we asked VARs to rank the top 3 vendors across infrastructure, application and log monitoring by customer interest and then applied a weighting to derive our rankings.

Datadog Maintains Its Infrastructure Monitoring Lead, Hyperscaler Results Weaken Again

Beginning with ITIM, we asked vendors in which solutions customers were currently showing the most interest. For the first time in our survey, Datadog surpassed the cloud vendors (AWS, Azure, GCP, etc.) in interest, with 32% of respondents selecting the company, vs. 18% for the cloud vendors (was 30% in Q3). New Relic also overtook the cloud vendors, with its interest level remaining flat at 20%. Looking at the number of responses with no weighting applied, Datadog received five first-place rankings and seven in the top-three. The cloud vendors received one first place ranking, and seven in the top-three as well. Dynatrace saw an improvement in interest q/q, while Elastic saw no interest for the third straight quarter. Grafana again made an appearance, while Splunk also inflected higher for the second quarter in a row.

FIGURE 14. Which infrastructure monitoring solutions are customers showing the most interest in?

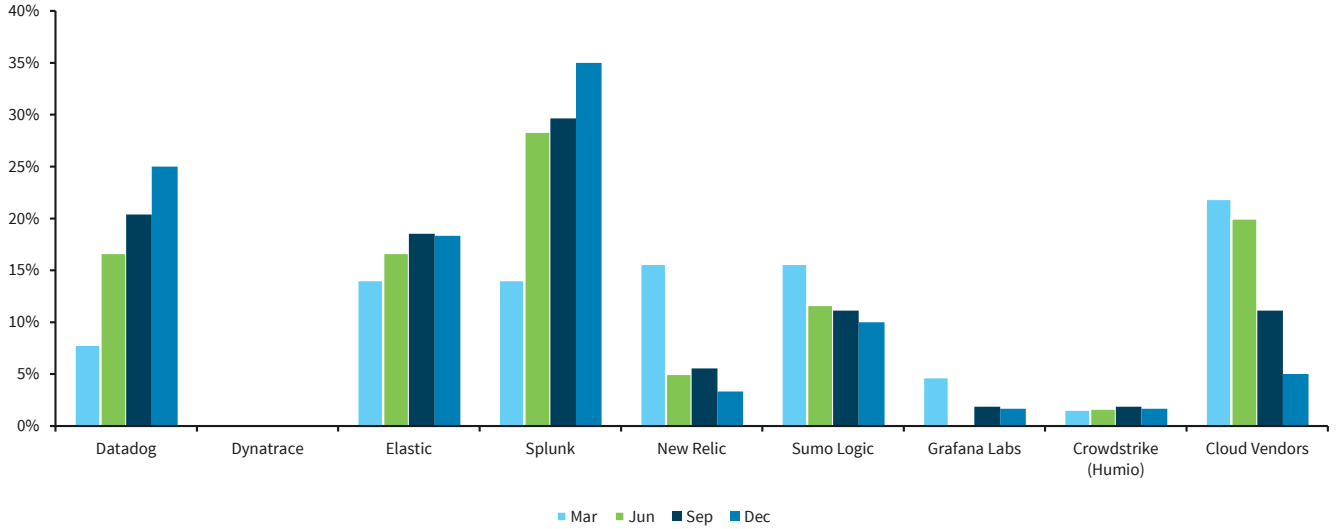


New Relic, Sumo Logic, Grafana Labs, Observe not covered.
 Source: Barclays Research

Splunk Remains Incumbent Despite Takeover, Datadog and Elastic Interest Remains High

Turning to log management, Splunk maintained its spot as the most preferred log management solution with 35% interest, and saw four first-place rankings and nine in the top-three. Datadog again saw q/q gains, and is handily the second most preferred solution with four first place votes. Much of this improvement could be driven by the company's new logging product (Flex Logs), which has been GA for ~6 months now, and has been touted as an improvement over Logging Without Limits (noted in our recent Cloud Optimization Expert Call- see [U.S. Software: Takeaways From Cloud Optimization Expert Call, 01/22/24](#)). Interest in the hyperscaler solutions declined to 5% this quarter, (vs. 11% last quarter and 20% two quarters ago) while Elastic moved to the third most popular solution and maintained interest of ~19%. We highlight Dynatrace still has yet to receive notable interest as the company continues to build out its log management solution, as noted in our takeaways from its Perform conference last week (see [Dynatrace, Inc.: Customer Conference Highlights Exciting Opportunities, 02/02/2024](#)).

FIGURE 15. Which log management solutions are customers showing the most interest in?

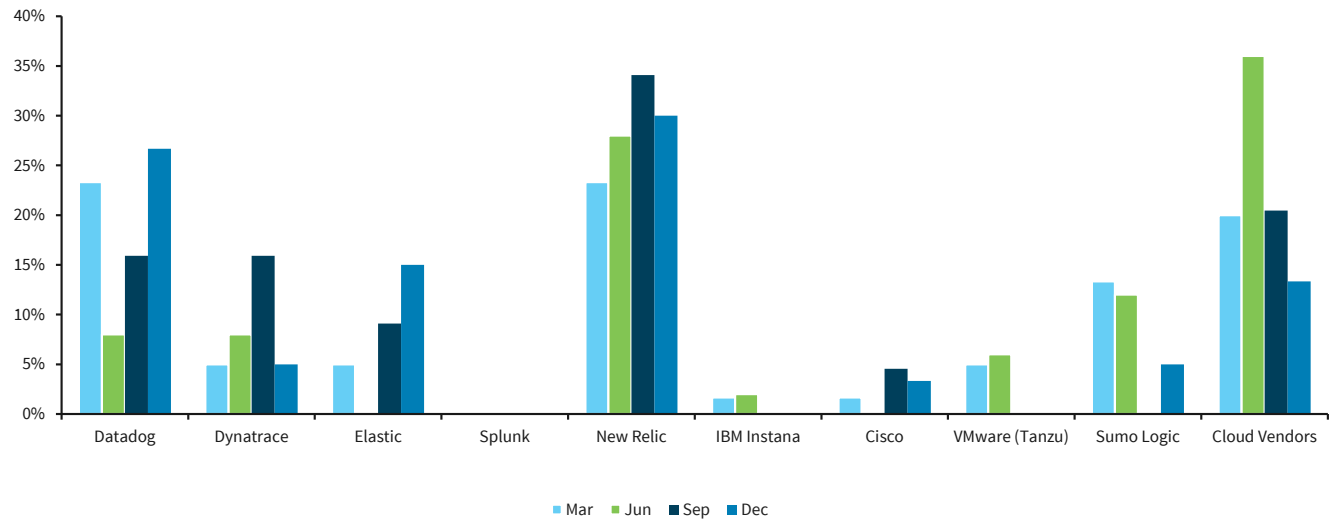


Source: Barclays Research

Strong Datadog and New Relic Interest Comes at the Expense of Dynatrace

Customer preferences for APM solutions showed the cloud vendors momentum reverse again vs. the prior quarter, while New Relic continues to lead the pack. New Relic had five first place votes and seven in the top three, equating to 30% interest, while the cloud vendors had one first place vote and three overall for 13% interest. Interest in Datadog jumped to 27% this quarter vs. 16% last, and Elastic improved compared to the prior quarter as well. Interestingly, Dynatrace declined from 16% last quarter to 5% this quarter.

FIGURE 16. Which application monitoring solutions are customers showing the most interest in?



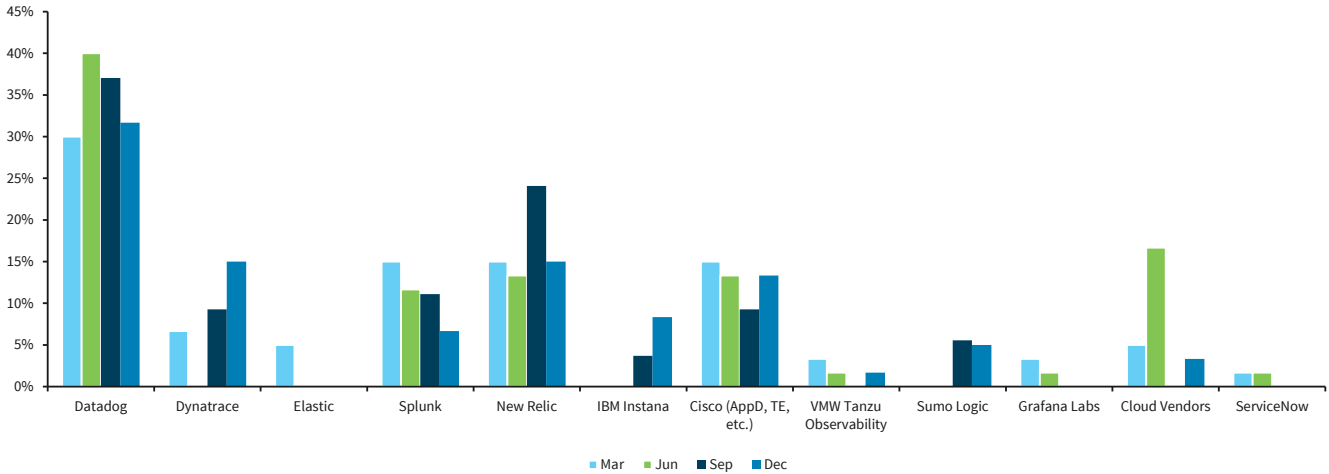
Source: Barclays Research

Healthy Dynatrace Platform Interest Continues, Datadog Remains Far Ahead of Peers

For our next question, we asked VARs which vendors have the most integrated and comprehensive full-stack monitoring (observability platform) solution today. Here, Datadog maintained its platform advantage (32% vs. 37% in the prior quarter), with five first-place rankings and eight in the top-three. Coming in second with 15% interest from customers was Dynatrace and New Relic, which showed improvements and declines respectively in their level

of interest. Cisco improved to third, this quarter, with Splunk moderately behind in fourth. Elastic saw no responses for the third consecutive quarter.

FIGURE 17. Which vendors do customers believe have the most integrated and comprehensive full-stack uniform monitoring (observability platform) solution today?



Source: Barclays Research

Preferred Pricing Methods Continue to Fluctuate - Infrastructure Takes the Lead

We then inquired about pricing models now that most observability vendors continue to migrate away from or offer additional pricing options other than ingestion-based pricing. Infrastructure-based pricing improved to 50% (was preferred by 33% of respondents last quarter). Interest in consumption-based decreased to 20% (vs. 33% in the prior quarter) and interest in indexed-based pricing was roughly flat at 30% (was 33% last quarter).

FIGURE 18. What pricing model is best suited to your needs?



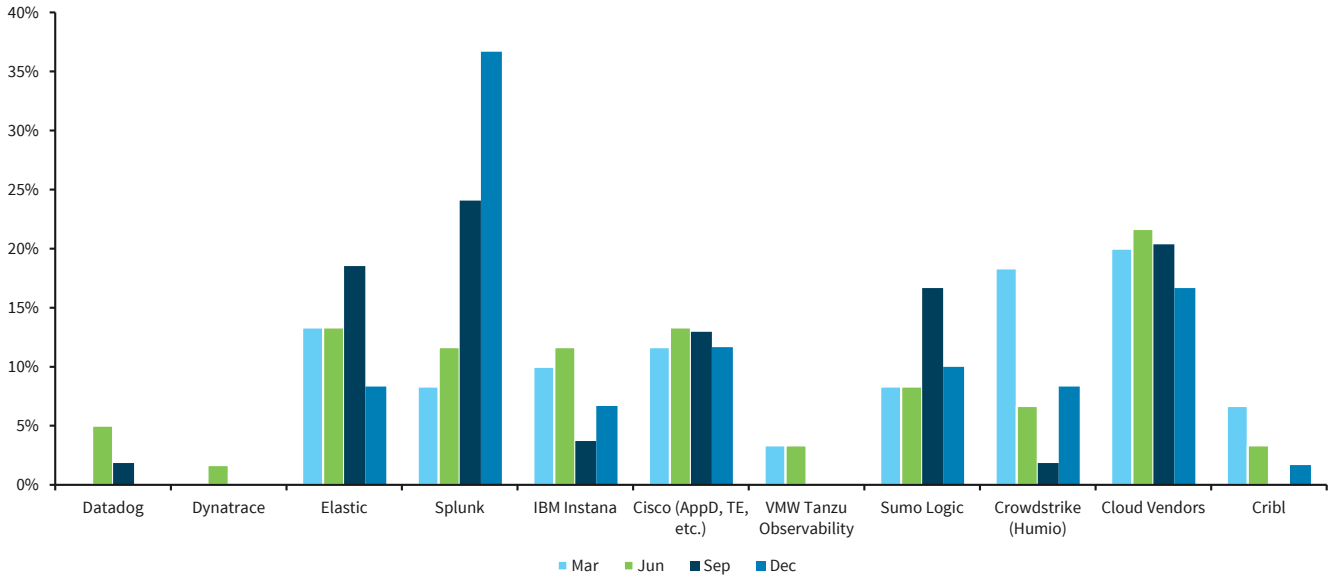
Source: Barclays Research

Splunk and the Hyperscalers Remain Ahead of the Pack, Elastic Interest Declines This Quarter

After covering traditional monitoring, we expanded our focus to newer observability use cases in the next two questions. Starting with security, we asked partners which traditional monitoring vendor is seeing the most interest for observability capabilities for security use

cases. Splunk saw the largest improvement and maintained its first place positioning with 37% interest (vs. 24% in the prior quarter). The cloud vendors continued to show healthy positioning as well, with 17% interest this quarter (vs. 20% last quarter). Elastic saw a fairly large sequential decline with 8% interest (vs. 19% last quarter), while Cisco moved into third place with 12% interest. We continue to see small levels of interest in Datadog and Dynatrace, as we note these companies continue to build out their security offerings.

FIGURE 19. Which traditional monitoring vendor is seeing the most interest for adoption of observability capabilities for security use cases?

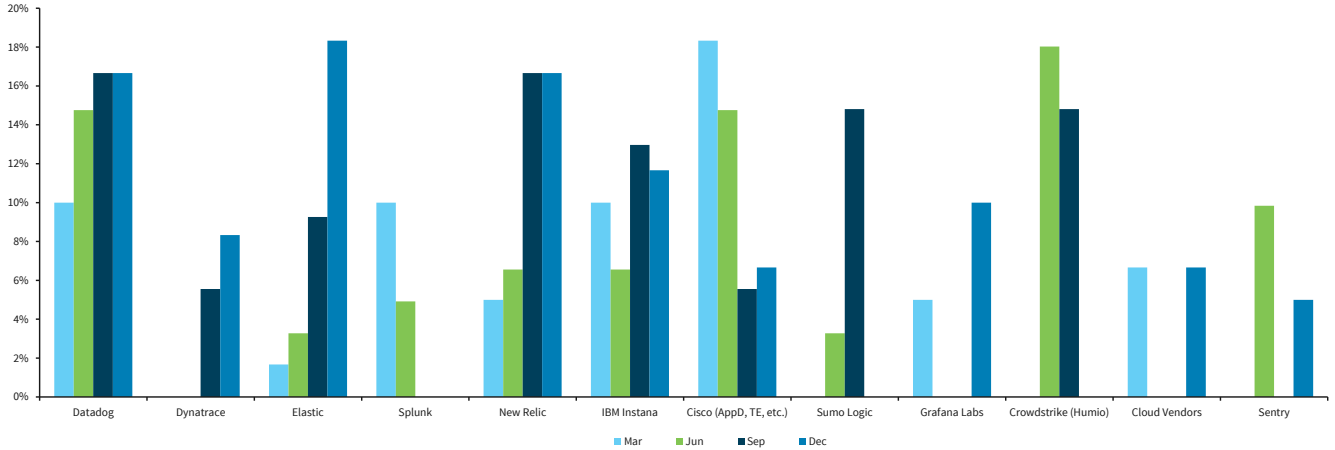


Source: Barclays Research

CI/CD Interest Continues to Fluctuate, Datadog Remains Consistent

We then turned to the next expansion vertical for observability and asked partners which traditional monitoring vendor is seeing the most interest for adoption of observability capabilities over CI/CD workflows. Elastic saw strong interest this quarter and jumped to 18% vs. 9% last quarter. Both Datadog and New Relic maintained their levels of interest at 17% each. CrowdStrike and Sumo Logic both fell dramatically from 15% interest to 0%, while IBM maintained solid interest at 12%. The cloud vendors saw interest again (7%) after a few quarters of no interest, and Grafana saw the greatest increase q/q (10% level of interest, was 0% last quarter).

FIGURE 20. Which traditional monitoring vendor is seeing the most interest for adoption of observability capabilities over CI/CD workflows?

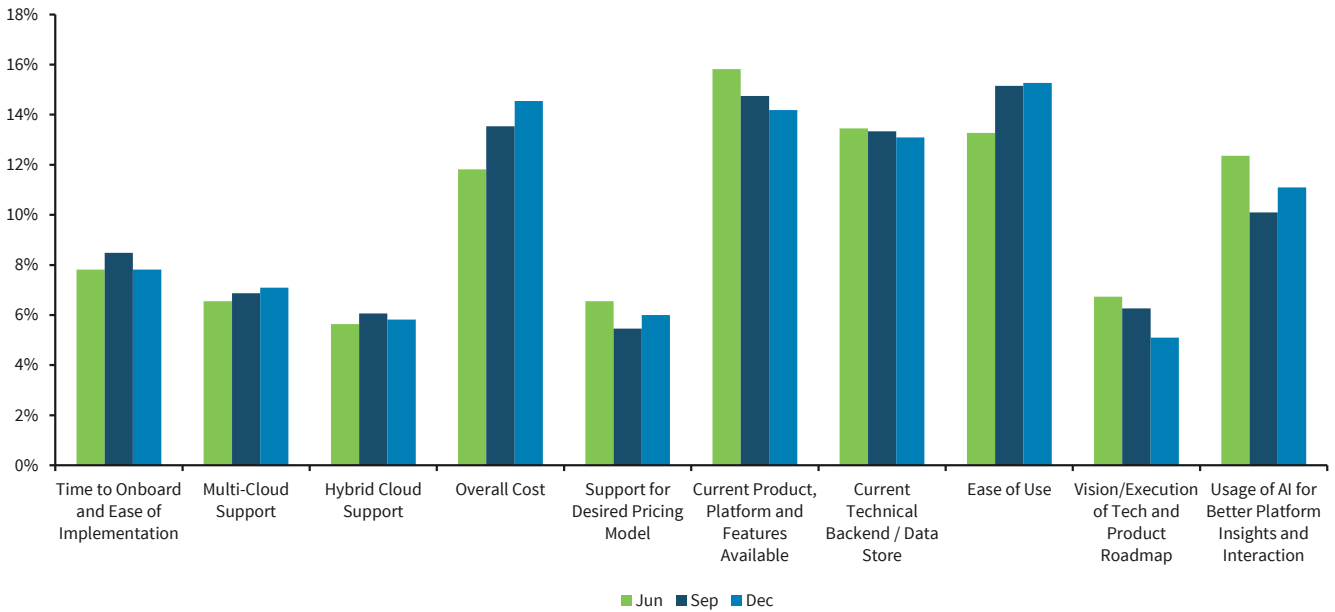


New Relic, IBM, Sumo Logic, Grafana, Honeycomb, Chronosphere, Cribl, not covered.
 Source: Barclays Research

Products, Cost, and Ease of Use Lead the Way Again in Most Important Factors

To get a different perspective other than a product-focused viewpoint, we asked respondents to rank the most important and critical factors for their observability solution (from 1 to 10) and weighted the responses. About 15% of our VARs indicated the current platform, products and features were the most important, tied with ease of use and overall cost also at 15%.

FIGURE 21. What key factors are the most important and critical when choosing an observability solution to onboard and/or expand on?



Source: Barclays Research

Trend Spotter and Investor Conversation Takeaways: DDOG Shows Resiliency, While Holiday Seasonality Weighs on Traffic Data

Two weeks ago, we published our quarterly Trend Spotter report (see "[U.S. Software: Raimo's Trend Spotter - 20th Edition of Tracking Web Traffic in Software](#)", 01/23/24) and view the data as complementary to the VAR survey data above, in addition to our Q4 preview (see "[U.S. Software: The Q4 Earnings Guide](#)", 01/23/24). Looking at the data points from our VAR survey in conjunction with Trend Spotter, we are most bullish on DDOG with the data supporting its growing platform vendor moat and improving trends vs. last quarter, although total visits and unique visits appear to have leveled off slightly. The data is more mixed for Splunk, Elastic, and Dynatrace across both surveys.

Investor Sentiment Mixed Across the Space, Looming Questions Around Datadog Serve as Near-Term Catalysts

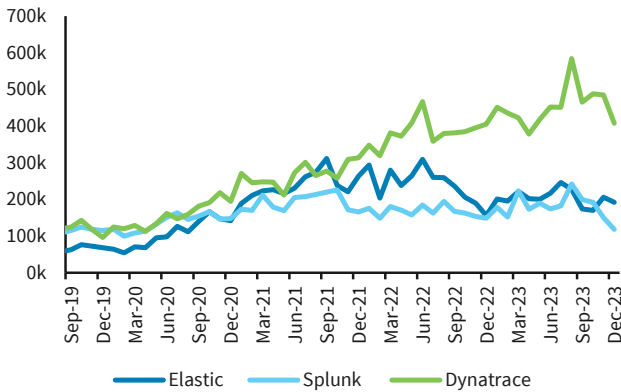
- **Datadog:** Investors seem to be relatively positive on Datadog this quarter on the back of last quarter's strong performance, as well as positive commentary from both the company and hyperscalers around the lessening impact of optimizations. A return to higher beat levels (+4.5% vs. prior four quarter average of +3.7%) and greater y/y sequential revenue added was viewed positively by investors, and the buy side appears to be expecting similar results in Q4 with an easy setup. However, there has been some uncertainty around the FY guide, as well as the analyst day that is two days following earnings. On FY24 guidance, we think investors are looking for the company to guide close to the Q4 exit rate, as, walking numbers up from this level would get DDOG close to ~30% y/y growth in FY24. However, we believe management will lean more cautious, particularly with their being lingering uncertainty around new workloads, as called out by the hyperscalers. Additionally, the closely followed analyst day could factor into near term performance, particularly if the company gives long term targets on both the top and bottom line. However, as seen in our data points above and below, DDOG appears to be faring better than most still, which adds to our confidence in a recovery for FY24.
- **Dynatrace:** Conversations have been more mixed, as the company is reporting its FYQ3 and we won't get any commentary around FY25 guidance until next quarter. As a result, with the company having hosted its annual customer conference last week, investors have primarily focused on the company's product road map, as well as the likelihood of the company meeting long term targets around its Security and Logs businesses (>\$100mn ARR by the end of FY25). Expectations look fair for the print, and investors are looking for a similar beat to last quarter, while expecting less on an impact from FX. The company is expected to ramp sales capacity and other investments in the back half of this year, and as such we expect there to be some discussion around margins should these continue to beat sell-side estimates by a large margin.
- **Elastic:** Investors continue to dig more deeply into the vector database space and the company's positioning and differentiation vs. pure vector database startups. Following last quarter's strong performance and the subsequent run the stock has had, investors are increasingly positive on the name with cloud expected to accelerate further, though questions remain in the short-medium term around the impact AI is truly having on the business.

Trend Spotter Takeaways

Elastic offers its technology as a fully managed service named Elastic Cloud. Splunk and Dynatrace both offer cloud native software as part of their respective observability suites.

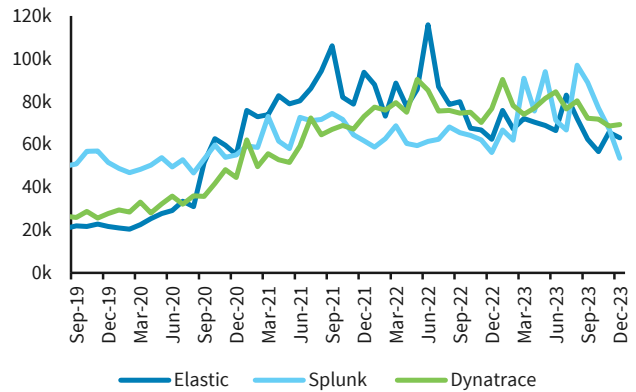
- Overall results for vendors were mixed, with all vendors seeing negative sequential visitors, but positive total visits y/y. More specifically, Elastic was down -12% q/q (vs. up +5% in Q3), Splunk was down -26% q/q (vs. up +16% in Q3). Finally, Dynatrace saw a decrease of -8% q/q (vs. up 20% in Q3). On a y/y basis, Elastic was up +3% (vs. -14% in Q3), Splunk was down -1% (vs. +19% in Q3), and Dynatrace was up +17% (vs. +34% in Q3). Their q/q data could be influenced by seasonality but we do not have enough data yet to make a complete judgment.
- On unique visitor traffic, the story is similar. Elastic was down -15% q/q (vs. +6% in Q3) and Splunk down -22% q/q (vs. +5% in Q3). With Dynatrace, unique visitors were down -9% (vs. -6% in Q3). On a y/y basis, results were similar, with Elastic down -6% (vs. -11% in Q3), Splunk up +8% (vs. +29% in Q3), and Dynatrace down -6% (vs. +1% in Q3).

FIGURE 22. Elastic, Splunk, and Dynatrace Cloud - Total Visits



Source: Barclays Research, Similarweb

FIGURE 23. Elastic, Splunk, and Dynatrace Cloud - Monthly Unique Visitors



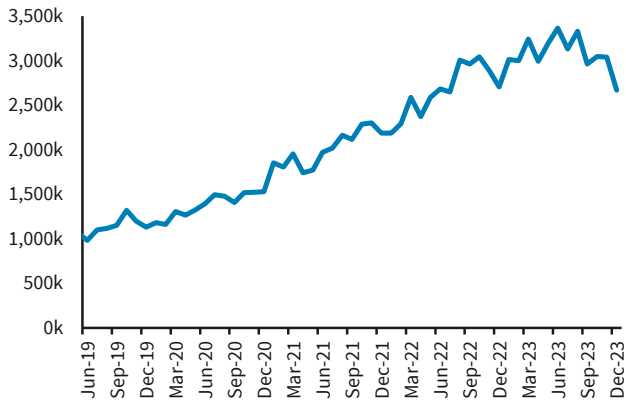
Source: Barclays Research, Similarweb

Datadog Cloud

Datadog's cloud login page has far more traffic than the other three observability names we track and hence we track it separately from the other vendors.

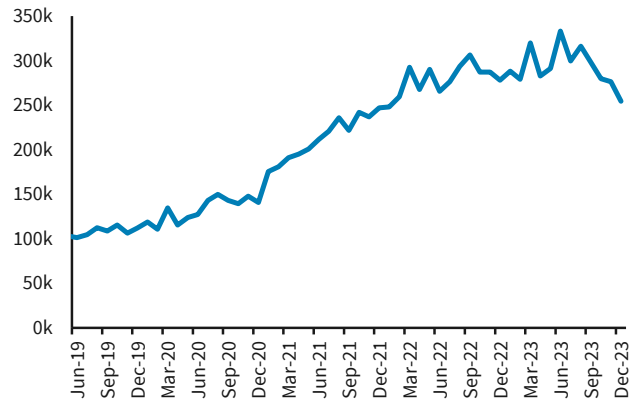
- Similar to the other observability vendors we track, total and unique visitors were both down q/q and y/y.
- Total visits declined -7% sequentially (vs. -1% in Q3) and +1% on a y/y basis (vs. +9% in Q3), while unique visitors were down -11% q/q (vs. +1% in Q3) and -5% y/y (vs. +4% in Q3).

FIGURE 24. Datadog Cloud Login Page - Total Visits



Source: Barclays Research, Similarweb

FIGURE 25. Datadog Cloud Login Page - Monthly Unique Visitors



Source: Barclays Research, Similarweb

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Materially Mentioned Stocks (Ticker, Date, Price)

Datadog, Inc. (DDOG, 29-Jan-2024, USD 128.87), Overweight/Positive, CD/CE/J

Dynatrace, Inc. (DT, 29-Jan-2024, USD 59.83), Equal Weight/Positive, CE/J

Elastic N.V. (ESTC, 29-Jan-2024, USD 123.18), Equal Weight/Positive, CD/CE/J

Splunk Inc. (SPLK, 29-Jan-2024, USD 153.64), Overweight/Positive, CD/CE/FA/J

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Stock Rating

Overweight - The stock is expected to outperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

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8x8 Inc. (EGHT)	Adobe Inc. (ADBE)	Alarm.com Holdings, Inc. (ALRM)
Alkami Technology, Inc. (ALKT)	Ansys, Inc. (ANSS)	Appian Corporation (APPN)
Atlassian (TEAM)	AudioCodes Ltd. (AUDC)	Autodesk Inc. (ADSK)
Bandwidth Inc. (BAND)	BigCommerce (BIGC)	Braze Inc. (BRZE)
CCC Intelligent Solutions (CCCS)	Check Point Software Technologies Ltd. (CHKP)	Confluent, Inc (CFLT)
Couchbase (BASE)	CrowdStrike Holdings, Inc (CRWD)	CyberArk Software (CYBR)
Datadog, Inc. (DDOG)	Dayforce, Inc. (DAY)	Definitive Healthcare Corp (DH)
Descartes Systems Group (DSGX)	DigitalOcean (DOCN)	DoubleVerify Holdings, Inc. (DV)
Dynatrace, Inc. (DT)	Elastic N.V. (ESTC)	Everbridge, Inc. (EVBG)
EverCommerce Inc. (EVCN)	Five9, Inc. (FIVN)	Fortinet, Inc. (FTNT)
Freshworks Inc. (FRSH)	Gen Digital Inc. (GEN)	GitLab Inc. (GTLB)
HubSpot, Inc. (HUBS)	Intapp, Inc. (INTA)	Integral Ad Science Holding Corp. (IAS)
Intuit Inc. (INTU)	Jamf Holding Corp. (JAMF)	Klaviyo, Inc. (KVYO)
Lightspeed Commerce Inc. (LSPD)	LivePerson, Inc. (LPSN)	MeridianLink, Inc. (MLNK)
Microsoft Corp. (MSFT)	MongoDB, Inc. (MDB)	nCino, Inc. (NCNO)
OpenText Corp. (OTEX)	Oracle Corp. (ORCL)	Palo Alto Networks (PANW)
Paycom (PAYC)	Paylocity Holding Corp (PCTY)	Pegasystems, Inc. (PEGA)
PowerSchool Holdings, Inc (PWSC)	Procore Technologies, Inc. (PCOR)	PTC Inc. (PTC)
Rapid7 (RPD)	RingCentral, Inc. (RNG)	Salesforce.com Inc. (CRM)
SAP SE (SAP)	SecureWorks (SCWX)	SentinelOne, Inc. (S)
ServiceNow, Inc. (NOW)	Similarweb Ltd. (SMWB)	Skillsoft Corp. (SKIL)
Smartsheet Inc. (SMAR)	Snowflake Computing (SNOW)	Splunk Inc. (SPLK)
Sprinklr, Inc. (CXM)	Sprout Social, Inc. (SPT)	Tenable Holdings Inc (TENB)
Teradata Corp. (TDC)	Twilio Inc. (TWLO)	Tyler Technologies, Inc. (TYL)
UiPath, Inc. (PATH)	Varonis Systems, Inc. (VRNS)	Veeva Systems Inc. (VEEV)
WalkMe Ltd. (WKME)	Workday Inc. (WDAY)	Zeta Global Holdings Corp. (ZETA)
Zoom Video Communications, Inc. (ZM)	ZoomInfo Technologies Inc. (ZI)	Zscaler, Inc. (ZS)

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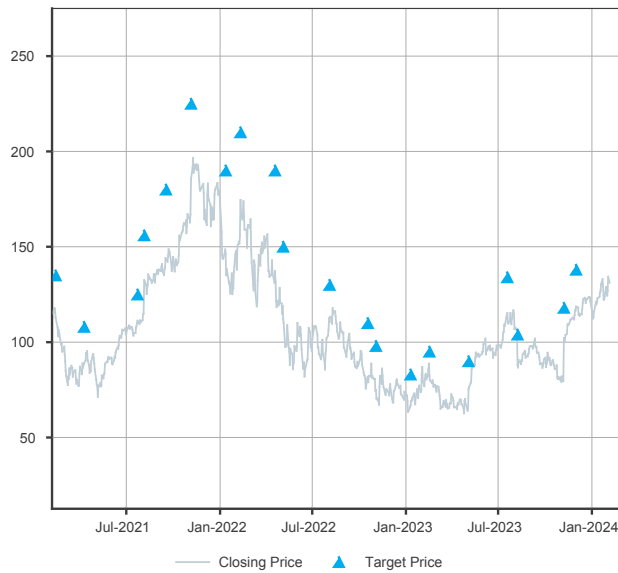
Stock Rating: **OVERWEIGHT**

Industry View: **POSITIVE**

Closing Price: **USD 128.87** (29-Jan-2024)

Rating and Price Target Chart - USD (as of 29-Jan-2024)

Currency=USD



Source: IDC, Barclays Research

[Link to Barclays Live for interactive charting](#)

Publication Date	Closing Price*	Rating	Adjusted Price Target
01-Dec-2023	116.57		138.00
07-Nov-2023	79.55		118.00
08-Aug-2023	106.30		104.00
19-Jul-2023	113.82		134.00
04-May-2023	75.40		90.00
16-Feb-2023	82.47		95.00
10-Jan-2023	65.94		83.00
03-Nov-2022	75.01		98.00
18-Oct-2022	80.79		110.00
04-Aug-2022	110.49		130.00
05-May-2022	111.87		150.00
19-Apr-2022	131.11		190.00
10-Feb-2022	174.60		210.00
12-Jan-2022	146.33		190.00
05-Nov-2021	166.95		225.00
17-Sep-2021	139.11		180.00
05-Aug-2021	114.93		156.00
23-Jul-2021	111.23		125.00
09-Apr-2021	88.80		108.00
12-Feb-2021	112.86		135.00

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Source: Bloomberg, Barclays Research

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Valuation Methodology: Our PT of \$138 is based on ~57x CY24 FCF of ~\$868mn.

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Dynatrace, Inc. (DT / DT)

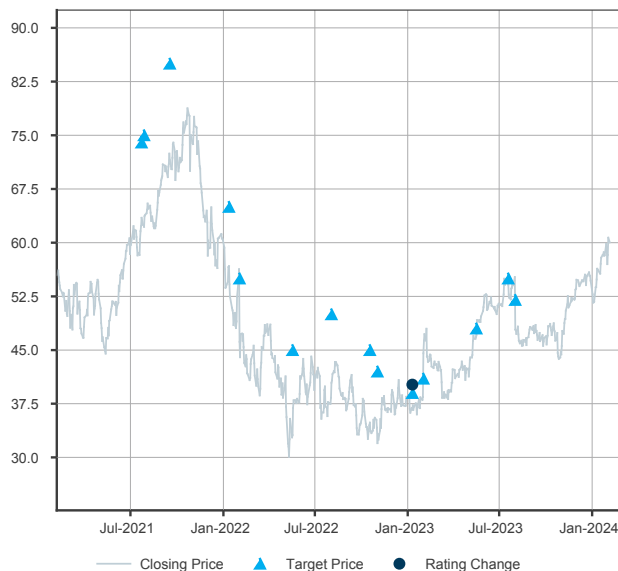
Stock Rating: **EQUAL WEIGHT**

Industry View: **POSITIVE**

Closing Price: **USD 59.83** (29-Jan-2024)

Rating and Price Target Chart - USD (as of 29-Jan-2024)

Currency=USD



Source: IDC, Barclays Research

[Link to Barclays Live for interactive charting](#)

Publication Date	Closing Price*	Rating	Adjusted Price Target
02-Aug-2023	55.19		52.00
19-Jul-2023	54.57		55.00
17-May-2023	47.07		48.00
01-Feb-2023	44.54		41.00
10-Jan-2023	36.89	Equal Weight	39.00
02-Nov-2022	32.00		42.00
18-Oct-2022	34.48		45.00
03-Aug-2022	40.43		50.00
18-May-2022	33.12		45.00
02-Feb-2022	46.16		55.00
12-Jan-2022	54.54		65.00
17-Sep-2021	71.01		85.00
28-Jul-2021	62.22		75.00
23-Jul-2021	63.48		74.00

On 05-Feb-2021, prior to any intra-day change that may have been published, the rating for this security was Overweight, and the adjusted price target was 60.00.

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Valuation Methodology: Our price target of \$52 is based on an EV/CY25E FCF multiple of ~35x and our CY25E FCF estimate of \$435.8mn.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Near-term macro headwinds and slower than expected adoption of the company's platform may impact growth. Longer-term competitive headwinds from other observability competitors could also hinder the company's ability to land and expand with APM and other use cases.

Elastic N.V. (ESTC / ESTC)

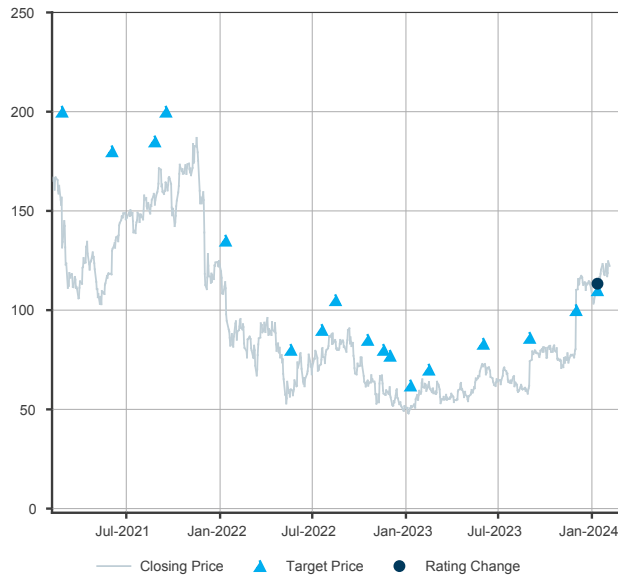
Stock Rating: **EQUAL WEIGHT**

Industry View: **POSITIVE**

Closing Price: **USD 123.18** (29-Jan-2024)

Rating and Price Target Chart - USD (as of 29-Jan-2024)

Currency=USD



Source: IDC, Barclays Research

[Link to Barclays Live for interactive charting](#)

Publication Date	Closing Price*	Rating	Adjusted Price Target
12-Jan-2024	112.29	Equal Weight	110.00
01-Dec-2023	80.36		100.00
01-Sep-2023	61.88		86.00
02-Jun-2023	72.29		83.00
15-Feb-2023	62.24		70.00
10-Jan-2023	50.50		62.00
01-Dec-2022	61.19		77.00
18-Nov-2022	59.48		80.00
18-Oct-2022	64.10		85.00
16-Aug-2022	84.94		105.00
20-Jul-2022	75.02		90.00
20-May-2022	58.90		80.00
12-Jan-2022	112.01		135.00
17-Sep-2021	159.99		200.00
26-Aug-2021	153.15		185.00
03-Jun-2021	129.84		180.00
25-Feb-2021	131.56		200.00

On 05-Feb-2021, prior to any intra-day change that may have been published, the rating for this security was Overweight, and the adjusted price target was 175.00.

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Valuation Methodology: Our price target of \$110 is based on ~39.3x CY25E EV/sales and our revenue estimate of ~\$224.2mn.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Elastic continues to expand into the observability and security markets where it faces more intense competition, and if traction of these solutions slows, or if uptake of Elastic Cloud declines, it could adversely impact revenue growth. Likewise, should AI revenue contribute faster than we anticipate, there could be greater upside to numbers than we currently expect.

Splunk Inc. (SPLK / SPLK)

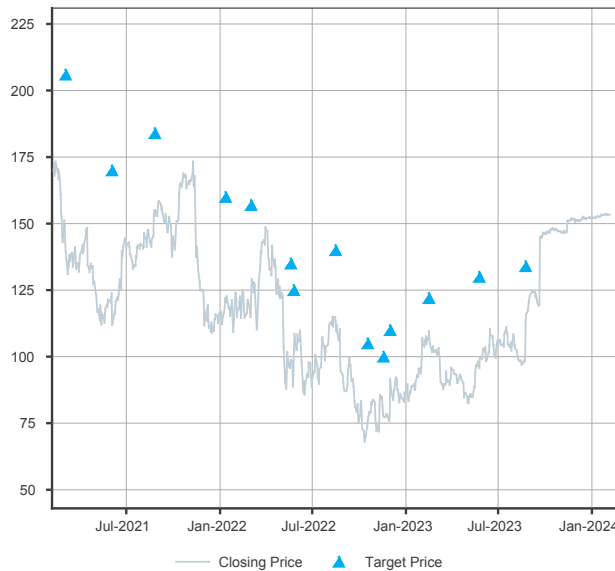
Stock Rating: **OVERWEIGHT**

Industry View: **POSITIVE**

Closing Price: **USD 153.64** (29-Jan-2024)

Rating and Price Target Chart - USD (as of 29-Jan-2024)

Currency=USD



Source: IDC, Barclays Research

[Link to Barclays Live for interactive charting](#)

Publication Date	Closing Price*	Rating	Adjusted Price Target
24-Aug-2023	99.93		134.00
25-May-2023	95.70		130.00
15-Feb-2023	106.58		122.00
01-Dec-2022	91.49		110.00
18-Nov-2022	78.25		100.00
18-Oct-2022	74.04		105.00
16-Aug-2022	114.84		140.00
26-May-2022	102.00		125.00
20-May-2022	97.70		135.00
03-Mar-2022	121.83		157.00
12-Jan-2022	118.32		160.00
26-Aug-2021	152.89		184.00
03-Jun-2021	111.98		170.00
04-Mar-2021	139.47		206.00

On 05-Feb-2021, prior to any intra-day change that may have been published, the rating for this security was Overweight, and the adjusted price target was 220.00.

Source: Bloomberg, Barclays Research

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FA: Barclays Bank PLC and/or an affiliate beneficially owns 1% or more of a class of equity securities of Splunk Inc., as calculated in accordance with US regulations.

J: Barclays Bank PLC and/or an affiliate is a liquidity provider and/or trades regularly in the securities by Splunk Inc. and/or in any related derivatives.

Valuation Methodology: Our PT of \$134 is based on EV/FCF multiple of ~22x on CY24 FCF estimate of ~\$1,139mn.

Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Increasing competition from logging and end-to-end observability platforms could impact traction of Splunk's solution and cause slower growth than expected. Additionally, weaker economic conditions could lead to customers delaying or cutting software investments, which would be a risk to our forecasts.

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